



United Nations Global Compact
Executive Director & CEO
Ms. Sanda Ojiambo
685 Third Avenue, 12th Floor
New York, NY 10017, United States

April, 14th 2022

MM's Annual Communication on Progress (CoP)

Dear Ms. Sanda Ojiambo,

At Mayr-Melnhof Karton AG (MM Group), we focus on economic and technical progress that is consistent with the needs of society and nature through responsible business activities in compliance with all legal regulations, industry standards, and the universal principles of the UN Global Compact. To provide greater transparency and contribute to a systemic change for sustainable development, we disclose in particular on matters regarding labor standards, human rights, environmental protection, and the fight against corruption.

This annual report on the year 2021, including our consolidated non-financial report, is based on the Sustainable Development Goals (SDGs) of the United Nations and the standards of the Global Reporting Initiative (GRI). In 2021, we have clearly emphasized sustainability and integrated it as a central component into our strategy, as documented in this report, which has been expanded and is more detailed than in previous years.

This is based on our conviction that we can be even more competitive and successful in the long term through documented sustainability and our progress in it, as well as through continuous dialogues with our stakeholders. This requires experienced central management, additional resources and harmonized systems, tools and standards, in which we have recently made significant investments.

Yours sincerely,

Peter Oswald
Chief Executive Officer



GROWING TOGETHER

Annual Report
Mayr-Melnhof Karton AG

2021

Key Indicators

consolidated (in millions of EUR)	2021	2020	+/-
Sales and earnings indicators			
Consolidated sales	3,069.7	2,528.4	+ 21.4 %
EBITDA	421.0	398.9	+ 5.5 %
Operating profit	269.6	231.4	+ 16.5 %
Profit before tax	244.5	222.1	+ 10.1 %
Profit for the year	190.7	162.2	+ 17.5 %
Cash flow from operating activities	269.8	318.2	- 15.2 %
Profitability indicators			
Return on equity	11.9 %	10.6 %	+ 127 bp
EBITDA margin	13.7 %	15.8 %	- 206 bp
Operating margin	8.8 %	9.2 %	- 37 bp
Return on capital employed	12.8 %	13.7 %	- 85 bp
Balance sheet indicators			
Total equity	1,661.9	1,547.1	+ 7.4 %
Total assets	4,014.2	2,399.6	+ 67.3 %
Equity ratio	41.4 %	64.5 %	- 2,307 bp
Net debt	- 1,063.5	- 122.2	
Capital expenditures/depreciation			
Capital expenditures (CAPEX)	257.8	157.6	+ 63.5 %
Depreciation and amortization ¹⁾	151.4	167.5	- 9.6 %
Employees			
Employees	12,492	9,938	+ 25.7 %
Share performance indicators (in EUR)			
Earnings per share	9.46	8.06	+ 17.4 %
Dividend per share	3.50 ²⁾	3.20	+ 9.4 %

Please find the five year overview 2017 - 2021 at the end of the report.

¹⁾ incl. impairment of property, plant and equipment, and intangible assets

²⁾ proposed

MM is Europe's leading
producer of cartonboard
and folding cartons with
an attractive offer
in kraft papers and
uncoated fine papers

We promote sustainable development through innovative, recyclable packaging and paper products made from renewable, fiber-based raw materials, and as a company actively contribute to avoiding plastic waste. Therefore, all activities related to sustainability, environment and safety have special priority. As a company with a family core shareholder group and a history of over 130 years, we focus on responsible growth based on values, tradition and long-term thinking.



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Acquisition of MM Kwidzyn

Attractive potential for development with an expanded product portfolio

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Human Resources
Growing together and
nurturing development

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Acquisition of MM Kotkamills

One of the most modern virgin fiber cartonboard machines in Europe

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>> The fundamental orientation of the MM Group towards a sustainable and long-term growth strategy has been successful and will be further pursued.

Peter Oswald

Chairman of the Management Board



Strategic sustainability management

Identifying opportunities and risks in the areas of Planet, People, Prosperity at an early stage to ensure long-term success

At a glance

Growth and increased profitability through efficiency, sustainability and innovation

Cartonboard packaging for everyday consumer goods as well as kraft papers and uncoated fine papers are our core competence. In two divisions, MM Board & Paper and MM Packaging, we pursue responsible, long-term growth and create value through cost-efficient, sustainable and innovative solutions.

2.6 million

tons of cartonboard and paper produced p.a.

87 %

share of sales in Europe

~12,500

employees worldwide

49

production sites

3

on continents



- Leading producer of cartonboard and folding cartons in Europe
- Increasing efficiency and innovation to enhance competitiveness of sustainable, fiber-based packaging solutions to replace plastics
- Ongoing investments in growth, organic and via acquisitions, with a focus on growing markets
- Solid financial strategy
- Long-term orientation and continuous dividend policy



853,000

tons of tonnage processed

>3,700

customers in more than

140

countries

CDP¹⁾-Rating A-

leadership status

¹⁾ Disclosure Insight Action

57%

of shares

core shareholder families (syndicate)

2021 Values

The year 2021

A successful year despite major challenges

3,069.7 in millions
of EUR

Group sales
+21.4 %

257.8 in millions
of EUR

Investments
(CAPEX)
+63.5 %

421.0 in millions
of EUR

EBITDA
+5.5 %

9.46 in EUR

Earnings per share
+17.4 %

269.6 in millions
of EUR

Operating profit
+16.5 %

3.50 in EUR¹⁾

Dividend per share
+9.4 %

¹⁾ proposed

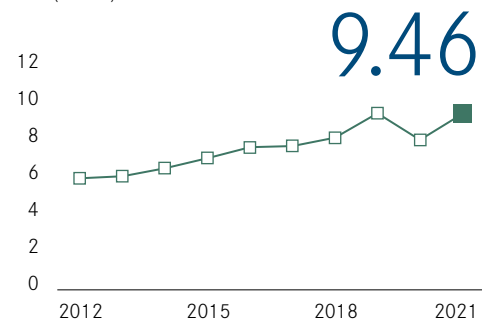
12.8 %

ROCE
Return on Capital
Employed
-85 bp

- Significant increase in sales and profit
- Dividend increase to EUR 3.50 per share proposed
- Transformative acquisitions Kwidzyn and Kotkamills integrated
- Strong demand at Board & Paper and Packaging
- Massive input cost inflation passed on gradually
- Strategic focus on increased competitiveness, growth and profitability

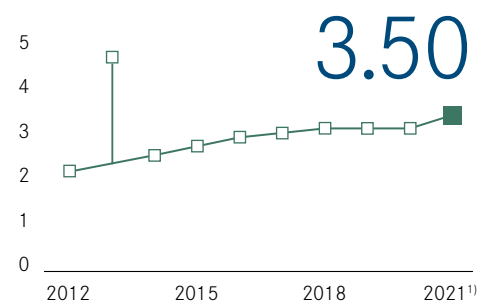
Earnings per share

(in EUR)



Dividend

(in EUR)

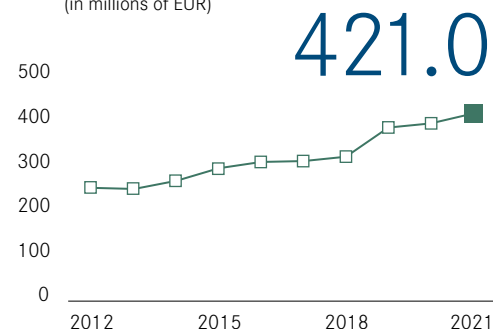


2013: incl. EUR 2.40 bonus

¹⁾ proposed

EBITDA

(in millions of EUR)



Highlights

A year of transformative acquisitions and strategic investments



➤ Acquisition of Kotkamills

With MM Kotkamills, MM strengthens its position in the field of virgin fiber-based cartonboard and innovative barrier cartonboard solutions to replace plastics, and takes a global role in saturating kraft paper.

MM Packaging makes major investments in Poland, Austria, Romania and Great Britain as part of a comprehensive future-oriented program.



➤ Investment program MMP Neupack Polska

Expansion of the Petersona plant in Bydgoszcz with cost benefits and a focus on growing markets such as sustainable, plastic-free packaging.



MM Kwidzyn, Poland

➤ Acquisition of Kwidzyn

With the acquisition of the integrated pulp and paper mill Kwidzyn, MM strengthens its activities in virgin fiber-based cartonboard and creates an attractive potential for development with an expanded product portfolio in the areas of kraft papers and uncoated fine papers.

➤ EUR 1.1 bn

Schuldschein loans/
Namensschuldverschreibungen
successfully placed

The proceeds from the issue are used to finance the acquisitions and organic growth projects.

➤ Sale of the virgin fiber cartonboard mills Eerbeek in the Netherlands and Baiersbronn in Germany

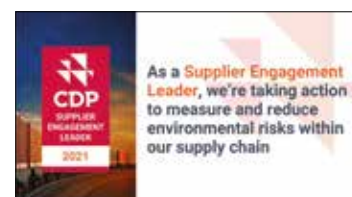
The sale of the smaller mills is in line with MM Board & Paper's strategy to focus on the large acquisitions and growth investments.

➤ The MM Group commits to net zero emissions by 2050

MM has joined the global initiative "Business Ambition for 1.5°C" with the intent of contributing to limiting global warming to 1.5 degrees by taking appropriate measures.

➤ CDP Rating 2021: A-leadership status for the MM Group for the first time

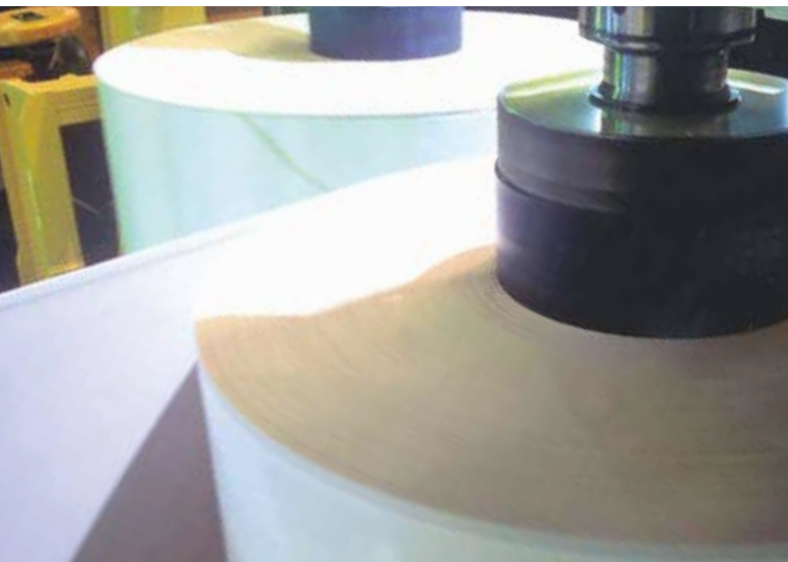
The non-profit organisation CDP (Disclosure Insight Action) has awarded MM an A- rating for its measures to fight climate change and a category B rating for its commitment to forest protection.





>> We have made the two largest acquisitions and launched the so far most extensive investment program in the Company's history to achieve more growth and competitive strength.

Peter Oswald
Chairman of the Management Board



Transformation creates growth

On the fast track with enhanced competitiveness and a focus on sustainability and innovation

Dear Shareholders,

in an exceptional business year 2021, your Company successfully managed a historically unique cost inflation and has set the strategic course for new growth.

A challenging and, at the same time, a very successful year 2021

In an amalgamation of several crises – Covid, raw materials, energy and most recently the war in Ukraine – the MM team managed the day-to-day business very well with a high level of responsibility, implemented challenging strategic projects and worked intensively on the best possible solutions for our customers in an often disrupted supply chain.

On behalf of the Management and Supervisory Board, I would like to sincerely thank all our employees for their high and successful dedication. The outstanding performance of our team made the very difficult year 2021 at the same time a very successful year for MM.

It was financially successful with operating profit and net income up around 17 %. This is why we will propose at the Annual General Meeting a dividend increase of 0.30 cents to EUR 3.50 per share. But even more important: 2021 was a year of profound strategic transformations for new growth, which we have already been able to implement powerfully.

In this foreword, I want to address two topics which characterized 2021 and will continue to be of high relevance throughout the current year: cost inflation and the strategic transformation of MM.

Massive cost increases successively passed on

Tremendous and rapid cost increases of recovered paper, pulp, wood, energy, CO₂ certificates, chemicals, transport and other input factors constituted a significant challenge for our business in 2021. However, these unprecedented inflationary dynamics seem to continue in 2022 and may even accelerate in the field of energy.

For example, the price of mixed recycled paper has increased by a factor of 5 to 6 since I started at MM two years ago, with experts predicting the ultimate peak from quarter to quarter. Or take natural gas, which has seen an increase by a factor of 10 within 24 months.

Throughout 2021, we were limited to pass on these cost inflation due to contractual obligations stipulating quarterly, half-year or full year price validities and slow moving indices. Although we implemented three cartonboard price increases, margins in the division Board & Paper recovered just very slowly from the trough in the second quarter.

New margin-oriented sales policy

To counter the lagging effect we have now lowered the validities, introduced energy surcharges, redefined cost indices. And based on this we have already implemented significant additional cartonboard and paper price increases at the beginning of 2022. In Packaging, however, we will see a temporary reduction of margins due to a number of multi-year contracts with price adjustment clauses that do not cover all our input costs and long delays.

In the medium term, however, we aim at achieving an operating margin of 12 % in Board & Paper and 10 % in

Packaging. Because our customers constantly request higher product quality, more innovation and sustainability, higher capacities and enhanced productivity. This is only feasible if our returns are above our cost of capital.

Foundation laid for growth and increased profitability

Apart from ongoing cost and margin management, the focus in 2021 was on MM's strategic transformation to make use of new growth opportunities and achieve higher competitiveness.

Focus on competitive, large sites

The acquisitions of the two large cartonboard and paper mills in Kwidzyn, Poland, and Kotkamills, Finland, combined with the divestiture of the smaller cartonboard mills in Germany and the Netherlands and the closure of the small cartonboard production in Hirschwang, Austria, already at the end of 2020, were milestones of our new strategy towards more competitive large facilities for more growth.

With these steps, we have not only expanded production for the growing virgin fiber-based cartonboard market, but also expanded our product portfolio by kraft papers and uncoated fine papers with attractive opportunities for the future. As a consequence, the former division name MM Karton was changed to MM Board & Paper.

At this point, I am pleased to report that eight months after these major acquisitions have been closed, we are seeing synergies that are significantly higher than initially expected.

Largest investment (capex) program so far, with a focus on efficiency enhancement, innovation and sustainability

In parallel to the acquisitions, we have adopted MM's largest investment program so far, with a focus on efficiency enhancement, innovation and sustainability in both divisions. As already announced, as in 2021, investments (capex) will continue to be in the range of EUR 250 to 300 million per year from 2022 to 2023.

Strategic course successfully set for 2030

Strong improvement in competitiveness

- Acquisitions of the long-term competitive board and paper mills Kotkamills (FIN) and Kwidzyn (POL), at a reasonable valuation
- Exit from our three small cartonboard mills: Eerbeek and Baiersbronn (sale), Hirschwang (closure)
- Strengthening the management team at Group and division level
- Restructurings at MM Packaging with positive effects on results
- New sales policy: active operating margin management
- Sustainability strategically anchored as basis for long-term business success with increased resources
- Modern innovation management: special focus on sustainability (plastic replacement)



>> MM Packaging is striving for growth through increased efficiency and specialization of our plants as well as targeted acquisitions in attractive future markets.

Andreas Blaschke

Member of the Management Board

In Board & Paper, we are currently executing major investments in the legacy mills Frohnleiten, Austria, Neuss, Germany, and Kolicovo, Slovenia, which will have a positive impact on our results from 2024 onwards as a consequence of increased efficiency, quality and capacity. At Kotkamills and Kwidzyn, we currently focus on smaller investments to realize synergies.

In the Packaging division, we have also made targeted investments into critical location size and specialization for more added-value business.

Lighthouse projects are the considerable technological and spatial expansion of our folding carton production in Bydgoszcz, Poland, as well as the construction of a new packaging plant near Warsaw, which has just started. In addition, we are expanding selected locations to critical size, for example in Great Britain, Austria and Romania. At the same time, however, targeted structural adjustment measures were necessary in Germany.

This is all part of a structural transformation process for more competitiveness, growth and profitability with a view to 2030.

Strengthened sustainability management shows success

We have anchored sustainability much more in our strategy as the basis for our business success and have significantly expanded our personnel with experienced management resources and specialists. For the first time, you will find the complete set of ambitious goals of our sustainability program in the areas Planet, People, Prosperity in our non-financial report. In particular, we are pleased to report that our CDP Climate Rating improved significantly from C to A-. So for the first time, MM has achieved leadership status and has moved into the preferred supplier category.



MM Basket as plastic replacement (European Carton Excellence Award)



>> To finance the acquisitions and our extensive investment program into the future, we have placed the largest Austrian Schuldschein loan so far, amounting to EUR 1.1 billion. This way, MM has ensured secure long-term financing with a solid balance sheet structure.

Franz Hiesinger

Member of the Management Board (CFO)

Furthermore, we have significantly increased our innovation efforts for sustainable fiber-based packaging, especially on the topic of plastic waste avoidance. We also launched several initiatives in 2021 in the areas of digitalization, product pricing, productivity enhancement and fixed cost reduction, as well as employer branding.

Organization oriented towards growth

We are proud that we also succeeded in making the organization of MM fit and viable for the new strategic course and the tight program of tasks in the past year. We were able to attract new experienced managers with an excellent performance record in the cartonboard and paper industry and have also

recruited a number of high potentials who will guide our future growth.

In summary, MM was successful in 2021 and has made good progress in view of its strategic transformation with the aim of achieving new growth and enhancing competitiveness. Although we needed comprehensive borrowings to be able to carry out this transformation, MM was still able to maintain a robust balance sheet with conservative financing.

Looking forward to 2022 with both concern and confidence

We look to the new year 2022 with deep concern and are shocked by the war in Ukraine and the suffering and loss



Investment in increased competitiveness (MMP Neupack Polska)

of lives. We hope for an immediate ceasefire agreement and a diplomatic solution to this appalling conflict. We support our MM team in Ukraine and their families as much as possible and additionally donate to humanitarian aid. In the region of Russia, Belarus and Ukraine, MM generated around 9 % of Group EBITDA in 2021.

Overall, we expect further cost inflation in 2022, the extent of which will be closely linked to the duration and intensity of the war in Ukraine and the sanctions. In addition to high energy costs, there is a potential risk of supply disruptions due to a lack of gas supplies, which is however spread due to MM's broader geographical presence.

Necessary passing on of costs by increasing prices

As already mentioned, we have implemented necessary price increases in response to the massive cost increases. In addition, we are working on a number of projects in both divisions to structurally increase efficiency, reduce fixed costs and partially compensate cost inflation.

The current good order backlog and high demand for both cartonboard and paper as well as packaging provide a good support.

Sales volume will strongly increase in Board & Paper due to the first-time inclusion of Kwidzyn and Kotkamills for twelve months. However, the mill rebuilds in 2022 and 2023 and the associated downtime will keep capacity broadly constant on a like-for-like basis. In the packaging sector, the recent expansions in several packaging plants should allow slightly higher volumes in the course of the year.

Sustainable growth strategy

The MM Group's fundamental orientation towards a sustainable and long-term growth strategy has proven successful and will be further pursued.

While at MM Board & Paper the focus is currently placed on the integration of the new acquisitions, MM Packaging is pursuing further expansion through acquisitions and organic growth projects.

Despite the current challenges and uncertainties, I am strongly convinced that MM has successfully set the strategic course for 2030 over the last two years.

Creating a basis for growth and increased profitability

Overview of significant measures that are still ongoing

- Major investments in three competitive cartonboard mills in Frohnleiten (AUT), Neuss (DEU) and Kolicovo (SLO), positive impact on results as of 2024
- Expansion of MMP Neupack Polska (Petersona) and construction of a new packaging plant in Poland (Emerald) to participate in market growth in Central-Eastern Europe and benefit from more favorable costs, positive impact on results gradually 2023 – 25
- Efficiency increase through MM Packaging machine park upgrade in the printing, die-cutting and gluing area, positive impact on results gradually from 2023 onwards
- Expansion of MM Packaging plants to critical size including logistics: UK, Hirschwang (AUT) and Romania, positive impact on results gradually from 2022 onwards
- Focus on sustainability shows first improvements:
 - CDP climate rating improved from C to A-
 - Customers respond positively to the strengthened focus on sustainability

Our resilient and sustainable packaging products, a solid financial basis, efficient processes and a highly dedicated team give MM resilience in uncertain times.

Yours sincerely,

Peter Oswald
Chairman of the Management Board
in March 2022

Our business model

We create value along the supply chain with sustainable products and processes

MM Board & Paper

47%

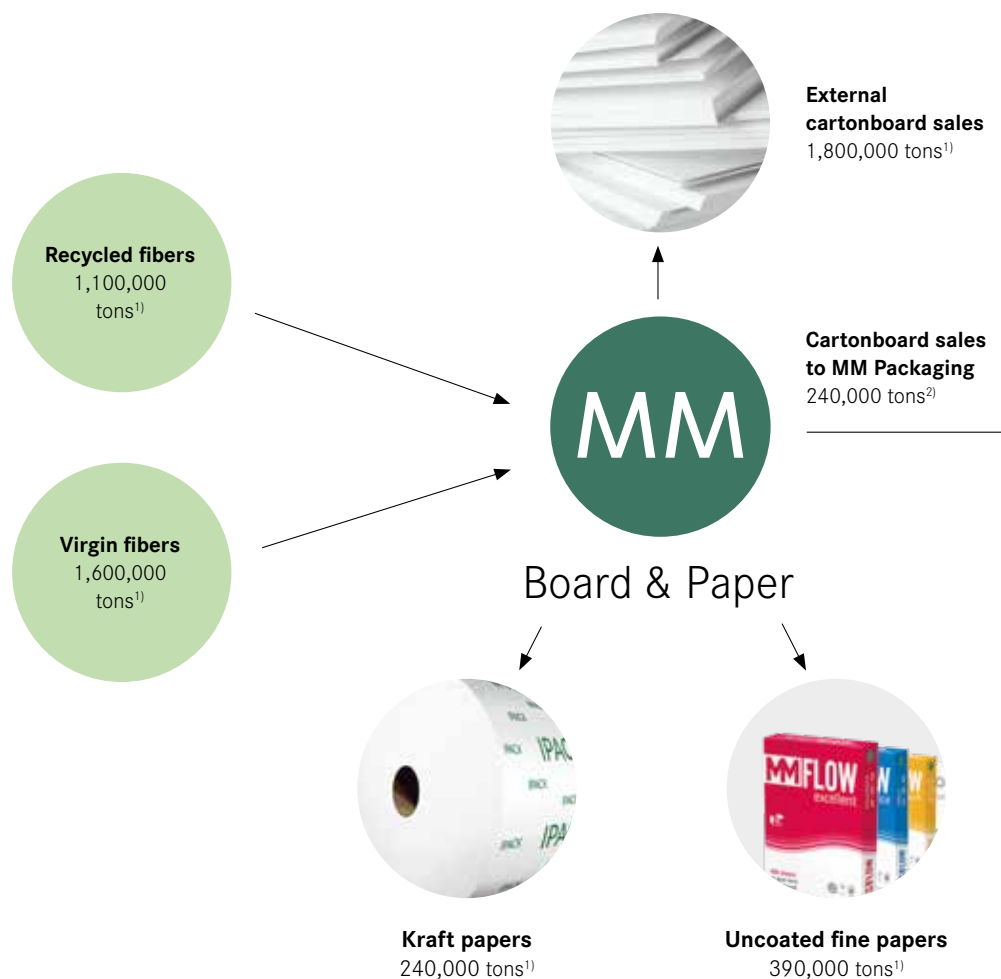
Group sales

40%

Group operating profit

11.0%

ROCE

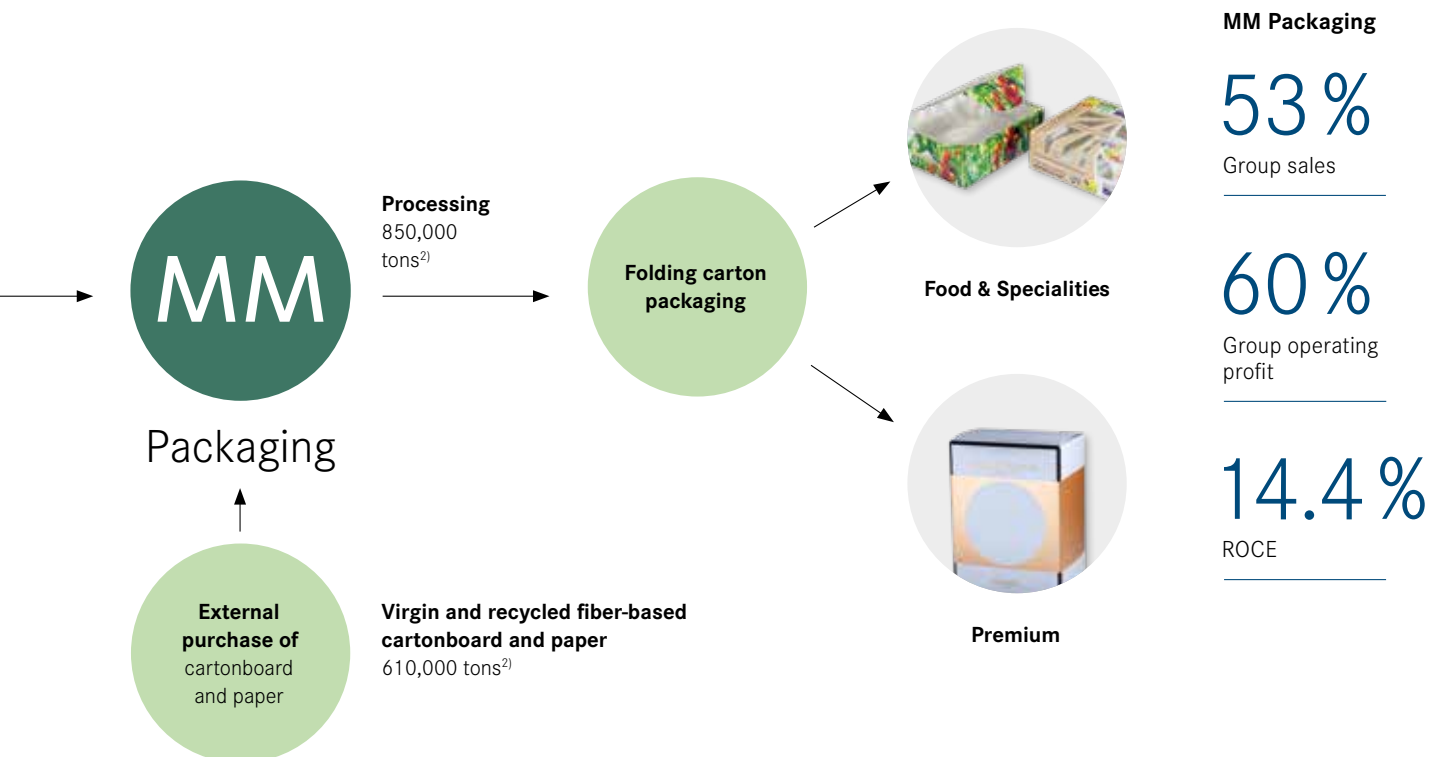


Fibers

For the production of our cartonboard products, we purchase fibers mainly on the spot market. We source recycled fibers from municipalities and traders. For virgin fibers, we mainly use groundwood pulp which is also produced directly at the cartonboard mills. The pulp for our paper products is produced in-house on an integrated basis.

MM Board & Paper

In addition to fibers, energy, chemicals and logistics are significant input cost factors in cartonboard and paper production. Cartonboard is sold to packaging manufacturers and consumer goods producers. Kraft papers are sold in particular to the food/gastronomy industry and the laminate industry, fine papers to paper/office supply retailers.



¹⁾ MM Board & Paper: annualized values

²⁾ MM Packaging: 2021 values

MM Packaging

Cartonboard and paper are the main input factors of MM Packaging. As a result of the broad sales spectrum, around 50 % of recycled fiber-based cartonboard and 50 % of virgin fiber-based cartonboard including paper are processed. MM Packaging is supplied by MM Board & Paper at market conditions.

End markets

The Food & Specialities and Premium markets contribute in roughly equal parts to the sales of MM Packaging. The highly specialized Premium business comprises the areas Pharma, Beauty & Personal Care and Cigarette.

MM Kwidzyn

Plattform for further growth

A milestone

Joining MM Group has marked a significant milestone for the Kwidzyn mill. The integrated pulp and paper mill was constructed in the 1970-80s and became a leading player in the industry within the next 20 years with four best-in-class paper and board machines, top quality products carrying well positioned brands and a talented team of professionals.

Leverage the high potential for development

Today we are facing new challenges from a demanding business environment and dynamic changes in the industry and customer choices. We need to evolve to remain competitive and we are excited that this change is happening within the MM Group. The merger has opened up a lot of new development opportunities and has inspired new ways of thinking about our future. Our goal is to build a long-term development strategy by deliberate investment planning in order to leverage the mill's full potential.



MM Kwidzyn

- ③ Integrated pulp and paper mill
- ③ High-quality virgin fiber-based cartonboard
- ③ Successful entry into kraft papers
- ③ Two of the most attractive copy paper machines in Europe



Attractive location

Being located in northern Poland, Central Europe, is a strong asset and creates a lot of opportunities for supply chain development. A great emphasis was also placed on reducing our environmental footprint and CO₂ emissions to become an even more sustainable manufacturer of recyclable products.

The change of corporate identity is a challenge, but the integration has already shown how well our worlds link. We share the same values of passion, performance and responsibility towards people and the planet. We are striving for innovation and have a common goal of achieving sustainable and long-term prosperity as MM.

>> The merger has brought a lot of new development opportunities and has inspired new ways of thinking about our future.

Tomasz Brodecki
Managing Director MM Kwidzyn



MM Kotkamills

Sustainable solutions from Finland

>> We drive product development towards higher value added products and increase productivity by operational improvements and successful capex.

Päivi Suutari

Managing Director MM Kotkamills



Strong position in virgin fiber-based cartonboard

It is a great benefit and advantage to have the leading company of our industry as a new owner. Through the acquisition of Kotkamills, MM has strengthened not only its position in virgin fiber-based cartonboard but has also added a range of barrier cartonboard solutions that can replace plastics in packaging and in food service applications. This is a core topic that we continue to drive with vigor.

A global market leader in saturating kraft paper

Furthermore, MM has diversified the business with saturating kraft paper, used as core material in decorative and industrial high pressure laminates, in which Kotkamills is one of the global market leaders. And finally our sawmill that has been in operation since 1872 supplies ecological wood products for the global markets.

Sustainability in focus

Sustainability is key to Kotkamills, especially by reducing CO₂ emissions, improving water protection, and using energy more efficiently. As a green company we will continuously further improve our performance along this way.





MM Kotkamills

- One of the most modern virgin fiber board machines in Europe
- World's leading producer of saturating kraft paper



Ambitious volume increase

The very first capex project with MM Board & Paper already started in autumn 2021, to increase the production of our strongly demanded saturating kraft paper Absorbex® to 200,000 tons p.a. At the same time, we are making operational improvements and undertaking investments to increase the production of our innovative board machine, which is one of the most modern machines on the European market, to its full capacity of 400,000 tons p.a.

Having worked as RDI director before my role as Managing Director, I am very happy now about the broader shoulders of MM thoroughly supporting innovation and product development.

Planet, People, Prosperity

Sustainability as a precondition for our business success



>> Strategic sustainability management enables us to identify risks and opportunities in the areas of Planet, People, Prosperity at an early stage and thus ensures the long-term success of the MM Group.

Thomas Greigeritsch

Head of Group Sustainability & Marketing Communication

We are committed to sustainability

Practiced sustainability secures competitive advantages, creates new market opportunities and represents a transparent quality criterion for all stakeholders. Therefore, sustainability and the circular economy are firmly established in the corporate strategy of the MM Group. In the course of our sustainability program Planet, People, Prosperity, we contribute to ecological, social and economic sustainability.

Create added value

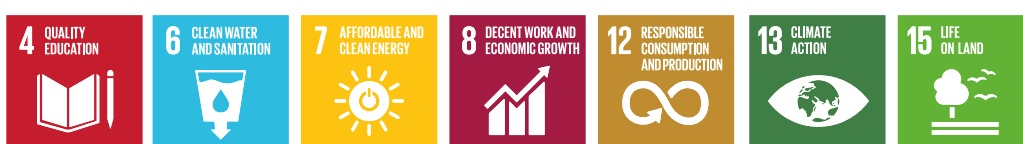
The focus is on a science-based approach. This applies to both corporate and product sustainability. It is our goal to provide added value for our customers, society and the environment through sustainable solutions. In 2021, the MM Group committed to the global initiative “Business Ambition for 1.5°C” in order to contribute to limiting global warming to 1.5 degrees by 2050 through appropriate measures, and thus commits to setting science-based climate targets.





Leadership status

Sustainable development cannot succeed alone. Therefore, we rely on close cooperation along the value added chain and on transparency with regard to our sustainability performance as part of our sustainability management. Among others, the MM Group publishes its environmental data as a part of CDP (Disclosure Insight Action). With an A- rating for initiatives against climate change, the MM Group was awarded leadership status for the first time in 2021 and is thus one of the leading 11 % of all participating companies.



Focus on plastic substitution

With innovative solutions made of cartonboard and paper, MM is at the lead of plastic waste prevention

Advantages of cartonboard and paper

➤ **More sustainable production**

Cartonboard and paper are made from cellulose fibers, the primary raw material being obtained from virgin or recycled fibers. In Europe, approx. 46 % of the fibers used are derived from recycled paper and 40 % from fresh mechanical pulp. 90 % of the wood used in the European industry originates from the European Union. 60 % come from sustainably managed forests and is certified by independent third parties.

Source: ProCarton

>> If cartonboard is not recycled, it decomposes comparatively fast, because the cellulose fibers are water-soluble. On the other hand, the big problem with plastic is that it will remain with us as waste for at least 400 years.

Peter Oswald

Chairman of the Management Board

Responsible packaging solutions

By focusing on cartonboard and paper products, a responsible circular economy is a central part of our business. Our products are mainly made from renewable raw materials and are characterized by their high recyclability. With the development and optimization of recyclable packaging solutions made from cartonboard and paper, we show our customers that high functionality and perfect convenience can also be achieved without plastic. Our innovative products contribute to the substitution of plastic and thus promote ecological sustainability.



Over 5 trillion particles of plastic waste pollute our oceans.



The new ALB-GOLD paper packaging for pasta is a successful paper-packaging concept from MM Innovaprint, Bielefeld, which replaces plastic packaging.



Innovative recyclable packaging solutions made of cartonboard and paper avoid plastic waste.

Plastics as an environmental burden

From 1950 to 2015, 8.3 billion tons of plastic were produced worldwide – that's more than one ton of plastic per person measured against the world's population (source: Plastic Atlas 2019). According to an international research study, over 250,000 tons or 5 trillion of these plastic materials are found in the world's oceans as plastic waste (source: PLOS ONE). In Europe, about 29 million tons of plastic waste is generated, with only just over 40 % being properly recycled (source: Eurostat).

Current recycling rates compared to the target values within the EU Circular Economy Package

	Recycling rate ¹⁾	Recycling targets 2025 (2030)
Cartonboard and paper	82 %	75 % (85 %)
Metal	78 %	Iron: 70 % (80 %) Aluminium: 50 % (60 %)
Glass	76 %	70 % (75 %)
Plastic	41 %	50 % (55 %)

¹⁾ Average recycling rates of the EU member states in 2019 according to Eurostat, as of March 2022.

> Cartonboard and paper recycling without limits

From the past, the idea persists that paper fibers can be recycled 25 times, see page 93. From practical experience, we know that this is still understated. We have provided scientific proof of this. Together with MM Board & Paper, the University of Technology Graz has launched an experiment to investigate the recyclability of folding cartonboard in more detail. A very time-consuming experiment for which scientists have worked in the laboratory for a year. The result: cartonboard can be recycled over and over again without losing its strength properties.

Source: MM

> Highest recycling rate

Cartonboard and paper packaging are the most recycled materials in the European Union. With a rate of 82 %, they are the European champion in packaging recycling.

Source: Eurostat

> Better energy balance

The production of both plastic and paper packaging causes high energy consumption. However, the energy balance of cartonboard and paper production is significantly better than that of plastic packaging. In Europe, biomass is the largest direct energy source with 58 %, followed by gas with 35 %. In addition, almost half of the energy required in the cartonboard and paper sector is self-generated. In that respect combined heat and power (CHP) is used to 96 %.

Source: ProCarton

Growing together – nurturing development

Great challenges well mastered together



>> We are challenged and learn every day, also as a team. That is the basis of our success.

Petra Pointinger

Head of Group Human Resources

Working together on solutions

2021 has shown one thing: we at MM get things done. Our employees around the world have consistently developed and implemented measures to keep production running or even expand it in the second year of the pandemic and to meet customer requirements in the best possible way. It was not easy to deal with the many restrictions and the constantly changing regulations. The challenging market environment made this task even more difficult. But coupled with high personal commitment and a lot of creativity, our joint solution-oriented work in 2021 led to a successful year. The long-time experience and expertise of our staff as well as the leadership strength of many managers has become clearly visible during this challenging time.

Strategic moves well mastered

Personally, it has been a great pleasure to experience so much enthusiasm and commitment to the large transformations and ongoing challenges. I would like to emphasize the positive cooperation with our new colleagues from MM Kwidzyn and MM Kotkamills right from the beginning, despite many changes and additional work. We have mastered these major strategic moves in a great way and have even been able to keep to schedules, which had even seemed impossible at the beginning. The integration process is making great progress, and we shape the future together.



Attractive development programs

When a lot is happening, you can also learn a lot. Even experienced experts and managers have to come up with new solutions for new issues. MM supports the development of its employees by offering opportunities for further education and training as part of the MM Academy.

We also help them to develop in specific programs and by entrusting them with new tasks, roles or projects. Because we grow most from concrete challenges on the job. A dynamic environment, a sustainable business model and a variety of job profiles create many opportunities at MM for an attractive joint path forward.

MM Board & Paper

Europe's leading cartonboard producer with an attractive offer of kraft papers and uncoated fine papers

The competitiveness of MM Board & Paper (formerly MM Karton) has been significantly strengthened by the strategic acquisitions, mill divestments and ongoing major investments.

With the cartonboard and paper mills Kwidzyn and Kotkamills, MM has acquired two new core products, kraft papers and uncoated fine papers, in addition to its improved position in virgin fiber-based cartonboard.



MM Kwidzyn

Poland

- ⊗ **265,000 t** annual capacity
virgin fiber-based cartonboard
- ⊗ **70,000 t** annual capacity
kraft paper
- ⊗ **390,000 t** annual capacity
fine paper
- ⊗ **Development:** Expansion kraft paper, reduction of CO₂ emissions

MM Kotkamills

Finland

- ⊗ **400,000 t¹⁾** annual capacity
virgin fiber-based cartonboard
 - ⊗ **170,000 t** annual capacity
kraft paper
 - ⊗ **Development:** Achieving full capacity utilization in the cartonboard sector; capacity expansion saturating kraft paper
- ¹⁾ planned



MM Kolicovo

Slovenia

- ⊗ **135,000 t** annual capacity
virgin fiber-based cartonboard
- ⊗ **135,000 t** capacity
recycled fiber-based cartonboard
- ⊗ **Development:** Increased orientation as virgin fiber-based cartonboard location





MM FollaCell

Norway

- **140,000 t** annual capacity
mechanical pulp
- **Development:** Maintaining a good level in the long-term

MM Frohnleiten

Austria

- **530,000 t** annual capacity
recycled fiber-based cartonboard
- **Development:** Investments focus on sustainability, digitalization and capacity expansion



MM Gernsbach

Germany

- **270,000 t** annual capacity
recycled fiber-based cartonboard
- **Development:** Extensive quality optimizations achieved

MM Neuss

Germany

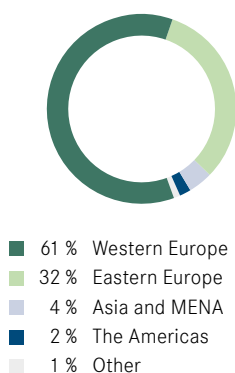
- **385,000 t** annual capacity
recycled fiber-based cartonboard
- **Development:** Expansion flexoliner, new power plant





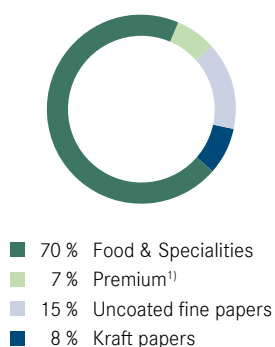
Uncoated fine paper
(office paper) MM Kwidzyn

Sales by destination



Sales by end markets

(% volume)



¹¹ Pharma, Beauty & Personal Care, Cigarette

Share of top 5 customers¹¹

(% sales)



¹¹ excl. MM Packaging

Leading cartonboard producer

MM Board & Paper is the leading cartonboard producer (excluding liquid board) in Europe with a total capacity of approximately 2 million tons of cartonboard in six board mills. The aim is to grow faster than the market through high competitive strength from location size, innovation and sustainability.

Sustainable sales market

The products of MM Board & Paper are used primarily as raw materials for the production of packaging for fast moving consumer goods and are characterized by high functionality and sustainability. Core business are food packaging, packaging for household, hygiene and pharmaceutical products as well as office and laminate papers. The main customers are cartonboard packaging manufacturers in the highly fragmented European folding carton industry and retailers. In view of the short-term delivery of the product to the customer and the transport costs, the European market is mainly supplied from Europe.

Current focus on the integration of new acquisitions and realization of synergies

Key Indicators MM Board & Paper

(in millions of EUR)	2021	2020	+/-
Sales ¹⁾	1,561.1	1,050.8	+ 48.6 %
EBITDA	185.2	164.7	+ 12.5 %
Operating profit	107.7	86.7	+ 24.2 %
EBITDA margin	11.9 %	15.7 %	- 381 bp
Operating margin	6.9 %	8.3 %	- 135 bp
Cash flow from operating activities	108.7	126.3	- 13.9 %
Return on capital employed	11.0 %	14.5 %	- 355 bp
Capital expenditures (CAPEX)	113.1	95.0	+ 19.0 %
Depreciation and amortization ²⁾	77.6	78.0	- 0.6 %
Employees ³⁾	4,787	2,417	+ 98.1 %

	2021	2020	+/-
Tonnage sold (in thousands of tons)	2,092	1,704	+ 22.7 %
Cartonboard	1,834	1,704	+ 7.6 %
Kraft papers	93	n.a.	
Uncoated fine papers	165	n.a.	
Tonnage produced (in thousands of tons)	2,069	1,710	+ 21.0 %
Capacity utilization	97 %	97 %	

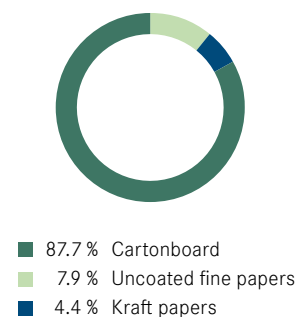
¹⁾ incl. interdivisional sales

²⁾ incl. impairment of property, plant and equipment, and intangible assets

³⁾ as of December 31

MM Board & Paper

(Tonnage sold)



2021 Values



Kraft paper (IPACK) MM Kwidzyn



Cardboard rolls
MM Kotkamills

MM Packaging

A leading European folding carton producer

MM Packaging places its focus on increasing competitiveness by expanding plants to a critical size, further expanding the advantageous production base in Poland and increasing efficiency by upgrading machinery.

MMP Neupack Polska

Bydgoszcz, Poland

- ⌚ Folding cartons and packaging made of micro-flute for Food & Specialities
- ⌚ **Development:** Doubling of capacities, industrial digital printing



MM Neupack

Reichenau, Austria

- ⌚ Micro-flute packaging
- ⌚ **Development:** Upgrading and expansion of the plant



MM Packaging Romania

Blejoi, Romania

- ⌚ Folding cartons and micro-flute packaging especially for Food & Specialities
- ⌚ **Development:** Expansion and modernization of the machinery

MM Packaging UK

Deeside, Great Britain

- ⊙ Folding cartons for Food & Specialities
- ⊙ **Development:** Location transfer and expansion of the machinery



MM Premium Vienna

Vienna

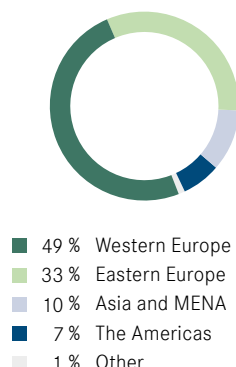
- ⊙ Folding cartons in high-quality range
- ⊙ **Development:** Upgrading to a premium location

Project Emerald Poland

Góra Kalwaria near Warsaw

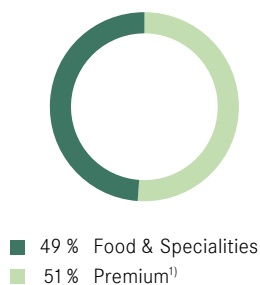
Investment in the construction of a state-of-the-art new site for Pharma, Beauty & Personal Care in Poland with a competitive cost base.

Sales by destination



Sales by end markets

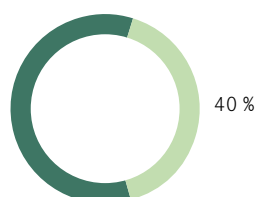
(% sales)



¹¹ Pharma, Beauty & Personal Care, Cigarette

Share of top 5 customers

(% sales)



2021 Values



Premium (Pharma)

A leading folding carton producer

MM Packaging is a leading folding carton producer in Europe with a leading position also in several markets outside Europe. In 2021, MM Packaging generated sales of EUR 1,641.6 million and processed around 850,000 tons of recycled and virgin fiber-based cartonboard and paper.

Cartonboard packaging for consumer goods

The main sales area is cartonboard packages for consumer staples. With technologically dedicated locations and broad market expertise, MM Packaging's core business covers both the large volume market of Food & Specialities as well as highly specialized printing and packaging services for the Premium market. Due to transport costs and service requirements, folding carton products are produced close to the customer. MM Packaging manufactures around 80 % of its production for large international customers.

At MM Packaging, we pursue further expansion through acquisitions and organic growth projects.

Key Indicators MM Packaging

(in millions of EUR)	2021	2020	+/-
Sales ¹⁾	1,641.6	1,594.2	+ 3.0 %
EBITDA	235.8	234.2	+ 0.7 %
Operating profit	161.9	144.7	+ 11.9 %
EBITDA margin	14.4 %	14.7 %	- 33 bp
Operating margin	9.9 %	9.1 %	+ 79 bp
Cash flow from operating activities	161.1	191.9	- 16.1 %
Return on capital employed	14.4 %	13.2 %	+ 124 bp
Capital expenditures (CAPEX)	144.7	62.6	+ 131.1 %
Depreciation and amortization ²⁾	73.8	89.5	- 17.5 %
Employees ³⁾	7,705	7,521	+ 2.4 %
	2021	2020	+/-
Tonnage processed (in thousands of tons)	853	847	+ 0.7 %

¹⁾ incl. interdivisional sales

²⁾ incl. impairment of property, plant and equipment, and intangible assets

³⁾ as of December 31



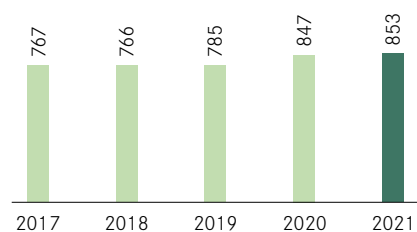
Food & Specialities



Premium (Beauty & Personal Care)

Tonnage processed by MM Packaging

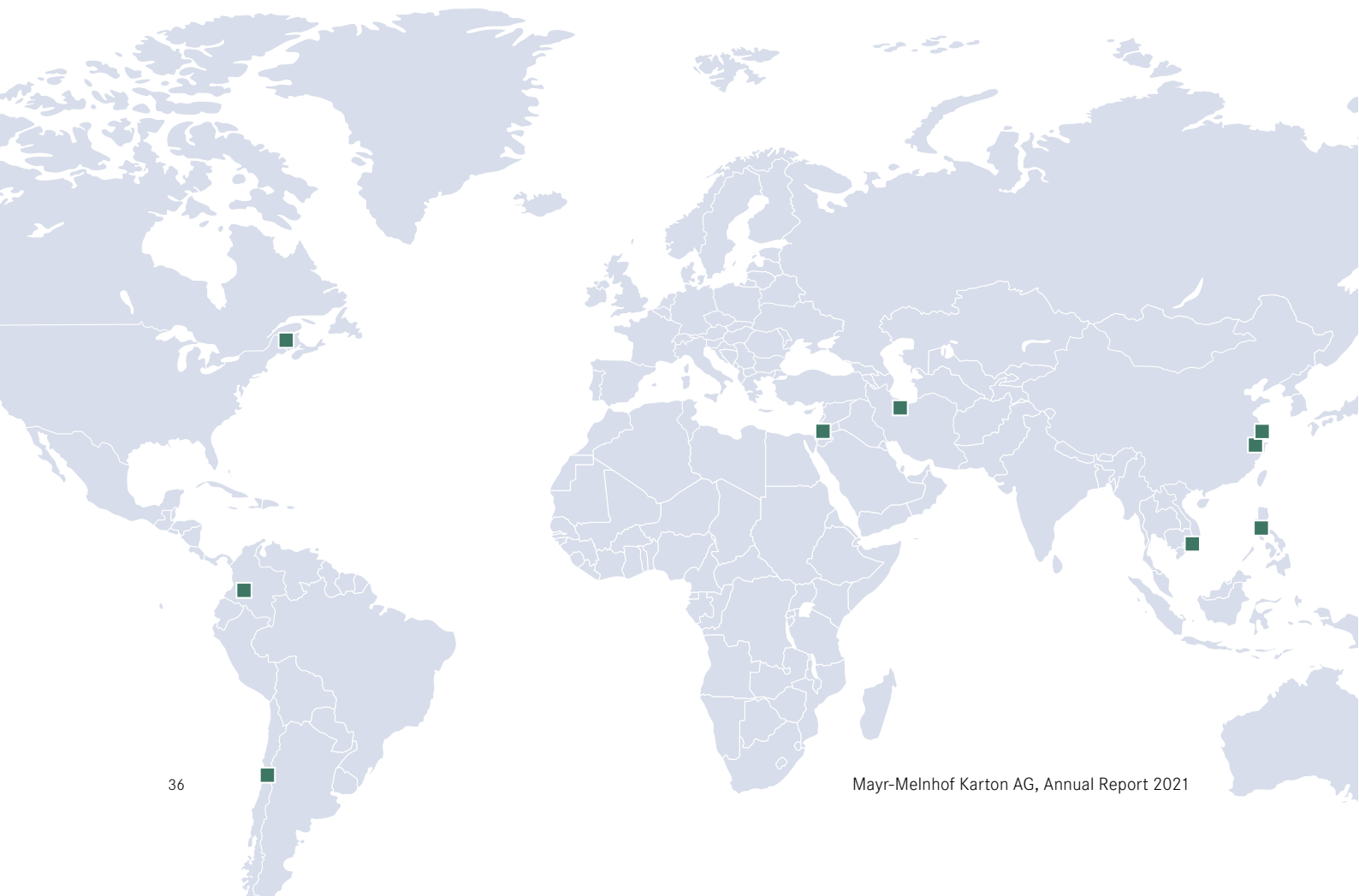
(in thousands of tons)



Global presence, focus on Europe

An international network of locations close to the customer

Products from our European cartonboard and paper mills are sold worldwide. Due to the limited economic supply radius, the business of individual packaging plants mainly focuses on the respective regional markets.





> **49** production sites on **3** continents

> **6** cartonboard and paper mills

> **43** packaging sites

> Sales in more than **140** countries

> **19** sales offices in **16** countries

(values year-end 2021)

MM Shares

In a stock market year 2021, which was overall characterized by an upswing on the stock exchanges, the MM share recorded a price performance of +7.0 % after a strong closing price in the previous year. The announcement in February to acquire the Polish cartonboard and paper site Kwidzyn as well as the structural changes associated with the recent acquisitions were positively received by the capital market. After a share price of EUR 165.00 at the end of 2020 and the distribution of a dividend of EUR 3.20 per share, the year 2021 closed with a share price of EUR 176.60. On November 12, 2021, the share reached a historic high of EUR 184.20.

The positioning of the MM Group as a long-term oriented, profitable, leading producer of cartonboard and folding cartons in Europe with an attractive range of kraft papers and uncoated fine papers was at the center of our ongoing Investor Relations activities. Our intensified strategic orientation as sustainability company towards avoiding plastic waste through innovative, recyclable packaging and paper products as well as the transformation process and entry into the top league of our industry associated with the acquisitions resulted in an exceptionally high level of investor interest in 2021. We continued to actively maintain relationships with our investors and the interested public via webcasts and a large number of virtual conferences and discussions. We attach great importance to the constructive feedback from the dialog with capital market participants, which we consider to be extremely valuable on our way into the future. The transformative acquisitions of the MM Group also convinced analysts of international banks and brokerage houses, who overall issued positive recommendations.

The share

The MM share has been listed on the Vienna Stock Exchange for 27 years. The issue price on April 21, 1994 amounted to EUR 26.16. The long-time listing on the ATX Prime requires the fulfillment of special additional requirements, such as stricter transparency criteria and minimum capitalization.

As "green investment", the MM share has been part of the Natur-Aktien-Index (NAI) ever since 1997 – for 25 years now. This index comprises 30 international companies that are selected according to particularly strict ecological and social criteria. In addition, the MM share was included in the newly launched AKTIONÄR Zero Plastic Index in 2021, which includes eight European companies that contribute to containing plastic consumption with their alternative concepts.

The share capital of Mayr-Melnhof Karton AG, amounting to EUR 80 million, is divided into 20 million bearer shares, applying the principle of "one share – one vote".

Stock market year 2021

In 2021, international stock markets were characterized by a steady upward trend, which led to record highs on some stock exchanges. This was mainly driven by the global economic upswing, which was supported by the ongoing expansionary monetary policy of major central banks and government aid measures. Uncertainties such as the lasting Covid-19 pandemic, increasing inflation, global supply bottlenecks and rising energy prices did not result in any sustained downturns.

As a result, both the pan-European EURO STOXX 50 index, with an increase of 21.0 %, and the leading Austrian index ATX, with a significant plus of 38.9 %, were able to compensate for the previous year's losses. The DAX rose by 15.8 % compared to the end of 2020, the Dow Jones Industrial (DJI) went up by 18.7 %.

Stable shareholder structure

The syndicate of core shareholder families continued to hold a stable share of around 57 % of the share capital in 2021. The remaining 43 % of the shares are in free float and are mainly held by long-term oriented institutional investors in Europe and the US.

Shareholder structure (in %)



Continuous dividend policy

Our dividend policy provides for a continuous distribution to the Company's shareholders in line with profit performance. Based on the positive profit development in the business year 2021, the Management Board will propose a dividend of EUR 3.50 per share to the 28th Ordinary Shareholders' Meeting on April 27, 2022, after EUR 3.20 per share were paid for 2020. This corresponds to a dividend payment totaling EUR 70.0 million (2020: EUR 64.0 million) for the business year 2021 and a payout ratio of 37.00 % (2020: 39.71 %). Based on the average share price in 2021, a dividend yield of around 2.0 % was achieved (2020: 2.4 %).

Investor Relations

A sustained active, direct and open dialog with our institutional and private investors, analysts, journalists and the interested public has always been at the center of our Investor Relations program, which we continued to pursue with great commitment in 2021.

In addition to the regular disclosure required by law, the exchange with current and potential investors took place, in particular by participating in virtual investor conferences with a large number of individual meetings.

The approach of our Investor Relations work consists in providing all capital market participants with an accurate image of the Group at all times by sharing comprehensive, timely and transparent information in order to facilitate an appropriate valuation of the MM share and to promote a long-term relationship of trust with shareholders and the public.

In this context, we attach the highest priority to the principle of treating all shareholders equally. Therefore we always publish all share-price-relevant and current information simultaneously and identically via an electronic distribution system and on the website of Mayr-Melnhof Karton AG.

The Chairman of the Management Board comments on the current operating and strategic development of the Group on a quarterly basis in publicly accessible audio and/or video webcasts. Thereby, the presentation of the annual and half-year results on a regular basis takes place in a video webcast and a subsequent CEO conference call.

Service for shareholders

We offer shareholders and interested parties the possibility to register for regularly receiving the Company's reports and press releases on our website (<https://www.mm.group/en/publication-mailing>).

Furthermore, our Investor Relations department is available to answer any questions you may have.

We aim at continuously improving our Investor Relations activities and are therefore always grateful for any suggestions for optimization.

Your contact at Investor Relations

Stephan Sweerts-Sporck

Phone: +43 1 501 36 91180

Fax: +43 1 501 36 91195

E-Mail: investor.relations@mm.group

Website: <https://www.mm.group>

Information about MM shares

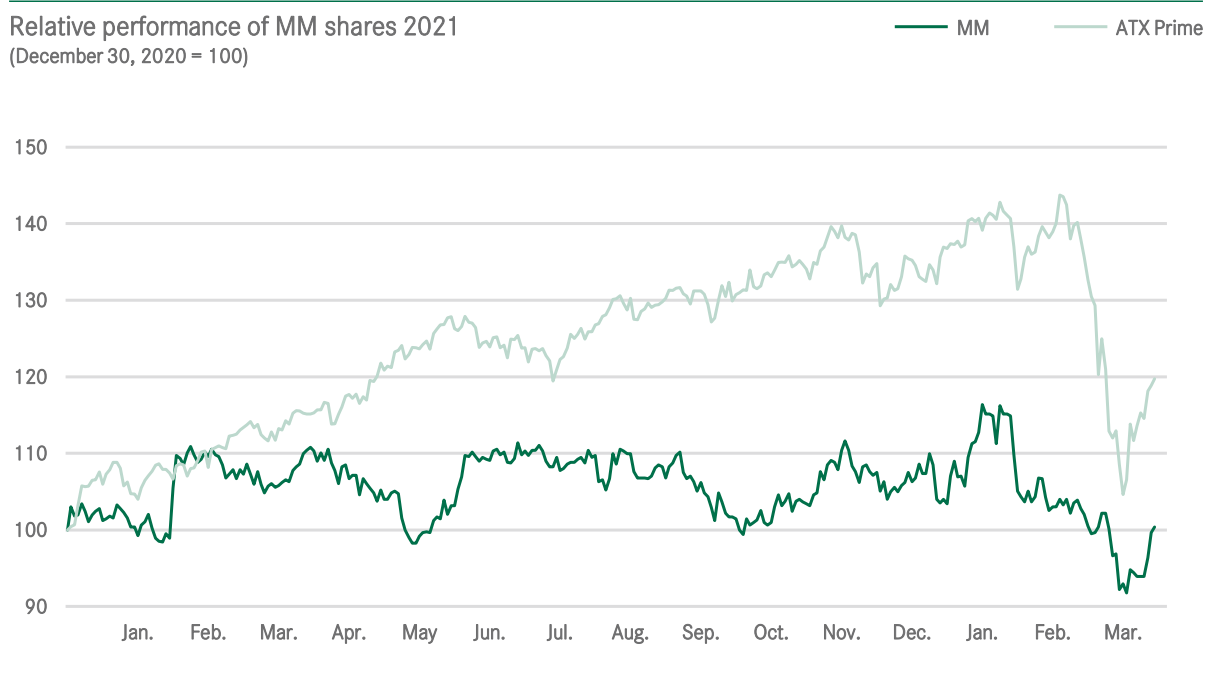
ISIN securities identification number: AT0000938204

Reuters: MMKV.VI

Bloomberg: MMK:AV

Share price chart

Relative performance of MM shares 2021
(December 30, 2020 = 100)



Share performance indicators

Stock price per share (in EUR)	2019	2020	2021
High	121.00	166.20	184.20
Low	105.80	93.50	162.20
Year-end	119.60	165.00	176.60

Stock performance (as of Dec. 31)			
-1 month	- 0.7 %	+ 11.8 %	+ 2.9 %
-3 months	+ 8.3 %	+ 11.3 %	+ 7.0 %
-9 months	+ 7.0 %	+ 46.0 %	+ 0.7 %

Relative performance (year-end)			
MM Shares	+ 8.7 %	+ 38.0 %	+ 7.0 %
ATX Prime	+ 15.9 %	- 12.1 %	+ 37.0 %

Share performance indicators (in EUR)			
Earnings per share	9.49	8.06	9.46
Total equity per share	75.15	77.12	82.82
Dividend per share	3.20	3.20	3.50 ³⁾
Dividend (in millions of EUR)	64.00	64.00	70.00 ³⁾
Dividend yield per average share price	2.8 %	2.4 %	2.0 %

Stock market data (Vienna Stock Exchange)			
Trading volume ¹⁾ (in EUR)	1,519,050	3,251,689	2,348,276
Number of shares issued	20,000,000	20,000,000	20,000,000
Free float ²⁾	8,596,720	8,596,720	8,596,720
Market capitalization ²⁾ (in millions of EUR)	2,392	3,300	3,532
ATX Prime weighting ²⁾ (in %)	2.18 %	3.37 %	2.66 %

¹⁾ daily average²⁾ as of Dec. 31³⁾ proposed

Consolidated Corporate Governance Report

As an internationally active, listed company, the MM Group is committed to responsible Corporate Governance focusing on sustainable value added. We consider this to be an essential prerequisite for achieving our corporate goals. We therefore ensure that Corporate Governance is consistently practiced and further developed in all areas of the Company. This includes the whole management and control system of the Company with the approach of promoting trust in the MM Group among our employees, shareholders, business partners and the public and ensuring a high level of transparency.

This present report provides information on the disclosures required by sections 243 c and 267 b of the Austrian Commercial Code.

COMMITMENT TO THE AUSTRIAN CORPORATE GOVERNANCE CODE

The MM Group has voluntarily committed to compliance with the Code in its respectively applicable version since the Austrian Corporate Governance Code (Österreichischer Corporate Governance Kodex – ÖCGK) became effective in 2002. The Code is based on the provisions of Austrian stock corporation, stock exchange and capital market laws, EU recommendations as well as the guidelines contained in the OECD Principles of Corporate Governance. The Code is regularly reviewed against the background of national and international developments and adjusted as necessary. The current Austrian Corporate Governance Code can be downloaded from the website of the Austrian Working Group for Corporate Governance at www.corporate-governance.at. The compliance with the Corporate Governance Code is subject to an annual internal evaluation provided by the MM Group. Furthermore, an external evaluation of compliance with C rules is carried out every three years, which was again performed in 2021 in order to rotation.

The implementation and evaluation for the business year 2021 is based on the Code's version of January 2021. The MM Group continues to comply with all legal provisions without any restrictions. Almost all additional C Rules and R Rules (Recommendations) contained in the Code, which do not require any explanation in case of deviations, have been complied with.

The Company gives the following explanations for deviations from C Rules for 2021:

Rule 27a	The Management Board contracts do not contain any provisions stipulating that the economic situation is to be taken into account in the event of the premature retirement of a Management Board member. However, due to the long-term profit-sharing scheme, future developments are taken into account by means of surcharges or deductions. When concluding new Management Board contracts, this requirement of the ÖCGK should also be taken into account.
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COMPOSITION OF THE BOARD

The Management Board

Peter Oswald

Chairman, CEO

Member of the Management Board

since April 1, 2020

appointed until March 31, 2025

born 1962

Strategic and profit-responsible management of the entire Group and in particular the areas:

- Group strategy
- Group organization
- Human resources of the Group and Board of the subsidiaries
- External and internal communication and Investor Relations
- Communication with the Presidium and the Supervisory Board members
- Sustainability including occupational safety
- Determination of representatives at associations
- Primary profit responsibility for the division Board & Paper (including sales and marketing, production, innovation and product development)
- Procurement

Franz Hiesinger

CFO

Member of the Management Board

since October 1, 2017

appointed until September 30, 2025

born 1965

- Finance and all financing matters
- Group reporting and accounting as well as controlling
- Merger and acquisition matters
- Risk management, insurances
- Legal and tax matters including compliance
- Information management (IT)
- Internal Audit

Andreas Blaschke

Management Board member Packaging

Member of the Management Board

since May 14, 2002

appointed until April 30, 2025

born 1961

- Primary profit responsibility for the division Packaging (including sales and marketing, production, innovation and product development)

The members of the Management Board do not hold any mandates in Supervisory Boards outside the Group.

The Supervisory Board

Rainer Zellner

Chairman since April 29, 2015 born 1947	Independent entrepreneur; Chairman of the Supervisory Board of Mayr-Melnhof Holz Holding AG, Leoben
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Johannes Goess-Saurau

1 st Deputy Chairman since May 7, 2008 Member of the Supervisory Board since May 18, 2005 born 1955	Manager of his own companies
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Nikolaus Ankershofen

2 nd Deputy Chairman since April 26, 2017 Member of the Supervisory Board since April 28, 2010 born 1969	Lawyer and partner at Ankershofen Goëss Hinteregger Rechtsanwälte OG; Supervisory Board member at Mayr-Melnhof Holz Holding AG, Leoben; Management Board member of several private trusts
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Alexander Leeb

Member of the Supervisory Board since May 7, 2008 born 1959	Deputy Chairman of the Supervisory Board at Plansee Holding AG, Reutte; Deputy Chairman of the Supervisory Board at Andritz AG, Graz; Chairman of the Board of Trustees of LGT Venture Philanthropy Foundation, Vaduz
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Georg Mayr-Melnhof

Member of the Supervisory Board since May 7, 2008 born 1968	Employee of the archdiocese of Salzburg
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Ferdinand Mayr-Melnhof-Saurau

Member of the Supervisory Board since April 29, 2020 born 1987	Managing partner at various real estate investment and real estate development companies; Management Board member at Oskar Vogl Privatstiftung, Graz
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Klaus Rabel

Member of the Supervisory Board since April 29, 2020 born 1961	Auditor and tax consultant, University Professor of Corporate Valuation and Value-Oriented Management at the Institute of Corporate Accounting and Taxation at the Karl-Franzens-University, Graz; Deputy Chairman of the Professional Committee for Business Administration of the Chamber of Advisors and Auditors, Vienna; Member of the Europe MSR Board of the International Valuation Standards Council (IVSC), London; Management Board member of Austrian family trusts and Supervisory Board member in Austrian family-owned companies
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Franz Rappold

Member of the Supervisory Board since April 29, 2020 born 1952	Managing partner at RAFRA Consulting GmbH; Supervisory Board member at Polo Handels AG, Vienna; Supervisory Board member at Mayr-Melnhof Holz Holding AG, Leoben; Management Board member of a private trust; former Management Board member at Mayr-Melnhof Karton AG
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Delegated by the works council:

Andreas Hemmer

Member of the Supervisory Board since October 20, 2009 Employee representative
born 1968

Gerhard Novotny

Member of the Supervisory Board since May 10, 1995 Employee representative
born 1963

The current mandates of all members of the Supervisory Board delegated by the shareholders will expire at the 31st Ordinary Shareholders' Meeting in 2025 which will resolve on the discharge for the financial year 2024. The mandates of the employees' representatives are awarded for an indefinite period of time.

Members of the Committees of the Supervisory Board*Presidium (Committee for Management Board Issues)*

Rainer Zellner, Chairman
Johannes Goess-Saurau
Nikolaus Ankershofen

Audit Committee

Klaus Rabel, Chairman
Rainer Zellner
Johannes Goess-Saurau
Nikolaus Ankershofen
Gerhard Novotny

Members of the Supervisory Board with additional Supervisory Board mandates in publicly listed companies

Alexander Leeb
Deputy Chairman of the Supervisory Board, Andritz AG, Graz

Independence of the members of the Supervisory Board

The Supervisory Board is committed to the guidelines set out in annex 1 of the Austrian Corporate Governance Code when determining the criteria of their independence:

A Supervisory Board member must not maintain, or have maintained in the past year, any business relations with the Company or any of its subsidiaries with significance for the member of the Supervisory Board. This also applies to relationships with companies in which a member of the Supervisory Board has a considerable economic interest, but not to the performance of institutional functions in the Group. The approval of individual transactions by the Supervisory Board in accordance with L Rule 48 (Company Contracts with Members of the Supervisory Board outside their activity in the Supervisory Board) does not automatically qualify the person as not independent.

The Supervisory Board member must not have acted as an auditor of the Company or have owned a share in the auditing company or have worked there as an employee in the past three years.

The Supervisory Board member must not be a member of the Management Board of another company in which a member of the Company's Management Board is a Supervisory Board member.

The Supervisory Board member must not be closely related (direct offspring, spouse, life partner, parent, uncle, aunt, brother, sister, niece, nephew) to a member of the Management Board or employees in leading positions, the auditor, or employees of the auditing company.

All members of the Supervisory Board have declared their independence in accordance with these criteria. Consequently this also applies to all members of the Committees of the Supervisory Board.

In addition, the members of the Supervisory Board deal with the provisions of the Austrian Corporate Governance Code regarding conflicts of interest at least once a year. Furthermore, new members of the Supervisory Board receive detailed information on the avoidance of conflicts of interest at the start of their activities.

Representation of interests of a share > 10 % in Mayr-Melnhof Karton AG

In the Supervisory Board of Mayr-Melnhof Karton AG, there are two independent members representing a shareholding of more than 10 %:

Nikolaus Ankershofen

Ferdinand Mayr-Melnhof-Saurau

Contracts between members of the Supervisory Board and the Company subject to approval

In the financial year 2021, the following contracts between Mayr-Melnhof Karton AG and individual members of the Supervisory Board were subject to approval:

Nikolaus Ankershofen

Ankershofen Goëss Hinteregger Rechtsanwälte OG, where Nikolaus Ankershofen is lawyer and partner, acts as a legal advisor to Mayr-Melnhof Karton AG on an ad-hoc basis. These mandates mainly relate to employment law matters between the Management Board and Mayr-Melnhof Karton AG. Ankershofen Goëss Hinteregger Rechtsanwälte OG charges on the basis of hourly rates customary for lawyers. In the financial year 2021, fees totaling thous. EUR 23 were charged.

Franz Rappold

RAFRA Consulting GmbH provides consulting services on the basis of a consulting agreement with Mayr-Melnhof Karton AG, which are outside the activities of Franz Rappold as a member of the Supervisory Board. The consulting agreement has a total term of 3 years and ends on June 30, 2022. The contractually agreed consulting fee amounts to thous. EUR 100 per calendar year plus any cash expenses.

REMUNERATION OF THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

Since the financial year 2020, information on the remuneration of the Management Board and the main contractual conditions, as well as the remuneration of the Supervisory Board have been included in the Company's remuneration report which is presented annually to the Annual General Meeting and in the remuneration policy.

INFORMATION ON THE PROCEDURES OF THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

The Management Board manages the business in accordance with the law, the Articles of Association and the bylaws of the Company. The latter are available on the Company's website at <https://www.mm.group/en/about-us/responsibility/corporate-governance/>. The bylaws of the Management Board govern the assignment of responsibilities as well as the cooperation within the Management Board and include a list of business cases which require the prior consent of the Supervisory Board. The members of the Management Board cooperate closely as colleagues, informing one another of all significant measures and occurrences within their respective areas of operation. The Management Board of Mayr-Melnhof Karton AG holds regular Board meetings to discuss material Group- and division-relevant topics. The Chairman of the Management Board is responsible for chairing and preparing the meetings and for exchanging information with the Supervisory Board.

Type and decision-making power of the Committees of the Supervisory Board

The Supervisory Board has established the following Committees constituted by its members:

Presidium (Committee for Management Board Issues)

The principal task of the Presidium is to discuss the Company's strategy and orientation on a continuous basis and to prepare resolutions for the Supervisory Board concerning all strategic matters. Furthermore, this Committee decides on issues concerning the Management Board in accordance with statutory regulations and also fulfills the functions of the Nomination and Compensation Committee. The quality of the Committee's work is guaranteed by the long-standing experience and know-how of its members in the field of remuneration policy.

Audit Committee

The Committee's decision-making power derives from statutory regulations. The quality of the Committee's work is guaranteed by the long-standing experience and know-how of its members in the fields of finance, accounting, and reporting.

It is guaranteed that the Supervisory Board and the Committees are able to take decisions promptly in urgent cases. The Chairmen of the Committees inform the Supervisory Board on a regular basis about the activities of the Committees.

Focus of the Supervisory Board

The Supervisory Board convened in seven meetings in the financial year 2021, with the participation of the Management Board, and fulfilled its tasks and obligations in accordance with the law, the Articles of Association and the bylaws. All members of the Supervisory Board attended at least six meetings. As a result of Covid-19 restrictions, participation was partially virtual.

In addition to the challenging developments in the current business in view of coping with an unprecedented cost inflation for raw materials and energy, the discussions focused in particular on structural and strategic measures to strengthen competitiveness for further growth. In this context, a major focus was placed on the acquisition and integration of the large board and paper sites Kwidzyn, Poland, and Kotkamills, Finland. This not only significantly expanded MM's position in virgin fiber-based cartonboard, but also included kraft paper and uncoated fine paper as new core products of the division MM Board & Paper. As part of the transformation, the two smaller cartonboard mills, Baiersbronn and Eerbeek, have been disposed of after cartonboard production in Hirschwang, which had no longer been competitive, had been discontinued in the previous year. Furthermore, the so far most comprehensive investment program to strengthen the competitiveness and growth capability of selected sites of both divisions was discussed and approved. In the course of the structural changes and future orientation, the Supervisory Board dealt in depth with matters related to post-merger

integration, organization, human resources (incl. succession planning) as well as the change of MM's IT landscape. Furthermore, topics related to financing (in particular the issuance of Schuldschein loans), risk evaluation, Corporate Governance, compliance, and the increased focus on sustainability were discussed. The Supervisory Board paid particular attention to the Covid-19 pandemic and its impact on business performance, the personnel situation, and the value added chain.

The Supervisory Board carried out a self-evaluation for the financial year 2021 based on a questionnaire, with the result that the activity of the Supervisory Board was assessed to have been generally efficient. The regular exchange of information as well as the discussion of major topics in cooperation with the Management Board and the Group Auditor contribute significantly to this. Moreover, digital reporting and voting management ensures a high level of efficiency in the organization of the Supervisory Board.

Discussions in the Supervisory Board and Management Board meetings were characterized by openness and a high degree of constructiveness also in 2021. All participants had sufficient opportunities to ask questions and participate in discussions.

Focus of the Committees of the Supervisory Board

In 2021, the Presidium (Committee for Management Board Issues) met eight times. It dealt especially with strategic transformation through acquisitions, investments, divestments, restructuring, matters relating to the Management Board as well as management succession and prepared the meetings of the Supervisory Board.

In addition, the implementation and review of the remuneration policy and the reporting on remuneration were taken care of (see remuneration report 2021 at <https://www.mm.group/en/for-investors/reports/>).

In 2021, the Audit Committee held two meetings and fulfilled its statutory duties. A focus was placed on dealing with the Group financial statements and the individual financial statements for 2020 as well as the preparation of the Group financial statements and the individual financial statements for 2021. In this context, the consolidated non-financial report according to section 267 a of the Austrian Commercial Code and its audit were also discussed, as well as details concerning the scope of non-auditing services rendered by the auditors, and key audit matters were determined. Klaus Rabel, a financial expert, is Chairman of the Audit Committee.

Due to the regular exchange between the Chairman of the Audit Committee and the Group Auditor outside the meetings, a discussion during the meetings without the participating Management Board members was not necessary.

MEASURES TO PROMOTE WOMEN AND DESCRIPTION OF THE CONCEPT OF DIVERSITY

As a sustainably operating company, the MM Group is more than ever committed to taking diversity into account as a long-term success factor. The MM Group's concept of diversity is stated in the Code of Conduct. It is laid down there that we commit ourselves to creating a working environment throughout the Group that is characterized by openness and mutual respect. We are convinced that with a background of different perspectives and experiences, which we consider to be an enrichment, we can perform our tasks even more effectively and innovatively. In our Group-wide, uniform, inclusive human resource policy, we are committed to equal opportunities, irrespective of national/ethnic origin, gender, age, religion or life situation, and assess employees and applicants in accordance with the principle of equal treatment.

When filling management positions in the Company, the MM Group generally follows the recommendation of the Equal Opportunities Act to pay attention to diversity and to strive in particular for an appropriate distribution of gender, age and competence. In line with our strategic objective to achieve the best possible diversity at the top management level and to further increase the proportion of women in management positions, we are pleased to report on progress in 2020/2021. Since 2021, one woman has been appointed to a divisional executive board. In addition, women hold more and more top management positions within the MM Group. These include in particular the areas of Human Resources, Information Management (IT), Strategy/Continuous Improvement, Marketing Communication and Legal. Within the framework of internal management development, we attach great importance to further expand the share of female participants. More flexible work arrangements help to increase the compatibility of career and family. Overall, the share of women in the MM Group amounted to 22.3 %. However, due to MM's activity in heavy industry and work in shifts, the share of women in the Group and in recruitment tends to be low. Being an attractive employer for women in both technical and commercial occupations is our long-term aspiration.

At present, the Supervisory Board consists of ten men and the Management Board, the only employees of the listed holding company, of three. In the election of Supervisory Board members, attention is paid to the professional and personal qualifications, independence and impartiality of the candidates and to a well-balanced composition. Achieving a more balanced gender ratio of the Supervisory Board remains our objective.

Details on employee development can be found in the "People" section of the non-financial report.

EXTERNAL EVALUATION

The external evaluation of the Company's compliance with the C rules (Comply or Explain) was carried out in the course of the annual audit of the financial statements 2021 by PwC Wirtschaftsprüfung GmbH, Vienna. The review of compliance with the rules of the Code regarding the audit was conducted by Georg Eckert, professor at Innsbruck University. As a result of this evaluation, the auditors have determined that the declaration given by Mayr-Melnhof Karton AG regarding compliance with the Corporate Governance Code corresponds to the actual conditions. The next external evaluation is planned for the corporate governance report of the year 2024.

EVENTS AFTER THE BALANCE SHEET DATE

There were no changes of matters requiring reporting between the reporting date and the preparation of the corporate governance report.

Vienna, March 14, 2022

The Management Board

Peter Oswald m. p.

Andreas Blaschke m. p.

Franz Hiesinger m. p.

Report of the Supervisory Board

In the financial year 2021, the Supervisory Board fulfilled its responsibilities pursuant to statutory provisions, the Articles of Association and bylaws. In addition to the challenging developments in the current business in view of coping with an unprecedented cost inflation for raw materials and energy, the main focus of the discussions was placed on structural and strategic measures to strengthen competitiveness for further growth. In this context, a major emphasis was placed on the acquisition and integration of the large board and paper sites Kwidzyn, Poland, and Kotkamills, Finland. This not only significantly enhanced MM's position in virgin fiber-based cartonboard, but also included kraft paper and uncoated fine paper as new core products of the division MM Board & Paper. As part of the transformation, the two smaller cartonboard mills, Baiersbronn and Eerbeek, have been divested after cartonboard production in Hirschwang, which had no longer been competitive, had already been discontinued in the previous year. Furthermore, the so far most comprehensive investment program to strengthen the competitiveness and growth capability of selected sites of both divisions was discussed and approved. In the course of the structural changes and future orientation, the Supervisory Board dealt in depth with matters related to post-merger integration, organization, human resources (incl. succession planning) as well as the change of MM's IT landscape. Furthermore, topics of financing (in particular the issuance of Schuldschein loans), risk evaluation, corporate governance, compliance and the greater focus on sustainability were discussed. The Supervisory Board also regularly dealt with the impact of the Covid-19 pandemic on business management, the personnel situation and the value chain.

Ongoing activities of the Supervisory Board

During the financial year 2021, the Supervisory Board convened in seven meetings with the participation of the Management Board. All members of the Supervisory Board attended at least six meetings. Furthermore, the Presidium (Committee for Management Board Issues) convened eight times, the Audit Committee met twice.

The meetings of the Supervisory Board and the Committees always offered sufficient opportunity to discuss individual agenda items and timely submitted documents in detail.

The interaction of capital and employee representatives within the Supervisory Board was characterized by a constructive atmosphere.

The Management Board has complied with its duty to provide information and has informed the Supervisory Board regularly, promptly and in detail, both in writing and verbally, about the position and development of the Company and its subsidiaries.

Between the meetings, the Chairman of the Supervisory Board and the Chairman of the Management Board had regular exchanges and discussed the progress of business, strategy, and the Company's risk position.

Information on the composition and procedures of the Supervisory Board and its compensation can be found in the consolidated corporate governance report and the remuneration report.

Audit 2021

The annual financial statements and the management report of Mayr-Melnhof Karton AG for the year ending December 31, 2021, including accounting, were audited by PwC Wirtschaftsprüfung GmbH, Vienna. The same applies to the consolidated annual financial statements which were prepared in accordance with IFRS and supplemented by the management report for the Group and further notes pursuant to section 245a of the Austrian Commercial Code. The audit

confirmed that accounting, the annual financial statements, the management report as well as the consolidated annual financial statements and the management report for the Group comply with the legal requirements and the Articles of Association and, in all material respects, convey a fair picture of the financial position, the financial performance, and cash flows. The audit provided no reason for query, and the auditors duly issued an unqualified opinion for 2021.

The Supervisory Board has examined the annual financial statements and the management report of Mayr-Melnhof Karton AG as of December 31, 2021 as well as the consolidated financial statements and the Group management report of Mayr-Melnhof Karton AG as of December 31, 2021 in accordance with the legal requirements. The final result of the audit by the Supervisory Board did not give rise to any objections.

The Supervisory Board has complied with its statutory audit obligation concerning the consolidated corporate governance report 2021 and the consolidated non-financial report 2021. Additionally, a limited assurance engagement of the consolidated non-financial report 2021 was performed. Based on the procedures performed, nothing has come to the attention of PwC Wirtschaftsprüfung GmbH, Vienna, that gives reason to believe that the consolidated non-financial report 2021 of Mayr-Melnhof Karton AG has not been prepared in accordance with the requirements of section 267 a of the Austrian Commercial Code in all material aspects.

In compliance with Rule C-62 of the Austrian Corporate Governance Code, Mayr-Melnhof Karton AG regularly undergoes an external evaluation of its compliance with the provisions of the Austrian Corporate Governance Code at three-year intervals. The last evaluation took place in 2022 by PwC Wirtschaftsprüfung GmbH, Vienna, and by Georg Eckert, University of Innsbruck, for the financial year 2021. The evaluation did not reveal any facts that would lead to the assumption that, on the one hand, the consolidated corporate governance report for the financial year 2021 does not comply in material respects with the statutory provisions of the Austrian Commercial Code (Section 243 c or Section 267 b of the Austrian Commercial Code) and, on the other hand, that the declaration of conformity does not accurately present the implementation of and compliance with the relevant C Rules of the Austrian Corporate Governance Code in material respects.

Approval of annual financial statements, consolidated annual financial statements and distribution of profit

The Supervisory Board concurs with the annual financial statements, the management report, the corporate governance report, the consolidated non-financial report according to section 267 a of the Austrian Commercial Code as well as the consolidated annual financial statements and the management report for the Group, and hereby approves the annual financial statements as well as the consolidated annual financial statements of Mayr-Melnhof Karton AG as of December 31, 2021. Thus, the 2021 annual financial statements of Mayr-Melnhof Karton AG are adopted in accordance with section 96 (4) of the Austrian Stock Corporation Act.

The Supervisory Board has considered and approved the Management Board's proposal regarding the distribution of the profit for the financial year 2021.

The members of the Supervisory Board extend their gratitude to the Management Board and all employees of the MM Group for their excellent performance and great dedication in this particularly challenging financial year 2021. In addition, the Supervisory Board would also like to thank the shareholders for the trust they have placed in the Company.

Vienna, March 2022

Rainer Zellner

Chairman of the Supervisory Board

Management Report

1 POSITIONING OF THE MM GROUP AND THE DIVISIONS

Group

Cartonboard, paper, packaging - sustainable packaging for consumer goods

With the strategic acquisitions of the cartonboard and paper mills Kwidzyn, Poland, and Kotkamills, Finland, the MM Group (MM) has moved into the (European) leading group of suppliers of virgin fiber-based cartonboard in 2021, alongside to its already leading position in recycled fiber-based cartonboard in Europe. In addition, kraft papers and uncoated fine papers were included as new business areas in the course of these transactions, which are managed together with cartonboard in the MM Board & Paper division (formerly MM Karton). The MM Packaging division is a leading producer of folding cartons in Europe and, additionally, also holds a leading market position in several countries outside Europe.

Both divisions of the MM Group are managed that each are responsible for their own results and supply each other at arm's length. In 2021, MM Board & Paper supplied around 13 % of its cartonboard sales to MM Packaging. The majority of its cartonboard production, however, is sold to folding carton producers outside the Group and thus to competitors of MM Packaging. MM Packaging bought more than one quarter of the tonnage processed internally from MM Board & Paper in 2021, with recent acquisitions increasing the potential for internal sourcing.

Circular economy - an immanent part of the business model

Cartonboard is mainly used as a raw material for the production of folding carton packaging. Folding cartons are, besides plastics, the most important primary packaging material for consumer staples. In addition to the attractive presentation of the consumer goods and their protection, folding carton packaging is characterized in particular by its sustainable production from renewable fiber materials that can be recycled many times. Responsible circular economy is thus an immanent part of the MM Group's business.

Regional focus on Europe

Demand for cartonboard and cartonboard packaging correlates with private consumption, especially of consumer staples, and therefore shows a relative resilience. Due to transport costs and service demands, the folding carton business has a mainly regional character leading to the geographical focus of our business on the well-developed and sustainable European market. By contrast, global cartonboard trade only has minor importance.

Kraft papers are sold in particular to the food/gastronomy industry and the laminate industry, uncoated fine papers (office and printing papers) to paper/office supply retailers in Europe.

Focus on growth, efficiency, sustainability and digitalization

The creation of long-term growth perspectives is at the center of the recent strategic transformation of the MM Group. Improved competitiveness as well as the focus on sustainability and innovation are to contribute significantly to this. In addition to the acquisition of two large sites, the exit from three small cartonboard mills – sale of the mills Baiersbronn and Eerbeek (2021), closure of the Hirschwang cartonboard site (2020) – as well as restructuring measures in the packaging sector in Germany were carried out with the aim of increasing structural efficiency. Furthermore, the most extensive investment program to date was launched, comprising a number of projects focusing on growth, cost efficiency and technological innovation at major competitive sites of both divisions. With the establishment of the Group function "Sustainability" and modern systems in this area, the increasing importance of sustainability as a differentiation criteria on the market is taken into account. For MM, it is particularly important to utilize the potential from the replacement of plastic

packaging by recyclable packaging made of renewable raw materials with the same functions and the same convenience. More innovative solutions are the key to this transformation, which is why innovation management of MM has also been significantly modernized and expanded. In addition, a comprehensive harmonization and optimization of systems and processes in the course of digitalization aims at being able to use the potentials and synergies of the MM Group in an even better value-adding way in the long term. The management team of MM was broadened in line with these tasks and also supplemented by high potentials.

MM Board & Paper*

Leading cartonboard producer with an attractive offer in kraft papers and uncoated fine papers

With a total annual production capacity of more than 2.0 million tons of cartonboard, the division MM Board & Paper is the biggest cartonboard producer in Europe (excluding liquid packaging cartonboard). A varied range of cartonboard products for a wide spectrum of applications in the packaging and food service area is manufactured at six locations in Europe. Approx. 65 % of the capacity is accounted for by coated recycled fiber-based cartonboard and approx. 35 % by virgin fiber-based cartonboard. Furthermore, the division has an annual capacity of approximately 260,000 tons of kraft paper and 390,000 tons of uncoated fine paper. Recycled fibers, which are purchased from external suppliers, account for approx. 40 % of the fibers used. Another approx. 20 % of the fibers used are groundwood pulp, most of which we produce ourselves at our cartonboard mills and in the division's own fiber mill FollaCell in Norway. Pulp, which accounts for approximately 28 % of the fiber demand, is produced 65 % by the Group and 35 % is purchased.

Cartonboard and paper – a wide range of applications

Cartonboard products of MM Board & Paper are used as packaging material in numerous consumer goods markets for daily needs. The main areas of application are Food & Specialities, which account for around 89 % of sales, as well as the premium sector with a sales share of 11 %. Kraft papers are sold in particular to the food/gastronomy industry and the laminate industry, uncoated fine papers (office and printing papers) to paper/office supply retailers. In order to optimally satisfy specific requirements of individual market segments, MM Board & Paper's main product groups – recycled fiber-based cartonboard, virgin fiber-based cartonboard, white coated recycling liner (high-quality printable and finishable top layer for corrugated board products in low grammage), packaging kraft paper, saturating kraft paper as well as food service & cupstock – have been set up as separate units within the sales organization. Following the integration of the sales organization, which has already taken place after the recent acquisitions, market penetration is to be further increased with a new branding.

According to the geographic base of MM Board & Paper, Europe is the main market, where approximately 89 % of the sales volume was sold in 2021. In addition, a worldwide sales network is maintained, supplying more than 2,000 customers in around 140 countries. These are in particular printing businesses in the medium-sized and highly fragmented European folding carton industry as well as consumer goods producers and the above-mentioned customers in the paper sector.

* Division name change from MM Karton to MM Board & Paper after completion of the Kwidzyn acquisition and the resulting expansion of the product portfolio to include "Kraft Papers" and "Uncoated Fine Papers".

Growth through efficiency, sustainability innovative products

As a key factor for further growth, not only comprehensive investment programs have been launched for the Frohnleiten, Neuss and Kolicevo sites, but also projects have already been taken up at the new acquisitions. The objective is to align the product range to new opportunities on the market through technological innovations and to become even more competitive with greater efficiency and sustainability. A coordinated process between innovation activities, product development, and commercialization aims at the continuous improvement of existing solutions and processes as well as the development of new applications and market potentials. MM Board & Paper pursues an approach that takes into account aspects from the entire value chain in order to differentiate on the market. High quality, functionality, safety, and sustainability of our products as well as comprehensive competence and state-of-the-art services characterize the range of products offered by Board & Paper.

"Plastic substitution" – potential and sustainable goal

Due to an increasing demand for sustainable packaging solutions, the trend towards "plastic substitution" continues. MM Board & Paper's aim is to create new possibilities for replacing plastic packaging with environmentally friendly, innovative solutions made of cartonboard and paper and to further increase the functionalities without using plastics. A measurable impact of this trend on our cartonboard and paper sales remains difficult to estimate. However, our ambition is to use this strategically in order to grow faster than the market.

High-performance locations

In 2020/2021, MM has concentrated its production on high-performance sites. At year-end of 2021, production is carried out on eight high-performance cartonboard machines and four paper machines at six locations. Each of the machines is aligned to specific product qualities: three to recycled fiber-based cartonboard, two to virgin fiber-based cartonboard, one to white coated recycling liner and two more cartonboard machines flexibly produce both recycled and virgin fiber-based cartonboard grades. In addition, two paper machines produce uncoated fine paper and two further machines produce packaging kraft paper and saturating kraft paper respectively. The cartonboard machines are continuously further developed according to the state of the art with a focus on growth potential and competitive strength.

Fibers and energy at the center

Recovered paper is the strategically most important raw material for the production of coated recycled fiber-based cartonboard, groundwood pulp for virgin fiber-based cartonboard and pulp for kraft and fine papers. Additionally, energy, chemicals, and logistics are other significant cost factors. High-quality printability of cartonboard is reached through the application of a coating made from chalk, fillers, and binders to the outer surface of cartonboard.

MM Board & Paper purchases recycled fibers exclusively in Europe, predominantly on the spot market. In addition, long-term supply opportunities from municipalities and waste-management companies are also used to a lesser extent. Due to high European recycling quotas for recovered paper and existing reserves, we consider the raw material of recovered paper to be sustainably secured. We also consider the supply of wood as a raw material for groundwood pulp and pulp to be ensured due to the ongoing procurement from sustainable forestry. However, as the situation resulting from Covid-19 showed, massive fluctuations in supply and prices can occur. MM Board & Paper primarily uses natural gas as an energy source. The increased use of renewable energy sources, such as biomass, is a long-term objective.

Intense competition in the cartonboard industry

MM Board & Paper is the only European supplier with several large production locations of recycled and virgin fiber-based cartonboard, respectively, and, moreover, the only European cartonboard producer with a substantial additional pillar in folding carton production. The three largest Scandinavian suppliers operate exclusively in the area of virgin fiber-based cartonboard.

With regards to recycled fiber-based cartonboard, the capacity growth in Europe has been achieved through a continuous technological modernization of existing mills ("creeping capacity increase") for decades. Regarding virgin fiber-based cartonboard, in particular the structural shift from graphical papers to cartonboard packaging products over the last few years has resulted in the creation of new capacities, some of which are also sold outside Europe.

MM Packaging

A leading folding carton producer

The core business of MM Packaging focuses on folding cartonboard packages for consumer staples. In the year 2021, around 708,000 tons of recycled and virgin fiber-based cartonboard and 145,000 tons of paper have been processed and sales of EUR 1,641.6 million were generated. MM Packaging is thus not just a leading producer of folding cartons in Europe but also one of the largest worldwide. Transport costs and service requirements limit the supply radius of folding cartons, which are thus defined as mainly regional products. As the market barriers in the folding carton business are lower compared to the cartonboard industry, the business is characterized by a continuously intensely competitive environment.

The production of folding cartons is a multi-step process that can be briefly described as follows: cartonboard is printed, creased in the subsequent cutting process before being separated into packaging blanks which are then folded individually according to the demand of the customer branch and glued in the final step of the process. In addition, a large number of processes for finishing the packages is applied. The packages are generally shipped and transported in a folded state with an outer carton. The filling of packages with consumer goods largely takes place at the customers' packing systems. Aspiring best industrial practice, MM Packaging uses all common state-of-the-art preprinting, printing, and finishing technologies.

The production of corrugated cartonboard is a different industry from that of cartonboard and folding cartons with different products and markets in which MM Packaging does not operate. There is an overlap for consumer goods packaging made of fine flute (micro-flute), which are also produced at some specialized MM Packaging sites. These combine the stability of flute with the excellent printability of cartonboard.

International site network always close to the customer

The geographic focus of the site network, consisting of 43 production plants in 18 countries, lies on Europe. In addition, a leading position is also held in individual countries in the Middle East, South America, and the Far East. Aside to the broad local presence, we create competitive advantages by having our sites specializing in specific market and product segments in the areas Food & Specialities as well as Premium through appropriate know-how and continuous further development. The main sales market of Europe accounts for approx. 82 % of sales, the Middle East/Asia markets for 11 %, and the Americas for 7 %. The aim of our location policy is to supply our customers from highly competitive, geographically well-positioned production facilities.

Supplying a wide range of industries creates balance and potential

In the field of packaging for consumer staples, MM Packaging covers a wide range of sectors, thus creating both potential and a solid level of resilience. The two markets Food & Specialities and Premium contribute to MM Packaging's sales in almost equal parts. The highly specialized premium business comprises the areas pharma, beauty & personal care, and cigarette. The concentration of MM Packaging's organization on individual specialized business units makes it possible to meet individual market and product requirements with targeted know-how.

The major part of the business is generated with large multinational consumer goods producers which account for approx. 80 % of sales. The allocation of demand via tender procedures and multi-year procurement agreements are the rule in international key customer business. The remaining part of sales goes to local customers. In total, MM Packaging supplies more than 1,700 customers worldwide.

Cartonboard – strategic raw material

Folding carton production starts with cartonboard as essential raw material, constituting both the most important input and cost factor. The choice of used cartonboard, on the one hand, depends on the functionality of the package, and, on the other hand, on the specific requirements of individual consumer goods sectors and manufacturers. In accordance with the divisional profit-center principle of the Group, MM Packaging procures the required recycled and virgin fiber-based cartonboard and papers via its own purchase organization. Within the business with international consumer goods manufacturers, the purchase of cartonboard is also decided or negotiated by the customer. To cover major changes in cartonboard prices, long-term supply contracts with large customers generally include appropriate clauses which relate to reference values. In addition to cartonboard and paper, other important raw materials for MM Packaging include inks, varnishes, and tools. The personnel intensity in folding carton production is consistently higher than in cartonboard production.

Investment in increasing competitiveness – growth, organic and through acquisitions

As the cartonboard market, the demand for folding carton packages correlates with private consumption. Due to the focus on packages for consumer staples, demand shows a high level of continuity in the mature main market Europe. MM Packaging's aim is to continue to grow organically and through acquisitions by increasing its competitive strength and by focusing on future markets, such as pharma.

For this purpose, we are investing in state-of-the-art technologies and developing attractive sites close to our customers. For example, in order to participate in the market growth in Central-Eastern Europe and to take advantage of more favorable costs, the large MMP Neupack Polska site (Petersona) is being doubled in size and another packaging plant is being built in Poland (Emerald). Furthermore, the expansion of MMP plants to critical size in Great Britain, Austria and Romania has been initiated. In addition, the company is gradually modernizing its machinery (printing, die-cutting and gluing) in order to increase efficiency and develop at state-of-the-art technology (i. e. digital printing).

The aim is to continue to grow in line with best industrial practice. The focus is on increased site specialization, automation and digitization, and the development of innovative, sustainable packaging. Therefore, we also give a lot of room for innovation so that ongoing change, especially in the replacement of plastic packaging, can succeed.

As before, MM Packaging will continue its expansion course, in a risk-conscious way, guided by value creation and striving for a sustainably high quality of results.

2 DEVELOPMENT IN THE YEAR 2021

General economic situation

The global economy in 2021 was mainly characterized by recovery after the corona-related downturn in the previous year, although the pace varied from region to region. While the economic performance of China and the US returned to pre-crisis levels, the major economies of the EU were not yet able to fully make up for the declines in GDP. Countries that are primarily dependent on contact-intensive sectors of the economy, such as tourism, were at a disadvantage here. Continuing expansive monetary and fiscal policies and the ongoing immunization of the population with effective vaccines played a key role in the economic recovery. As a result, containment measures were largely relaxed again by the middle of the year, giving private consumption further momentum. However, with the economic upturn and global supply and delivery shortages, prices on the raw material markets also accelerated. This impacted industrial production in particular from the 2nd quarter, and the economic recovery lost momentum. Drastically rising prices for fuel, gas and electricity ultimately led to the highest inflation in decades towards the end of the year.

Industry development

In the wake of the overall economic recovery, demand on the cartonboard and folding carton markets as well as for papers showed a strong dynamic in 2021. At the same time, the massive increase in fiber and transport costs and later also in energy costs led to a series of significant price increases in the course of the year.

Recovered paper prices continued to rise dramatically, mainly as a result of high demand, additional capacity in the converting industries, such as corrugated board, as well as pandemic-related lower stock levels and continued lower collection volumes for graphic papers. Pulp also recorded a significant price increase, in particular due to strong demand, logistical constraints, extended production shutdowns and the upward momentum from Asia. By contrast, prices for wood chips remained largely constant. Gas and electricity prices recorded a rapid rise from October onwards due to demand and also as a result of political tensions, with gas prices in some cases quadrupling from their previous level. In addition, many other input factors such as inks, coatings, technical chemicals and packaging materials were characterized by strong inflation with a continuing trend.

The topic of sustainability in packaging, in particular the substitution of plastic, has received further attention and is proactively promoted by all participants along the value added chain, cartonboard/paper and folding carton producers as well as consumer goods manufacturers and retailers. However, due to full employment in the industries, conversions in 2021 were slow to take hold.

In 2021, capacity increases in the cartonboard industry in the European core market were mainly concentrated on ongoing investment activities in already existing plants. On the European periphery, one new recycling and one new virgin fiber-based cartonboard machine were started up. The acquisition of Kotkamills and the Kwidzyn mill by MM marked the most significant change in the European cartonboard market. In the folding carton sector, Graphic Packaging (US) achieved a leading position in Europe through the acquisition of AR Packaging. In addition, the involvement of financial investors in the sector continued. Overall, the heavy cost burden in 2021 has in particular significantly increased the pressure on smaller companies in the cartonboard and folding carton industry. The supplier structure in Packaging continues to be characterized by strong fragmentation.

Development of business 2021

Group

The MM Group was able to overall successfully close the financial year 2021, which was characterized by historically unprecedented cost increases, in particular for energy, recovered paper and pulp. The strong pressure on margins was successively compensated for by price increases, which could only be implemented with a time lag due to contractual commitments. The continuing strong demand for cartonboard packaging and papers and thus high capacity utilization in both divisions provided significant support in this respect.

The growth in operating profit by 16.5 % to EUR 269.6 million is attributable to both divisions. While MM Packaging recorded a rather robust ongoing development, the increase in profit of MM Board & Paper is mainly attributable to one-off effects of structural changes.

With the acquisition of the cartonboard and paper mills Kwidzyn in Poland and Kotkamills in Finland as well as the sale of the two smaller cartonboard mills, Baiersbronn and Eerbeek, and the launching of several major investments to increase efficiency, innovation, and sustainability, 2021 was a year of significant strategic transformations at MM in addition to operational challenges. The fundamental objective is to enable long-term growth in sustainable fiber-based packaging solutions as well as an increase in profitability through intensified competitiveness.

Through the acquisitions in the virgin fiber sector, MM has not only strengthened its position as the leading cartonboard and folding carton producer in Europe, but also acquired two new core products, kraft papers and uncoated fine papers, which offer interesting potential and are managed in the division MM Board & Paper.

In line with the solid profit development, a dividend increase to EUR 3.50 per share (2020: EUR 3.20) for the financial year 2021 will be proposed to the 28th Annual General Meeting on April 27, 2022.

Consolidated income statements

Consolidated income statements (condensed version)

(in millions of EUR)	2021	2020	+/-
Sales	3,069.7	2,528.4	+ 21.4 %
Operating profit	269.6	231.4	+ 16.5 %
Financial result and result from investments	(25.1)	(9.4)	
Income tax expense	(53.8)	(59.8)	
Profit for the year	190.7	162.2	+ 17.5 %

The Group's consolidated sales reached EUR 3,069.7 million which is 21.4 % or EUR 541.3 million above the previous year's figure (2020: EUR 2,528.4 million). This increase was mainly acquisition-related from the division Board & Paper. Regarding the geographical distribution of sales, the focus remained unchanged on Western Europe with 54.2 % (2020: 55.2 %), followed by an increased share in Eastern Europe with 32.4 % (2020: 28.3 %) and a decrease in the share of sales outside Europe to 13.4 % (2020: 16.5 %). Intercompany sales rose to EUR 133.0 million (2020: EUR 116.6 million) and were mainly related to deliveries from MM Board & Paper to MM Packaging.

Group sales by destination

(in %)	2021	2020
Western Europe (excl. Austria)	52.1 %	53.3 %
Austria	2.1 %	1.9 %
Eastern Europe (incl. Turkey)	32.4 %	28.3 %
Asia and MENA	7.9 %	10.2 %
The Americas	4.8 %	4.9 %
Other	0.7 %	1.4 %
Total	100.0 %	100.0 %

Cost of sales

(in millions of EUR)				Percentage of sales	
	2021	2020	+/-	2021	2020
Cost of materials and purchased services	1,798.6	1,317.9	36.5 %	58.6 %	52.1 %
Personnel expenses	375.3	363.3	3.3 %	12.2 %	14.4 %
Depreciation and amortization ¹⁾	125.8	144.0	- 12.6 %	4.1 %	5.7 %
Other expenses	113.9	88.7	28.3 %	3.7 %	3.5 %
Cost of sales	2,413.6	1,913.9	26.1 %	78.6 %	75.7 %

¹⁾ incl. impairment on property, plant and equipment, and intangible assets

Cost of sales for operating performance increased by EUR 499,7 million or 26,1 % to EUR 2,413.6 million (2020: EUR 1,913.9 million) compared to 2020. This rise resulted in particular from the expansion of business volume due to the acquisitions as well as higher fiber and energy costs. As a result, and due to a time lag in passing on costs, the share in sales changed from 75.7 % to 78.6 %.

Selling and distribution, administrative and other operating expenses

(in millions of EUR)				Percentage of sales	
	2021	2020	+/-	2021	2020
Personnel expenses	165.2	163.2	1.2 %	5.4 %	6.4 %
Depreciation and amortization ¹⁾	25.6	23.5	8.7 %	0.8 %	0.9 %
Other expenses	280.6	216.2	29.8 %	9.1 %	8.6 %
Selling and distribution, administrative and other operating expenses	471.4	402.9	17.0 %	15.3 %	15.9 %

¹⁾ incl. impairment on property, plant and equipment, and intangible assets

Selling and distribution, administrative and other operating expenses also increased, mainly acquisition-related, from EUR 402.9 million to EUR 471.4 million. Their share in sales was kept constant at 15.3 % (2020: 15.9 %).

At EUR 269.6 million, operating profit was 16.5 % or EUR 38.2 million above the previous year (2020: EUR 231.4 million). Around 55 % of this increase is attributable to MM Board & Paper and around 45 % to MM Packaging. One-off expenses from the initial consolidation of the mills Kwidzyn and Kotkamills in the amount of EUR 26.3 million, which are mainly attributable to ancillary acquisition costs including transaction taxes and inventory valuation, as well as restructuring expenses in the division MM Packaging of EUR 20.1 million were offset by one-off income from the sale of the Eerbeek and Baiersbronn mills in the amount of EUR 46.1 million (after incidental transaction costs). In 2020, one-off effects amounted to EUR -64.0 million. The Group's operating margin was therefore at 8.8 % (2020: 9.2 %), the return on capital employed at 12.8 % (2020: 13.7 %). EBITDA rose by 5.5 % or EUR 22.1 million to EUR 421.0 million (2020: EUR 398.9 million), the EBITDA margin reaching 13.7 % (2020: 15.8 %).

Financial income of EUR 3.3 million (2020: EUR 1.7 million) was contrasted with financial expenses of EUR -24.4 million (2020: EUR -7.9 million). The latter increased mainly due to the issuance of Schuldschein loans and Namensschuldverschreibungen to finance the acquisitions and organic growth projects. "Other financial result - net" amounted to EUR -4.0 million (2020: EUR -3.2 million), mainly attributable to changes in the foreign currency result.

Accordingly, profit before tax at EUR 244.5 million was 10.1 % higher than in the previous year (2020: EUR 222.1 million). Income tax expenses totaled EUR 53.8 million (2020: EUR 59.8 million), resulting in an effective Group tax rate of 22.0 % (2020: 27.0 %). The reduction compared to the previous year is mainly due to tax-free income from company disposals.

Profit for the year, earnings per share

Profit for the year rose by 17.5 % or EUR 28.5 million to EUR 190.7 million (2020: EUR 162.2 million), the net profit margin remained almost constant compared to the previous year at 6.2 % (2020: 6.4 %). An unchanged total average of 20,000,000 shares was outstanding in the reporting year 2021, resulting in earnings per share of EUR 9.46 (2020: EUR 8.06) based on the profit for the year attributable to the shareholders of the Company of EUR 189.2 million (2020: EUR 161.2 million).

Assets, capital, and liquid funds

Consolidated balance sheets (condensed version)

(in millions of EUR)	Dec. 31, 2021	Dec. 31, 2020
Non-current assets	2,460.0	1,397.9
Current assets	1,554.2	1,001.7
Total assets	4,014.2	2,399.6
Total equity	1,661.9	1,547.1
Non-current liabilities	1,569.4	397.2
Current liabilities	782.9	455.3
Total equity and liabilities	4,014.2	2,399.6

The Group's total assets of EUR 4,014.2 million by December 31, 2021 were EUR 1,614.6 million above the figure at year-end 2020 (EUR 2,399.6 million). This increase is mainly due to the initial consolidation of the acquisitions. The Group's total equity rose from EUR 1,547.1 million (December 31, 2020) to EUR 1,661.9 million, with the profit for the year being offset by the dividend payment. Return on equity was 11.9 % after 10.6 % in the previous year.

Financial liabilities are largely of a long-term nature and increased from EUR 268.4 million at year-end 2020 to EUR 1,423.1 million as of December 31, 2021. This rise resulted in particular from the issuance of Schuldschein loans and Namensschuldverschreibungen in the amount of EUR 1,125.0 million. With an equity ratio of 41.4 % (December 31, 2020: 64.5 %), the MM Group remains solidly financed.

With cash available to the Group totaling EUR 359.5 million (December 31, 2020: EUR 146.2 million), net debt increased from EUR 122.2 million to EUR 1,063.5 million at the end of 2021. Furthermore, credit lines and credit facilities totaling EUR 472.6 million (December 31, 2020: EUR 902.5 million) were available to the Group which can be used at any time.

Non-current assets increased from EUR 1,397.9 million to EUR 2,460.0 million, primarily due to acquisitions. Likewise, current assets also recorded a rise compared to the previous year from EUR 1,001.7 million to EUR 1,554.2 million.

Cash flow development

Consolidated cash flow statements (condensed version)

(in millions of EUR)	2021	2020
Net cash from operating activities	269.8	318.2
Net cash from investing activities	(891.4)	(142.9)
Net cash from financing activities	836.9	(150.8)
Effect of exchange rate changes	(2.0)	(5.1)
Net change in cash and cash equivalents (< 3 months)	213.3	19.4
Cash and cash equivalents (< 3 months) at the end of the year	359.5	146.2

At EUR 269.8 million, cash flow from operating activities was EUR 48.4 million below the comparative figure (2020: EUR 318.2 million). This difference results in particular from a lower cash-effective result. A decline in working capital in the previous year contrasted with an increase in the current year.

Cash flow from investing activities changed from EUR -142.9 million to EUR -891.4 million. This change is mainly attributable to the payment of the purchase prices for the acquisition of the Kwidzyn mill in an amount of around EUR 676.5 million and of Kotkamills in the amount of around EUR 203.1 million, which were offset by proceeds from the sale of the Eerbeek and Baiersbronn mills in the amount of around EUR 152.2 million. Payments for the acquisition of property, plant and equipment and intangible assets increased according to the intensified investment program from EUR 152.8 million to EUR 248.4 million.

Capital expenditures of MM Board & Paper amounting to EUR 103.4 million (2020: EUR 93.5 million) were mainly related to technical modernization and expansions with a focus on the sites in Frohnleiten, Austria, Kolicovo, Slovenia, and Neuss, Germany.

The main focus of MM Packaging's capital expenditures in the amount of EUR 145.0 million (2020: EUR 59.3 million) were expansions and technological modernizations in Poland, Great Britain, Austria und Russia.

Cash flow from financing activities changed from EUR -150.8 million to EUR 836.9 million, primarily as a result of the issuance of Schuldschein loans and Namensschuldverschreibungen.

Further information

Acquisition of Kotkamills and Kwidzyn

On August 2, 2021, the acquisition of Kotkamills, Finland, which was agreed in December 2020, was completed for a purchase price of EUR 203.1 million.

MM Kotkamills operates one of the most modern virgin fiber board machine in Europe (built 2016) with a planned capacity of 400,000 tons, a machine for saturating kraft paper with a capacity of 170,000 tons, for which the company is a leading global supplier, and a sawmill.

On August 6, 2021, the acquisition of the Kwidzyn mill, Poland, which was agreed in mid-February 2021, was completed. The purchase price amounted to EUR 676.5 million.

MM Kwidzyn operates at its integrated pulp and paper site in Kwidzyn a pulp mill with an annual capacity of around 400,000 tons and four integrated cartonboard/paper machines. The flagship is a FBB machine with 260,000 tons annual capacity. Moreover, MM Kwidzyn has recently entered the area of MF kraft paper via one of its paper machines to serve the growing demand for flexible fiber-based packaging products with an annual capacity of 75,000 tons. In addition, MM Kwidzyn operates two of the most attractive copy paper machines (UWF) in Europe with an annual total capacity of 410,000 tons.

The acquisitions strengthen the position of MM in the virgin fiber-based cartonboard market (FBB) with an attractive offer of barrier board solutions as well as innovative, sustainable and cost-efficient grades and complement the established market position in recycled fiber-based cartonboard. Furthermore, MM expands the product portfolio with kraft papers and uncoated fine papers (UWF), which are backward integrated with own pulp production.

Divestment of the Eerbeek and Baiersbronn virgin fiber-based cartonboard mills

In August 2021, the division MM Board & Paper sold 100 % of the shares in the virgin fiber-based cartonboard mills Mayr-Melnhof Eerbeek B.V., Netherlands, and Baiersbronn Frischfaser Karton GmbH, Germany, to a subsidiary of funds managed by Oaktree Capital Management, L.P. for a purchase price of EUR 110.5 million. In addition, the buyer settled the existing intercompany loan and cash pool liabilities in the amount of EUR 41.7 million to MM.

Eerbeek and Baiersbronn together have an annual capacity of approximately 245,000 tons of virgin fiber-based board (FBB), which is produced on two cartonboard machines.

Issuance of Schuldschein loans and Namensschuldverschreibungen in an amount of EUR 1,125.0 million

At the end of February, Mayr-Melnhof Karton AG has successfully placed Schuldschein loans and Namensschuldverschreibungen in a total volume of EUR 1 billion with a broadly diversified group of institutional investors in Austria and abroad. The transaction comprises tranches with fixed as well as variable interest rates over a duration of 5 to 15 years with an average duration of 8.8 years and an average interest rate of 1.5 %. As of September 30, 2021, further Namensschuldverschreibungen in the amount of EUR 125.0 million with a maturity of 18 years and a fixed interest rate of 1.88 % were issued. The proceeds from the issue are used to finance the acquisition of Kotkamills, Finland, and Kwidzyn, Poland, as well as for attractive organic growth projects.

MM Group has committed to net zero emissions until 2050

The MM Group supports the global initiative "Business Ambition for 1.5°C", which was launched by the Science Based Targets Initiative and the UN Global Compact, among others. In the course of this, MM has committed itself to setting science-based emission reduction targets across the entire value chain in order to keep global warming to 1.5°C above pre-industrial levels. Moreover, MM aims to achieve net zero emissions by 2050 at the latest.

Definition of financial indicators

EBITDA (Earnings before interest, income taxes, depreciation and amortization)

Operating profit plus depreciation, amortization and impairment of property, plant and equipment, and intangible assets.

EBITDA margin

EBITDA divided by sales.

Employees

Employees at the end of the year, including apprentices and part-time employees on a pro-rata basis.

Equity ratio

Total equity divided by total assets.

Net debt/Net liquidity

The sum of current and non-current interest-bearing financial liabilities, including lease liabilities according to IFRS 16 less cash and cash equivalents. In case the sum of cash and cash equivalents exceeds financial liabilities, there is net liquidity.

Net profit margin

Profit for the year divided by sales.

Operating margin

Operating profit divided by sales.

Return on Capital Employed (ROCE)

Operating profit divided by the sum of average total equity, average current and non-current interest-bearing financial liabilities, including lease liabilities according to IFRS 16 and less average cash and cash equivalents.

Return on equity (ROE)

Profit for the year divided by average total equity.

All indicators were calculated exclusively on the basis of the information provided in the consolidated financial statements.

Business development in the divisions

MM Board & Paper

European cartonboard markets as well as the markets for kraft paper and uncoated fine paper were characterized by strong demand in 2021. On the one hand, this is due to a restocking of the supply chain, which had been reduced during the pandemic, and, on the other hand, to securing volumes as a result of strongly increased delivery times and partly the lack of imports from Asia. Consequently, and owing to the initial inclusion of the acquisitions, the average order backlog of 340,000 tons was higher than the comparable figure of the previous year (2020: 100,000 tons). Despite individual delivery delays due to a lack of transport resources (e.g. truck drivers), production and supplies to our customers were guaranteed. Similar to the previous year, capacity utilization amounted to 97 %.

As a result of strong demand- and supply-related rises in raw material costs (especially fibers, chemicals, packaging materials, transport) as well as energy, several price increases were implemented. However, due to contractual commitments, these often take place with a time lag in relation to the price increases on the procurement markets. Pulp and recovered paper prices continued their upward trend in the second half of the year after a rapid increase in the first half-year. Main reasons for the significant rise in recovered paper prices continue to be the strong demand from the corrugated board industry and the decline in the volume of magazine papers and newsprint.

Particular focus in 2021 was placed on the integration of the strategic acquisitions of the cartonboard and paper mills Kwidzyn, Poland, and Kotkamills, Finland. With the acquisitions, MM Board & Paper not only strengthened its position in virgin fiber-based cartonboard, but also acquired two new core products, kraft papers and uncoated fine papers. As part of the transformation, the two smaller cartonboard mills, Baiersbronn and Eerbeek, were sold. In addition, major investments focusing on strengthening competitiveness through efficiency, innovation and sustainability were launched at the sites at Frohnleiten, Austria, Neuss, Germany, and Kolicovo, Slovenia.

The development of the division's key figures is particularly affected by the changes in consolidated companies.

Production at 2,069,000 tons was acquisition-related 21.0 % higher than in the previous year (2020: 1,710,000 tons). 1,320,000 tons (64 %) thereof were attributable to recycled fiber-based cartonboard and 502,000 tons (24 %) to virgin fiber-based cartonboard (2020: 1,365,000 tons or 80 % and 345,000 tons or 20 %). The remaining 247,000 tons (12.0 %) were attributable to the new product areas of kraft papers and uncoated fine papers. Based on the average number of employees, 616 tons (2020: 693 tons) were produced per employee. Sales volumes increased in line with production by 22.7 % to 2,092,000 tons (2020: 1,704,000 tons).

At EUR 1,561.1 million, sales were mainly acquisition-related 48.6 % or EUR 510.3 million above the comparative figure (2020: EUR 1,050.8 million). With a share of around 61 % in Western Europe (2020: 66 %) and 32 % in Eastern Europe (2020: 22 %), sales to European markets were again higher, thus the sales share in countries outside Europe declined to 7 % (2020: 12 %).

MM Packaging was again MM Board & Paper's largest customer with a share of deliveries of around 13 % or 236,000 tons (2020: 13 % or 226,000 tons).

The operating profit was particularly impacted by higher raw material and energy costs, which could only be compensated with a time lag through higher selling prices. In total it increased, however, by 24.2 % to EUR 107.7 million (2020: EUR 86.7 million), mainly as a result of the recognition of one-off effects of the changes in consolidated companies. The operating margin amounted to 6.9 % (2020: 8.3 %) and the return on capital employed to 11.0 % (2020: 14.5 %). Cash flow from operating activities totaled EUR 108.7 million, compared to EUR 126.3 million in the previous year.

Divisional indicators MM Board & Paper

(in millions of EUR)	2021	2020	+/-
Sales ¹⁾	1,561.1	1,050.8	+ 48.6 %
EBITDA	185.2	164.7	+ 12.5 %
Operating profit	107.7	86.7	+ 24.2 %
Operating margin (%)	6.9 %	8.3 %	- 135 bp
Cash flow from operating activities	108.7	126.3	- 13.9 %
Return on capital employed (%)	11.0 %	14.5 %	- 355 bp
Tonnage sold (in thousands of tons)	2,092	1,704	+ 22.7 %
<i>Cartonboard</i>	<i>1,834</i>	<i>1,704</i>	<i>+ 7.6 %</i>
<i>Kraft papers</i>	<i>93</i>	<i>n.a.</i>	
<i>Uncoated fine papers</i>	<i>165</i>	<i>n.a.</i>	
Tonnage produced (in thousands of tons)	2,069	1,710	+ 21.0 %

¹⁾ including interdivisional sales

MM Packaging

Similar to Board & Paper, the European folding carton markets were also characterized by sustained strong demand in 2021. Against this background, MM Packaging recorded high order volumes in all food and non-food application areas. Sales volumes were significantly above the previous year's level, especially in the pharmaceutical, beauty & personal care sectors. At the same time, however, all business units were affected by an increasingly dynamic rise in input costs such as cartonboard, paper, inks, varnishes and packaging materials. Passing on these cost increases to customers as well as maintaining the supply of materials and the ability to deliver were therefore the focus of the current business. MM Packaging succeeded in both, although the costs were passed on successively according to contractual conditions, but often with a time delay due to ongoing further increases.

In order to participate in market growth in Central-Eastern Europe and take advantage of more favorable costs, the doubling of the largest Polish plant MMP Neupack Polska Petersona in Bydgoszcz was driven forward and the construction of a new packaging plant Emerald in Poland near Warsaw was initiated. In addition, expansion investments to expand sites to critical size and focus on growth markets, such as sustainable, plastic-free packaging in Austria, Romania and Great Britain, are being successfully implemented. At the same time, necessary structural adjustment measures to increase competitiveness and safeguard the existing business were continued. This concerned in particular the German packaging site MM Graphia Bielefeld, which ceased operations at the end of September 2021. In this context, one-off expenses in the amount of EUR 20.1 million had to be recognized.

The tonnage of cartonboard and paper processed at 853,000 tons was slightly above the previous year's level (2020: 847,000 tons).

Sales increased by 3.0 % to EUR 1,641.6 million (2020: EUR 1,594.2 million), primarily due to higher volumes. 49 % and 33 % were accounted for by Western and Eastern Europe, respectively, and 18 % by business outside Europe (2020: 50 %; 32 %; 18 %). MM Packaging supplies more than 1,700 customers in various consumer goods industries. Main markets are Food & Specialities as well as Premium, the latter including Health, Beauty & Personal Care and Cigarette. As a result of a high concentration in the customer industries, a significant share of business is accounted for by multinational key accounts, whereby around 40 % of sales in 2021 were generated with the five largest customers (2020: 40 %).

Operating profit rose by 11.9 % or EUR 17.2 million to EUR 161.9 million (2020: EUR 144.7 million), mainly due to higher volumes and increased cost efficiency. Accordingly, the operating margin totaled 9.9 % (2020: 9.1 %). Return on capital employed amounted to 14.4 % (2020: 13.2 %) cash flow from operating activities to EUR 161.1 million after EUR 191.9 million in 2020.

Divisional indicators MM Packaging

(in millions of EUR)	2021	2020	+/-
Sales ¹⁾	1,641.6	1,594.2	+ 3.0 %
EBITDA	235.8	234.2	+ 0.7 %
Operating profit	161.9	144.7	+ 11.9 %
Operating margin (%)	9.9 %	9.1 %	+ 79 bp
Return on capital employed (%)	14.4 %	13.2 %	+ 124 bp
Cash flow from operating activities	161.1	191.9	- 16.1 %
Tonnage processed (in thousands of tons)	853	847	+ 0.7 %

¹⁾ including interdivisional sales

3 RESEARCH AND DEVELOPMENT

The focus of MM Group's research and development activities is on sustainably securing and strengthening the Group's competitiveness and ability to grow. Innovation is lived as a process that is intended to provide timely solutions for future challenges and opportunities and to create new sustainable solutions that can also go beyond previous business areas. MM aims to identify market and future trends at an early stage and to use them in a way that creates value for customers and the entire Group. In order to succeed in the long term, we draw on a broad spectrum of resources within and outside our organization, regularly create space and incentives for new things to develop, and continuously invest in progress and the future of MM.

On the one hand, innovation activities are driven by demand for continuous product and process optimization, on the other hand, changing legal framework conditions sometimes require further development. Last but not least, the exploration of new, future business areas and target applications is the driver for innovation activities. The development and implementation of product innovations always takes into account possible risks to product safety and seizing opportunities arising from the development of innovative and sustainable packaging solutions.

Modern innovation process

A newly established innovation and product development organization and the continuously refined innovation process ensure that innovations are supported in a targeted manner from idea generation to implementation by the necessary resources and corresponding experts from our specialized departments. The focus is placed on ensuring that innovations are evaluated in detail and implemented as projects as promptly as possible in order to meet the requirements for state-of-the-art technological functionality, quality, safety and sustainability. To ensure quality and safety, we rely on external certifications. They are an important proof for customers and end users that our product innovations are sustainable, socially acceptable and harmless to health. They also serve as proof of legal compliance in the area of product safety. Regular testing of both existing products and innovative solutions for compliance with certification criteria also ensures rigorous quality assurance, which is also visible to the outside world.

In order to give all employees the opportunity to be involved in the innovation process through their own ideas, the internal idea platform "we.invent" was also launched. The contributions are evaluated in a stage-gate process and brought to implementation.

Focus on sustainability

Both the Corona pandemic and climate change remind us that security and prosperity depend on how we preserve common goods, such as public health and climate stability, in the long term: society and economy must be built on a resilient, sustainable, and climate-friendly basis. Cartonboard and paper are thus gaining importance as environmentally friendly packaging, since implementing circular economy has always been an integral part of the MM Group's development and innovation activities. MM's objective is therefore to use the opportunity to support customers in replacing plastic with innovative and, at the same time, proven solutions made of paper and cartonboard. In this way, we are also following the current trend towards sustainable, plastic-free packaging with a natural appearance as well as a high level of convenience and safety and perfect integration into online sales.

Progressing digitalization in the Group

While digitization in recent years has focused in particular on digital sales and service platforms, MM has now embarked on an overall modernization of the IT landscape in the Group, which includes Enterprise Resource Planning (ERP), production planning, and production control. On the one hand, this is a challenge for our organization, but at the same time it is a clear step forward. At the end of this multi-year process, MM will be even better positioned with new competitive advantages.

At the same time, the automation of work flows and logistics processes in both divisions is progressively gaining momentum, also with the aim of creating additional competitive advantages. This is also accompanied by the introduction of a large number of new skilled functions in the Group.

Innovation activity in the MM Board & Paper division in 2021

On the one hand, innovation and research activities are driven by the demand for continuous improvement of all MM Board & Paper's products and their properties, on the other hand, changing legal framework conditions sometimes require further development. Last but not least, opening up new, future business areas is the driving force for new product developments.

The research and development center of MM Board & Paper at the Frohnleiten site works together with the capacities available at the MM Kotkamills site and external research institutions to implement fundamental findings in the context of science and production. This ensures industry-oriented approach and rapid implementation. The objective is to meet the current requirements in particular with regard to renewable raw materials in exchange for mineral oil-based source materials as well as sustainable production in a closed circular economy.

In connection with this, the focus in 2021 was placed on the one hand on deepening applied research of the latest coating technologies, both in terms of the type of coating and the materials used, and on the other hand on the opportunities opened up by the acquisition of the two new sites at Kotkamills and Kwidzyn to develop new applications.

Another focus was on the treatment of cellulose fibers used for fiber-based packaging solutions to improve both mechanical and sensory properties, obtaining the valuable materials during this treatment.

Topics such as "microplastics" and the "Single Use Plastic Directive" were dealt with in the context of the comprehensive structural changes at MM Board & Paper with the aim of purposefully expanding the portfolio of environmentally friendly, innovative food packaging made of cartonboard or paper.

Innovation activity in the MM Packaging division in 2021

MM Packaging's innovation network

With the establishment of a "Head of Innovation MMP" and a related new innovation organization, the innovation network of MM Packaging was further expanded in 2021. This ensures that the entire technical know-how of the MM Group can be used for the needs and requirements of our customers. It comprises the following: PacProject, the creative Innovation Center in Hamburg (100 % integrated into the new innovation organization since the beginning of 2021), the Premium Printing Center in Trier, and the Technical Account Management team for coordinating targeted customer briefings with the local Packaging Development Centers and individual plants and the Tann-Group's research and development center. In order to take into account also the customers' needs in terms of technical orientation and equipment, there is a close cooperation with the Divisional Technical Support Team. This is accompanied by close cooperation with MM Board & Paper in the area of innovation.

At PacProject in Hamburg, concept studies up to the first prototypes are carried out in close coordination with the customer. Due to the close collaboration with the Technical Account Management team, first feasibility analysis is already carried out at this stage. At the Premium Printing Center in Trier, highly innovative technologies are used to create packaging designs with extraordinary effects in the shortest possible time. Demand from our customers for "e-training/learning" has increased strongly in the area of innovation. Therefore we offer customized trend workshops, idea workshops and technical trainings.

Current innovation focus

The pandemic has shown us how important our packaging products are for society. The pressure on plastic packaging continues to increase, e-commerce is booming and the way we work together has changed dramatically. It has never been so fascinating and challenging to meet these rapidly changing conditions with innovative ideas at all levels.

In 2021, MM Packaging's innovation activities focused in particular on the topic of sustainability. In this context, work was carried out in cooperation with customers, universities of applied sciences and research institutes, on optimizing recyclable packaging and developing new products.

One innovation focus was therefore on replacing plastic packaging with paper solutions. With the specific know-how in the field of paper processing, barrier properties, and packaging processes at the MM Innovaprint site in Bielefeld, well-known brands were able to switch from plastic to paper packaging in this context.

In order to take sustainability aspects into account already during the development of a product and to present cost advantages for the customers, "cost initiative in advance" was pursued further. This initiative involves the calculation of costs for ordered products already at the planning stage, taking into account the sustainability aspect. Before a new project is launched, different variants are calculated with regard to technical aspects, market requirements, design and costs of the new product and presented to the customer for selection.

MMe.commerce experience

Due to the Corona pandemic, the demand for e-commerce packaging increased significantly. On the newly established MMe platform, MM offers intelligent and innovative e-commerce packaging solutions ranging from cartonboard to the use of corrugated board. MM Packaging plants specialized in e-commerce are currently located in Romania, Austria and Poland.

Awards for special sustainability

At the European Carton Excellence Awards, MM Packaging and MM Board & Paper were honored to receive a joint award in the category Food & Drink Packaging, Recycled Fibre for the product "MM Basket". This solution, produced from Brown-color recycled cartonboard and patented by MM Packaging, was developed for storing and carrying stone fruit as an alternative to conventional plastic thermoformed trays. The jury was particularly convinced by the combination of functionality with appealing design and sustainability.

In addition, MM Board & Paper was awarded a prize in the category Food & Drink Packaging, Virgin Fibre for a food packaging that was able to convey the message of sustainability and naturalness particularly well. There were also two Gold Awards for other innovative packaging solutions.

4 RISK MANAGEMENT

The MM Group is exposed to a variety of general and industry-specific risks in connection with its international operations. Owing to the correlation of demand for the products of both divisions, MM Board & Paper and MM Packaging, with private consumption, the development of the economic situation has a particularly significant influence on the Group's risk situation. Because of the geographical business focus on Europe and the mainly regional character of cartonboard, paper and packaging due to transport costs and service, the economic conditions in the major European economies are of special importance. With regards to procurement, especially the development on fiber and energy markets is of particular relevance for risk assessment.

In addition to the Covid 19 pandemic, risk management in the financial year 2021 focused on massive price increases on the raw material and energy markets as well as on securing the ability to deliver. Another focus was on the integration of the new acquisitions MM Kotkamills and MM Kwidzyn into the Group's risk management. Due to the situation in connection with the conflict between Russia and Ukraine, geopolitical conflicts and related risks and effects were also considered within the existing risk fields. The MM Group closely monitors developments as well as international measures in order to be able to assess possible effects on the Group at an early stage. Although the Group has initiated numerous effective measures, in particular to pass on cost increases and to maintain the supply chain and operations, the risks of availability of raw materials for MM Packaging, sustainability as well as availability of human resources were assessed to be higher than in the previous year. Furthermore, the potential amount of damage from energy/emission certificates was also classified higher. A higher potential loss with regard to the availability of raw materials for MM Board & Paper followed the acquisitions of MM Kotkamills and MM Kwidzyn. Taking into account the safety and control instruments already in use and the early warning indicators, no significant risks that could endanger the Group's existence or impair its development are, however, currently identifiable.

Owing to a long-term focus on the core business areas, the MM Group has a solid base for identifying potential risks at an early stage and for adequately assessing possible consequences thereof. Dealing with risks is set out in a risk management system. It involves the systematic identification, assessment, control, and reporting of significant events and risks which could potentially endanger the Group's existence and influence its development. We define the term risk as a negative deviation from the corporate objectives resulting from an event that might occur in the future with a certain degree of probability. The risk management system aims at limiting substantial risks to an acceptable level by means of suitable measures. The existence of the Group and its ability to create value should thus be safeguarded in the long term.

For each risk that is identified and considered to be significant for the Group, specific control, steering and safeguarding measures are determined, taking into account the Group-wide risk policy, in order to manage the respective risk. These measures are continuously evaluated and developed or amended. They are oriented towards improving the Group's risk position, however without restricting possible opportunities.

The Management Board is responsible for the Group's risk management, defines the risk policy which is generally characterized by a conservative approach and sets the framework for Group-wide risk management. There is a focus on risk prevention and risk reduction which are, as far as economically justifiable, achieved by appropriate control measures and complemented by the Group's insurance program.

The "Risk Management Compliance" department reports directly to the Management Board and ensures that risk management is implemented and conducted on behalf and in the interest of the Management Board. Each risk area that is considered to be significant is assigned to a risk area officer with relevant expertise who is responsible for analyzing, assessing, controlling, and monitoring the respective risks. Thus, the risk management process does not take place in an isolated way, but as an integral part of the organization and its procedures. The identified risks are evaluated in terms of potential damage and probability of occurrence before as well as after taking safeguarding and steering measures.

The Group's auditor assesses the functionality of the risk management system and reports to the Supervisory Board and the Management Board.

The most significant risk areas to which the Group is exposed and the measures taken to manage these risks are described below.

Sales

The demand for cartonboard packages and paper products from MM correlates with the overall economic development, but especially with the demand for consumer staples. Market risks may therefore arise in particular from the overall economic development as well as regulatory and political conditions on individual sales markets.

Owing to sufficiently available capacities of providers, the sales markets of MM Board & Paper and MM Packaging are characterized by intensified competition. The Group therefore pursues a strategy of further asserting and extending the market position of both divisions in the long term through increasing competitiveness with efficiency gains, sustainability and innovation.

The Group has a total of several thousand customers. MM Board & Paper sells unprocessed cartonboard mainly to the medium-sized European folding carton industry. Kraft papers are sold in particular to the food/gastronomy industry and the laminate industry, uncoated fine papers (office and printing papers) especially to paper/office supply retailers in Europe. The division MM Board & Paper generates around 30 % of divisional sales with 15 to 20 main customer groups, excluding MM Packaging. The packaging division supplies printed cartonboard packages to consumer goods manufacturers and generates around 75 % of divisional sales with 40 main customers. The level of dependency on individual customers is still considered manageable.

Customers assess their locations network in constant evaluations in order to optimize costs and exploit growth opportunities, which may result in a geographical relocation of business. The Group's broad positioning in a great number of market segments and the geographical width of market presence contribute however to minimizing risk.

A broad range of well-established measures has been taken to safeguard market shares and generate new business. These include a close contact with customers, ongoing monitoring, market analyses, cooperation in research and development, sustained quality and cost management, continuous investment activities, a systematic expansion of our customer base, and a regular participation in tenders. Due to the possibilities of digitalization, potentials for customer retention are used especially in business processing and service.

The increased public interest in sustainability and health has been accompanied by growing demands from customers, interest groups, and legislators with regard to sustainable packaging solutions as well as their product quality and safety. It is a particular priority for MM to meet these requirements in order to minimize a potential risk to sales, compliance, or reputation. Embedded in an institutionalized framework, both divisions continuously implement R&D activities that undergo continuous further development. In 2021, for example, "we.invent" was introduced as an idea platform for the systematic recording of ideas from the perspective of MM's around 12,500 employees. In addition, the innovation stage gate process was further expanded. This makes it possible to offer safe and innovative products that are sustainably in line with market demands. MM meets the high product safety and quality requirements by certifying all production sites according to ISO 9001 and through regular quality assurance measures and inspections. As a result, 100 % of all MM cartonboard grades and the relevant paper products are tested with regard to their impact on consumer health and safety. In particular in the area of food packaging, a variety of effective measures ensure compliance with strict legal regulations and customer requirements, thus contributing to compliance, customer satisfaction and safeguarding sales. These include comprehensive certification in accordance with food safety and hygiene standards, continuous R&D activities, and quality controls with regard to the interaction between packaging and contents (migration studies), as well as measures to meet product traceability requirements.

In terms of sustainable, environmentally friendly packaging solutions, MM as a whole benefits from a positive perception of cartonboard as a packaging material by the general public and customers. Particular importance is currently attached to substitution possibilities for plastic packaging using cartonboard and paper applications which are being taken up proactively and in a customer-orientated manner. Following the trend towards light-weight packages, MM Board & Paper is further expanding its range of qualities with low grammages.

The market for cigarette packaging is subject to regulatory risk due to the protection of non-smokers and minors, which is associated with potential effects on sales development. This can affect both the quantity and the value of the product. More and more countries around the world, whose number continued to increase in 2021, require "plain packaging", i. e. standard packages without brand logos. The Member States in the European Union have implemented the EU Tobacco Products Directive (TPD2), which requests larger warning labels. A 2021 status report states that the approach of plain packaging with larger health warnings, in particular, should be pursued. A proposal from the EU Commission to revise TPD2 is expected at the beginning of 2024, with the evaluation phase to start already in the 1st quarter of 2022. The impact on the relevant sales of the MM Packaging division cannot be quantified yet, but the risk is minimized by broad global geographic sales and a close cooperation with cigarette manufacturers. Companies operating in this product area may be subject to discrimination in the public perception.

Production

Production plants and processes in the Group are systematically developed or renewed in line with the state of the art. A focus is placed on a sustainably responsible production, taking into account economic, environmental, and social aspects with the aim of creating long-term benefits for our stakeholders, in particular customers, employees, and shareholders.

This primarily involves an economical use of resources (especially of fibers, cartonboard, paper, energy, water, chemicals, and transport) for our production, a high solution expertise, and guaranteeing quality while maintaining a sound financial conduct. We therefore focus on continuous performance benchmarking among locations, innovation, and sustainable investments in the latest technology. Potentials of automation and digitalization are actively pursued and implemented. The aim is to produce according to the highest possible standards throughout the Group.

A high degree of technical availability (operational readiness) of the plants is crucial in both cartonboard/paper and folding carton production. Continuous electronic monitoring of individual machines and sections of machines, revisions, maintenance and certifications as well as risk engineering in collaboration with insurance companies are among the most important preventive measures for maintaining continuous operations. Furthermore, division-wide back-up concepts secure readiness for supply even in the event of long-term interruptions of operations. The opportunity to produce individual products in various locations constitutes a core element.

Meeting required quality standards and norms, especially in the areas of product safety and food contact, is an essential precondition for the sustainable competitiveness and attractiveness of our products and services. Constant quality assurance measures along the value added chain record compliance with high standards and enable traceability of products. Ongoing investment as well as R&D activities, market observation, and a longstanding collaboration with national and international standardization bodies and lobbies allow us to evaluate and consider new findings and interpretations as well as future developments in a timely manner.

We keep risks regarding investments, technical innovation, and integration of acquisitions limited by focusing on our core competences. Before their realization, investment plans are subjected to a standard multi-level approval process as well as clearly defined tendering procedures involving the specialist departments concerned. Negotiations and drafting of purchase agreements are carried out in cooperation between Corporate Sourcing, Divisional Technology and Corporate Legal. Investment projects are accompanied during implementation by a continuous control of qualitative as well as quantitative aspects. Product and process innovation is subjected to extensive test phases and generally assessed in pilot projects before being rolled out.

Procurement

The performance of both divisions requires the use of certain essential raw materials and input factors which are mainly obtained externally. In the division MM Board & Paper, these include especially recycled paper, wood and other fiber materials as well as energy, chemicals, and logistics services. With regard to the division MM Packaging, these include primarily cartonboard and paper as well as printing inks, varnishes, glue and finishing materials, but also tools and packaging materials. For procurement there is basically a risk of availability concerning quantity and quality as well as a price risk. We particularly counter the risk of availability through regular market and demand monitoring and continuous contact with a majority of suppliers. We ensure compliance with the agreed properties by incoming goods inspections, continuous quality monitoring, and on-site visits at our suppliers. Where reasonable and possible, tenders are conducted for current purchasing volumes.

Recovered paper, wood, pulp, and chemicals are the most essential raw materials for MM Board & Paper and sufficiently available in Europe. The division procures them via its own European procurement organization, mainly by monthly or spot orders as well as longer-term contracts. Ongoing monitoring and suitable security measures, such as capacity reservations, long-term contracts, and backup concepts, are partly successful in counteracting the increased shortage and price risk due to a higher global demand and in absorbing short-term price peaks. As a result of high recycling quotas in Europe and existing reserves, a sufficient supply of paper for recycling is basically assured. Due to regulatory measures, there may be shifts in supply. The additionally required groundwood pulp is mainly produced internally in the cartonboard and paper mills and in our Norwegian fiber mill FollaCell.

In close cooperation between production and engineering, we take state-of-the-art measures to control the consumption and optimize the use of raw materials. In this regard, opportunities for substitution and adjustments of formulations are regularly evaluated.

Based on the profit center principle, purchase of cartonboard and paper for the MM Packaging division is conducted by its own procurement organization with continuous screening of various cartonboard and paper producers.

Significant price changes of strategically important input factors are taken into account by appropriate clauses in long-term agreements.

Energy (gas, electricity, coal, heating oil) is an input factor of strategic importance, especially for the division MM Board & Paper. In risk assessment, purchase price, basic availability, and purchase opportunity are essential parameters. The latter refers to the physical availability of energy, which mainly depends on the political stability of producer and transit countries. Political conflicts, armed conflicts and natural disasters can have a significant impact on the availability and price risk of energy. In some cases, minimum purchase quantities are defined in energy agreements. If the level of those is not reached due to standstills or technical faults, compensation settlements are due (take-or-pay rule). In order to manage the risk, we rely on concluding long-term framework purchase contracts, continuously monitoring price developments and existing hedging contracts as well as linking production and sales planning to the purchase of energy. Medium-term purchasing policy is managed based on regular consultations between the management and an energy procurement with Group-wide responsibility. Furthermore, measures aimed at reducing specific energy consumption are continuously implemented. Substitution of fossil energy types takes place, for example, through local biomass or replacement fuel plants. Adjustments to selling prices in line with price developments on the energy market are implemented as quickly as possible.

Due to the political objective of reducing greenhouse gas emissions in the industry, all mills of the division MM Board & Paper are confronted with a regulatory risk regarding the availability of emission permits (CO₂ certificates) which are issued restrictively according to the "cap & trade" principle. Thanks to energy-efficient facilities and correspondingly good benchmarking results, MM Board & Paper continues to benefit from a partly free allocation of emission permits and currently holds sufficient CO₂ certificates. It is expected that the EU will gradually reduce free allocations in order to create incentives for further emission reductions. The European Green Deal, which aims to achieve a climate-neutral EU by 2050, has recently come into play here. There is a dynamic CO₂ allocation in case of activity change +/-15 %. MM Board & Paper procures missing certificates on the free market under the EU emission trading system, whereby a price risk must be taken into account, which is partially mitigated by means of forward contracts.

MM Packaging also faces the risk of indirect emissions pricing. Based on the European Effort Sharing Regulation or the Fuel Emissions Trading Act in Germany, certain sectors (heating and transport) face a CO₂ levy, which may have an impact on the cost side of both divisions as a result of onward charging.

Sustainability

Basically, sustainability describes sustainable management taking into account economic, ecological and social aspects with the aim of creating long-term benefits for our customers, shareholders, employees and the environment and society and minimizing the negative impact on environment and society. In detail, this means, for example, using resources (recycled paper, cartonboard, virgin fiber, chemicals, energy, water, waste) responsibly and efficiently and ensuring fair working conditions as well as long-term qualitative growth, which will also ensure economic success in the future. Sustainability is therefore an integral part of the Group's strategy and is one of the foundations of the long-term financial success of the Company.

Risks in this area consist of physical risks (e.g. floods, forest fires, storm damage, drought) and transitory risks (e.g. emission certificates, changing market requirements and consumer behavior, political developments). Physical risks can lead to direct production losses, supply bottlenecks or increased raw material prices. Transitory risks should primarily be regarded as compliance issues that do not result in short-term production losses, but in the event of violations negatively impact the "license to operate," which can be reflected economically in declining sales figures, increased penalties and CO₂ taxes, for example.

From a macro-political perspective, conflicts must be taken into account here, which can lead to production losses in conflict regions as well as to bottlenecks with regard to energy and raw material supplies.

Legal changes, such as those that are coming into force as a result of the EU Green Deal in particular, are intensifying the requirements for corporate sustainability, as financial indicators and non-financial indicators are increasingly being seen as dependent on one another (e.g. EU taxonomy). Consequently, sustainability is an important parameter for financial market valuations and investment decisions.

With regard to market requirements, it must be taken into account that sustainability, measured in terms of the product life cycle, is an important decision criterion for customers in the production of needs-based products. Sustainable packaging solutions are often included by customers themselves in the company's own sustainability goals.

Sustainability is also playing an increasingly important role in the competition for young talents. Companies in which sustainability is not implemented or is implemented in an untrustworthy manner will have disadvantages in the future when it comes to attracting and retaining young talents.

To secure and control the sustainability risk, MM relies on a central sustainability management, resource-efficient production of recyclable products, ambitious long-term (science-based) sustainability targets as well as the inclusion of sustainability criteria in the remuneration policy. Non-financial key figures are subject to comprehensive regular monitoring by a dedicated management system. Furthermore, all cartonboard and paper mills and selected sites of MM Packaging are certified according to PEFCTM (Program for the Endorsement of Forest Certification Schemes) and FSC[®] (Forest Stewardship Council). In addition, selected sites are certified according to EMAS (Eco Management and Audit Scheme) and/or ISO 14001 for environmental management systems as well as ISO 50001 for energy management. In the areas of product quality and/or food safety, all cartonboard-producing and almost all folding carton-producing sites are certified (ISO 9001, BRC, ISO 22000, EN 15593, ECMA GMP).

Human Resources

The Group relies on qualified, motivated, and performance-oriented employees at all levels in order to achieve corporate success. We promote sustainable collaboration through continuous personnel development, education, appropriate remuneration, and incentive systems as well as a lived value and corporate culture with the aim of tying our employees to the Company in the long run and finding suitable top performers for vacancies. Targeted measures in HR marketing are implemented to ensure the Group's attractiveness as an employer.

The central "Group Human Resources" department acts as a strategic partner of the management and is not only responsible for operational personnel issues at the Group's headquarters, but also develops target-group-specific standards for the entire MM Group. With a wide range of development and training programs such as the MM Academy, the apprentice program "Next Generation" and various trainee programs, we systematically establish conditions under which talents can grow, and up-to-date expertise is made available to the Company over the long term.

Corporate health management supports our employees through a large number of support and prevention measures with the goal of maintaining health and performance at a high level over their entire working lives.

Since the start of the Covid-19 pandemic, particular attention has been paid to the measures required to ensure the best possible protection of the health and safety of employees, even under these exceptional circumstances. Higher safety standards, the option to work from home and the use of the latest online communication and e-learning tools make an important contribution in this respect.

HR agendas in 2021 were also characterized by the two large acquisitions as well as the sale of two mills in the MM Board & Paper division. Due to this strategic realignment, organizational structures were changed and new functions established. Changed management structures and teams, but also system and process decisions were necessary. This process will be continued in 2022. All major integration measures are managed via a clear project structure.

Pensions/severance payments/pre-retirement

The majority of employees in the Group is covered by defined contribution plans as part of statutory pension schemes. Apart from statutory pension schemes, the Group has also made performance- and contribution-based pension commitments to certain employees on the basis of individual commitments and company agreements. Furthermore, there are performance- and contribution-based severance obligations and obligations as part of statutory pre-retirement schemes. For monitoring and minimizing risks, a clearly structured process of data provisioning, plausibility checks, and verification at the level of individual companies or the Group is pursued and individual commitments are monitored by the Group's headquarter.

Liquidity risk is addressed through the use of qualifying insurance policies in Austria and Germany, pension funds in Great Britain and the Philippines, and a collective foundation in Switzerland to cover assets. The investment involves an assessment risk. External fund assets are invested as conservatively as possible in line with legal requirements (low equity component, corporate rather than government bonds).

The continuing low level of interest rates has methodically led to a low discount rate, which increases the actuarial present value of obligations. The resulting deduction item in equity can be classified as absolutely manageable in relation to equity. The projected expenses for pensions and severance payments remain stable.

Financial risks

Corporate planning is based on professional forecasts, assessments, and assumptions concerning future economic and financial developments in the Group. We try to hold the risk of false estimation at bay by a close cooperation of the mills with the specialist departments of the Group and the divisions within the framework of a clearly defined multi-step planning process.

We counter financing and liquidity risks of the Group in particular by a centrally managed cash and credit management, the careful selection and a continuous monitoring of national and international banking partners, and the availability of sufficient credit lines at any time. Compliance with the covenants from the Schuldschein loans and Namensschuldverschreibungen issued in 2021 is monitored regularly to minimize risk.

Foreign exchange risks are monitored continuously with system support and are limited or reduced by suitable hedging measures. Hence, the focus is placed on balancing risks naturally by matching receivables and liabilities at individual subsidiaries and at Group level as well as foreign exchange forward, swap and option contracts. Currency hedging transactions are mainly performed on a central currency trading platform. Currencies that are hedged for fluctuations of their exchange rates are in particular the British pound, the US dollar as well as the Euro for the companies with functional currencies other than the Euro. The related price risks are reduced as far as possible by currency congruence in business transactions and by price adjustment mechanisms in long-term agreements. Derivative financial instruments are neither used for trading nor for speculative purposes.

A central management system continuously optimizes working capital and minimizes impairment risks for inventories. The risk of default on accounts receivable is minimized by constant credit assessment as well as credit insurance for all customers, with the exception of selected international customers that enjoy the highest credit rating.

Accounting

The Management Board is responsible for establishing and developing an appropriate internal monitoring and risk management system for accounting as well as financial reporting and for preparing the consolidated financial statements. This ensures the completeness, reliability, and transparency of financial information. In addition, the appropriateness and efficiency of processes as well as compliance with statutory, contractual, and internal regulations is guaranteed.

The accounting process covers all essential tasks which ensure that the accounting-relevant information is recorded and processed completely, accurately, and in time and that financial reporting is presented in accordance with the applicable accounting standards.

In the organizational and operational structure, clear responsibilities are defined for the individual companies and the Group. The central departments "Corporate Accounting" and "Planning and Reporting" are responsible for developing up-to-date uniform Group guidelines as well as for organizing and controlling financial reporting in the Group.

The reporting to the Management Board and Supervisory Board is effected in a regular, comprehensive, and timely manner. Compliance with internal Group guidelines and processes concerning the recording, posting, and accounting of business transactions is continuously monitored. The data processing systems used are developed in a targeted manner and are continuously improved. Accounting processes and financial reporting are reviewed regularly for potential risks. Improvement measures are taken as quickly as possible and implemented swiftly. Focus audits are carried out by auditors and the Internal Audit department.

Information technology

Central IT management is based on ISO 31000, information security of the central IT on ISO 27001. The risk of a breakdown of central data processing is limited by a geographically separated backup computer center and by a variety of preventive measures and regular checks. Risks regarding information security are countered by a wide range of security measures which are embedded in a Group-wide information security management system (ISMS). The function of an Information Protection Officer ensures the Group-wide establishment and continuous update of security standards. We counter the general rise in cybercrime by continuously refining a prevention, detection and continuity management.

Employees are instructed in regular security training courses and trained to maintain a high level of attention.

Other risks

Compliance risks arising from possible non-conformity with standards, laws, ethical codes of conduct, and, where applicable, voluntary commitments are managed especially by means of protective measures in the systems, regular, systematic compliance monitoring, the four-eyes principle as well as Group-wide guidelines, for example the Code of Conduct (available on our website at <https://www.mm.group/en/about-us/responsibility/code-of-conduct/>) and Group-wide "Group Organizational Guidelines". Furthermore, the function "Group Legal" is established, which is also responsible for compliance training and organization. To counter any improper actions, in addition to the stipulation of approval requirements, in particular protection by the systems, a strengthened internal control system and a modern whistleblowing mechanism are in place.

The corporate governance report which is an integrated part of the annual report is available on our website at <https://www.mm.group/en/about-us/responsibility/corporate-governance/>.

We address the "legal compliance" risk in particular through the function "Group Legal", which is responsible for monitoring and controlling the risk area and, if necessary, by calling in external experts. The aim is to comply with legal requirements, the best possible contractual design of business relationships and, finally, to comply with these contractual requirements. This is not least intended to prevent the increasing risks of a breach of the law and possible sanctions resulting from ever more stringent regulation.

In addition to the risks listed here, the Group may be exposed to further risks. We are currently not aware of any such risks or classify them as insignificant.

5 DISCLOSURES ACCORDING TO SECTION 243 A PARA. 1 OF THE AUSTRIAN COMMERCIAL CODE

Composition of capital, stock categories

Please refer to the information provided in the consolidated financial statements under note 13.1.

Restrictions concerning the voting rights and the transfer of shares

Approximately 57 % of the shares are held by the core shareholder families in a syndicate. There is a syndicate agreement which regulates the transferability of shares within the syndicate and to outside parties. Issues that concern the Ordinary Shareholders' Meeting are decided by the syndicate with 65 % of the voting rights. Modifications of the syndicate agreement require unanimity, measured by the total number of votes cast.

Direct or indirect participation in capital of at least 10 %

According to the information provided to the Company, there were the following minimum participations of 10 % in the capital at year-end 2021:

MMS Mayr-Melnhof-Saurau Beteiligungsverwaltung KG
CAMA Privatstiftung

Owners of shares with special control rights and a description of these rights

There are no shares with special control rights.

Type of voting rights control for capital participation by employees, if they do not directly exercise the right to vote

There is no such capital participation model for employees.

Provisions for appointment and revocation of members of the Management Board and the Supervisory Board and regarding alteration of the Articles of Association of the Company that do not arise directly from the Act

There are no provisions of this type.

Authorization of the members of the Management Board that does not arise directly from the Act, in particular with regard to the option of issuing or repurchasing shares

There are no authorizations of this type.

All significant agreements to which the Company is a party and that take effect are modified or terminated in the event of a change of control of the Company as a result of a takeover offer as well as its effects; agreements which would significantly damage the Company if made public are excepted, unless the Company is obligated to make such information public as a result of other statutory provisions

The protective clause with regard to the disclosure of this information is invoked. The scope of the business in question is considered reasonable.

Existence and significant content of compensation agreements between the Company and the members of its Management and Supervisory Boards or employees in the event of a public takeover offer

There are no agreements of this type.

6 CONSOLIDATED NON-FINANCIAL STATEMENT ACCORDING TO SECTION 267 A OF THE AUSTRIAN COMMERCIAL CODE

To comply with section 267 a of the Austrian Commercial Code, the option to set up a separate consolidated non-financial report was chosen (see pages 89 et seq.).

7 OUTLOOK ON THE FINANCIAL YEAR 2022

This outlook reflects the assessment of the Management Board as of March 14, 2022, and does not take into consideration the effects of any acquisitions, disposals, or other structural changes in 2022. Previous and subsequent forward-looking statements are subject to known as well as unknown risks and uncertainties that may result in actual events differing from the forecasts made here.

Demand and order situation for the products of both divisions have remained in good shape since the beginning of the year. The price increases necessary in view of massive cost increases, especially the extraordinary rise in energy prices, could be implemented for the 1st quarter. In addition, a further cartonboard price increase is planned for the 2nd quarter in order to compensate for the cost inflation which has been going on since the beginning of the year. Also in the Packaging division, the recent rise in input costs is passed on continuously but often with a time lag due to contractual reasons. As a result of widely booked capacities and longer delivery times, our customers continue to focus on supply security, a demand that we meet with the highest possible flexibility and transparency.

Due to capacity limitations, the Group's sales volume can only increase gradually. However, the expansions recently initiated at several MM Packaging plants should enable more business in the course of the year. At MM Board & Paper, where the investment focus is on efficiency improvements and optimization of the product portfolio, the expansive effects will only gradually take effect from 2023 onwards.

As already indicated, due to intensified investment activity in increasing competitiveness and growth, investments in a range of EUR 250 - 300 million p.a. can also be assumed for 2022 and 2023. At MM Board & Paper, in addition to the major investments in Frohnleiten, Neuss, and Kolicovo, the focus is also placed on projects at the new acquisitions MM Kotkamills and MM Kwidzyn in order to be able to utilize attractive potentials in a timely manner. At MM Packaging, in Poland we are pursuing a doubling of the large site in Bydgoszcz as well as the construction of a new packaging plant near Warsaw in order to participate in the market growth in Central-Eastern Europe and to take advantage of more favorable costs. In addition, sites in Great Britain, Austria and Romania are expanded to critical size.

The orientation of the MM Group towards a long-term moderate growth course has proven successful and will be further pursued. While at MM Board & Paper the emphasis is currently on the integration of the new acquisitions, the market presence of MM Packaging is also to be expanded through acquisitions. The focus on optimizing cost structures, digitalization, and innovative, sustainable packaging products to replace plastic packaging will be consistently continued.

In view of ongoing cost inflation and further developments that are difficult to predict, the focus remains on compensating this weight by increasing selling prices as quickly as possible and reducing structural costs in order to catch up again in terms of margins.

The MM Group closely monitors the developments in Russia and Ukraine as well as the international measures and possible impacts on the Group. MM cumulatively generates approx. 9 % of the Group's EBITDA in Russia and Ukraine. In Russia, packaging products for the local demand of daily consumer goods are produced at two sites, St. Petersburg and Pskov. A downtime has to be expected. MM has stopped all cartonboard deliveries to Russia. In Ukraine, where MM produces packaging at the Cherkassy site in the center of the country, operations are currently suspended.

Vienna, March 14, 2022

The Management Board

Peter Oswald m. p.

Andreas Blaschke m. p.

Franz Hiesinger m. p.

Consolidated Non-financial Report

MM in the context of sustainability

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Brief profile of the MM Group

Circular economy and plastic substitution

Non-financial topics and their connection to business development

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About the Consolidated Non-financial Report

Appendix: MM sustainability performance at a glance

Overview of non-financial indicators

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TCFD Content Index

Independent limited assurance report

MM in the context of sustainability

INTRODUCTION

The MM Group is essentially a sustainability company. Producing innovative, recyclable packaging and paper products made from renewable raw materials, we are at the forefront of avoiding plastic waste. Due to its roots in the field of forestry since the foundation in 1888, the idea of sustainability has always been present at MM, if only less obvious.

Now, however, we have clearly emphasized sustainability and integrated it as a central component into our strategy, as documented in this report, which has been expanded and is more detailed than in previous years. This means that all activities related to environmental protection ("Planet"), attractive working conditions and occupational safety ("People") as well as the future-oriented management of investments and innovations and the cooperation with third parties to achieve systemic change ("Prosperity") have clearly come to the fore.

This is based on our conviction that we can be even more competitive and successful in the long term through documented sustainability and our progress in it, as well as our continuous stakeholder dialogue. This requires experienced central management, additional resources and harmonized systems, tools and standards, in which we have recently made significant investments.

The recent upgrade of our climate rating from C to A- and thus to "leadership status" by the renowned CDP (Disclosure Insight Action) was a first great success. In particular, this sends a signal to our customers that they prefer MM as their supplier. However, we also place a focus on improving our water, energy and accident statistics. After all, sustainability is increasingly becoming a distinguishing feature. In this context, the topic of "avoiding plastic waste" is particularly important to us. By providing adequate cartonboard solutions, we have the opportunity to show our customers that you can achieve the same functions and the same comfort without plastic.

The concept of circular economy has long been an intrinsic part of our business due to our focus on cartonboard and paper products, which are mainly produced using renewable raw materials and are fully recycled after use. Despite all efforts to increase recyclability, plastic will never be recycled to the same extent as cartonboard. Therefore, we strive to offer new opportunities for the substitution of plastics and create an attractive potential for MM in the current discussion about packaging materials through increased innovation and sustainable investment activities in the group, striving to offer competitive cartonboard and paper solutions.

However, we are also aware that we cannot achieve systemic change on our own and can only make the value chain even more sustainable in cooperation with our customers and partners. Therefore, we are a member of the United Nations Global Compact and are committed to the Sustainable Development Goals (SDGs) of the United Nations. We also base this report on the standards of the Global Reporting Initiative (GRI Standards Option "Core"). In the reporting year 2021, MM also joined the global initiative "Business Ambition for 1.5°C" in order to contribute to limiting global warming to 1.5 degrees by 2050 through appropriate measures. To this end, we set ourselves ambitious, science-based targets.

We have conducted a new materiality analysis on the topics described in this report in order to meet the interests of our stakeholders in an even better and more up-to-date way. At the same time, we are striving to continuously optimize and expand transparency in the ongoing dialogue over the next few years.

In this sense, we take into account all current sites of the divisions MM Board & Paper as well as MM Packaging with full-year values with regard to the disclosure of our non-financial performance indicators. This also applies in particular to the newly acquired cartonboard and paper mills MM Kotkamills and MM Kwidzyn. Those MM Board & Paper sites in Eerbeek and Baiersbronn that were sold in 2021 are no longer included, though. This creates a comprehensive basis for comparability in 2021 – also for the future reporting of non-financial performance indicators in subsequent years.

The fact that the MM Group is continuously making progress in economic, ecological, social and societal terms is due to the high sense of responsibility and performance of the entire MM team, for which we would like to thank in particular our employees.

BRIEF PROFILE OF THE MM GROUP

The MM Group is Europe's leading producer of cartonboard and folding cartons with an attractive range of kraft papers and uncoated fine papers. Offering innovative, recyclable packaging and paper products made from renewable, fiber-based raw materials, we are at the forefront of avoiding plastic waste as a sustainability company.

The Group has an integrated structure with two divisions, MM Board & Paper and MM Packaging, which trade with each other at arm's length. Cartonboard is the most important raw material for folding cartons, which are mainly used for packaging everyday consumer goods. Around 12,500 employees in the Group produce approximately 2.0 million tons of cartonboard, 260,000 tons of kraft papers and 390,000 tons of uncoated fine papers per year and process around 850,000 tons of cartonboard and paper. In 2021, the MM Group achieved sales revenues of approximately EUR 3.1 billion, including recent acquisitions. MM has 6 cartonboard and paper mills, 43 packaging sites and one fiber mill in 21 countries and sells its products to around 140 countries worldwide, with Europe as the main market.

The wide range of products and services includes cartonboard grades for a variety of consumer goods industries in the food & specialties and premium sectors. Papers are used for packaging solutions and technical applications as well as for products in the office sector. In line with the product portfolio, around 57 % virgin fibers and 43 % recycled fibers are used as raw materials. In addition to fibers, the most important input factors are energy, which is mainly obtained from natural gas, and coating chemicals for cartonboard surfaces. As already described in the introduction, cartonboard is mainly used in the packaging production. All MM Board & Paper's cartonboard and paper products are produced using renewable fibers and are both recyclable and biodegradable. MM Board & Paper's customers are folding carton producers, consumer goods manufacturers as well as traders.

MM Packaging is one of the leading producers of folding carton packaging in Europe with a leading position also in several non-European countries. The focus is on the production of packaging for everyday consumer goods in the Food & Specialties and Premium segments. While the first segment serves a broad spectrum of food and non-food applications, the premium business comprises highly specialized packaging markets such as pharmaceuticals, beauty & personal care and cigarettes. Recycled and virgin fiber cartonboard is used in roughly equal parts as raw materials. In addition to cartonboard and paper, mainly inks, varnishes and die-cutting tools are significant input factors in the packaging production that is more labor-intensive but energy-extensive compared to cartonboard and paper production. MM Packaging's customers are both multinational and local consumer goods producers.

CIRCULAR ECONOMY AND PLASTIC SUBSTITUTION

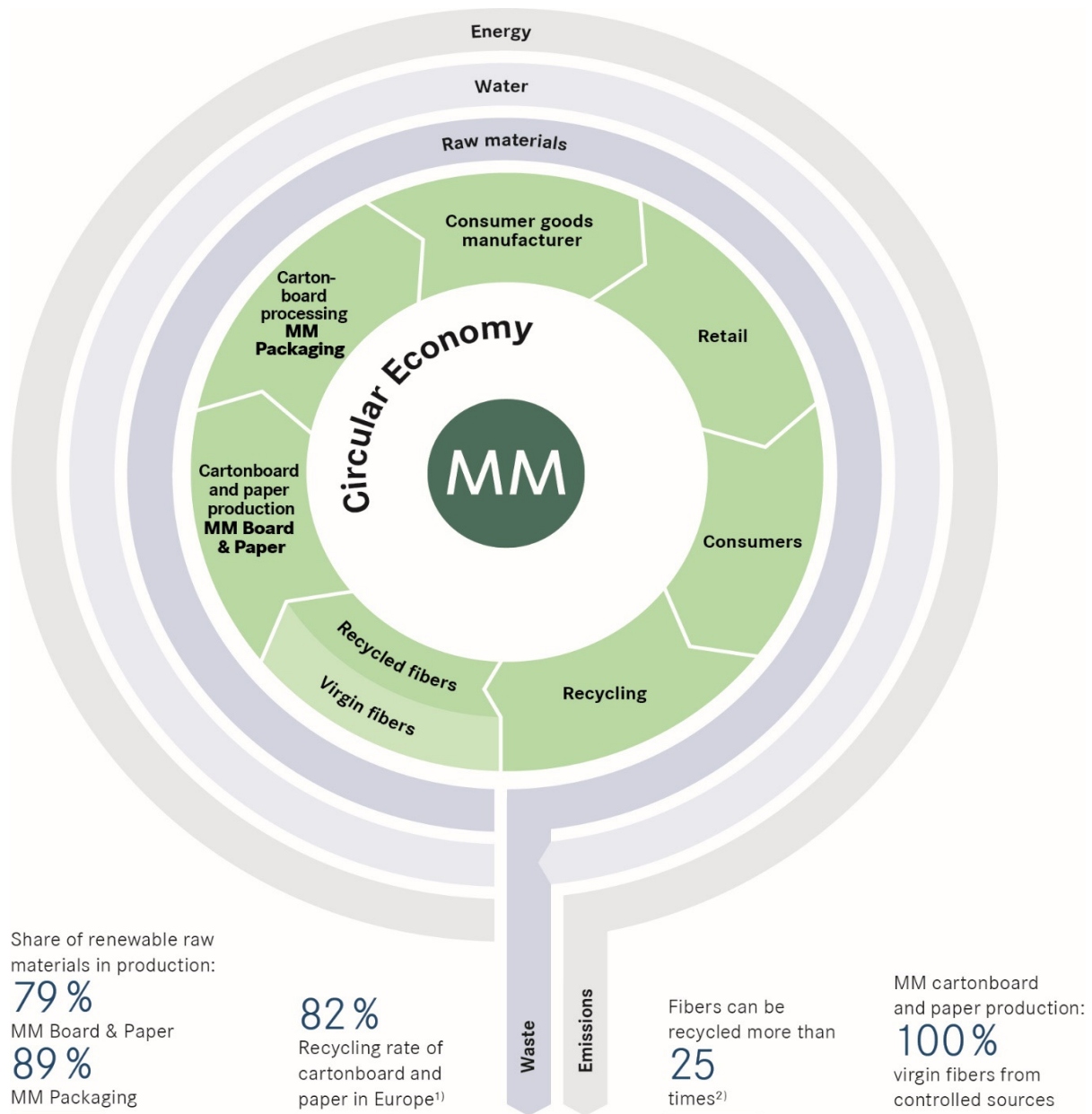
Responsible recycling management has long been an integral part of our business, as our business is focused on cartonboard and paper products that are predominantly produced using renewable raw materials and are fully recycled after use. Therefore, we strive to offer new possibilities for the substitution of plastics and create an attractive potential in the current discussion on packaging materials by developing innovative and competitive cartonboard and paper solutions.

The basis for the sustainable focus of the MM Group is our strategic positioning as market leader based on cost and innovation leadership as well as the rules of our Code of Conduct, which also include the universal principles of the UN Global Compact in the areas of labor standards, human rights, environmental protection and anti-corruption. Our ongoing objectives and resource allocations in the Group are based on this focus.

Sustainable value added and growth in the core business

Our strategy focuses on the sustainable generation of value added and growth along the supply chain with a focus on the two core business areas MM Board & Paper and MM Packaging. To achieve this, we focus on excellent industrial performance with a claim to cost, innovation and technology leadership and best practice opportunities related to many sustainability topics such as: resource consumption, circular economy, safety and development of our human resources, diversity, respect for human rights as well as the sustainable fight against corruption and bribery. By implementing a Group-wide sustainability management, the aim is to systematically develop MM's attractiveness as a sustainable company and to respond even better to our customers' expectations in this area.

We focus on the development and optimization of recyclable packaging solutions made of cartonboard and paper, as we are convinced that we can meet the expectations of the market in the long term and achieve success with products that are produced sustainably and add value. In doing so, we open up new sales areas and penetrate existing markets with highly competitive and innovative products and processes. We strive for both, organic growth and growth through acquisitions.



¹⁾ Source: Eurostat; average recycling rate of the EU member states in 2019

²⁾ Source: Putz, H.-J.; Schabel, S.: Der Mythos begrenzter Faserlebenszyklen. In: Altpapier im Fokus – Sicherung des Recyclings durch innovative Technologien und Nutzungskonzepte : PTS-Fachseminar AG 1821, Dresden. PTS, [Konferenzveröffentlichung], (2018)

NON-FINANCIAL TOPICS AND THEIR CONNECTION TO BUSINESS DEVELOPMENT

Non-financial topics and their connection to business development. The strategic examination of non-financial issues in connection with business development enables comprehensive risk and opportunity management. For the MM Group, the areas of "Planet" (environment), "People" (employees) and "Prosperity" (society) are various cost and turnover and sales drivers that have or can have an impact on the company's current and future business success.

A relevant sales driver is the focus on sustainable packaging solutions, a demand which we aim to meet through the ongoing adjustment of our offer and innovations to changing market and consumer preferences. The human capital of our employees is a key value driver and the motor for ongoing necessary changes and adjustments. The MM Group's multi-layered training and development programs as well as employee retention and recruitment measures help to ensure that the Group has a sustainable supply of qualified employees to secure its position, further development and growth.

Costs in connection with non-financial matters arise in particular with regard to personnel, energy requirements, water consumption, and waste generation of the MM Group. Future cost drivers could result primarily from regulatory changes such as an increase in the cost of CO₂ certificates as well as changes and tightening of guidelines and requirements, at national or EU level.

Broad social developments, on the other hand, represent potential future opportunities for the MM Group's business model. The progress of digitalization and automation will further increase efficiency in production processes and thus allow for cost savings. Developments in the transport and logistics sector could contribute to fuel or personnel cost savings. The trend towards urbanization and smaller households as well as growing private consumption in emerging countries could contribute to sales increases in the future, e.g. through an increased demand for smaller product units.

As in the previous year, the current business development of the MM Group in 2021 was characterized by a high level of resilience to the Corona pandemic and a high degree of continuity compared to the previous year. In addition, significant acquisition and investment decisions as well as necessary structural adjustment measures were taken. The effects of non-financial issues and the correlation of related key performance indicators (KPIs) with the annual financial statements, however, did not show any significant changes or special features, taking into account the structural adjustments. We consider the measures taken within the framework of sustainability management to be effective in terms of minimizing risks and optimizing opportunities in the Group when viewed from an overall perspective of non-financial and financial aspects. The following key figures from the value added statement confirm this view, taking into account one-off effects.

Stakeholder participation in net value added

The value added of the group is calculated based on the difference between the company's performance and the services purchased from third parties. In the statement of use, the share of all participants in the net value added is shown.

Value added

(in millions of EUR)	2021	2021	2020	2020
Origin:				
Sales	3,069.7		2,528.4	
Other operating income	84.9		19.8	
Change in finished goods and own work capitalized	1.5		(1.1)	
Financial result and result from investments	(25.1)		(9.4)	
Total operating revenue	3,131.0		2,537.7	
(-) Expenditures on purchased goods and services	(2,174.0)		(1,613.7)	
(-) Depreciation and amortization	(151.3)		(167.5)	
Net value added	805.7	100.0 %	756.5	100.0 %
Distribution:				
Employees	(320.0)	(39.7 %)	(307.1)	(40.6 %)
Social benefit costs	(147.8)	(18.3 %)	(143.4)	(19.0 %)
Public authorities	(147.2)	(18.3 %)	(143.8)	(19.0 %)
Non-controlling (minority) interests	(1.5)	(0.2 %)	(1.0)	(0.1 %)
Shareholders' Dividend (proposed for 2021)	(70.0)	(8.7 %)	(64.0)	(8.5 %)
Company	119.2	14.8 %	97.2	12.8 %

The MM Group generated a corporate output of EUR 3,131.0 million in the financial year 2021 after EUR 2,537.7 million in the previous year. After deducting intermediate inputs as well as depreciation and impairments of EUR 2,325.3 million (2020: EUR 1,781.2 million), net value added of EUR 805.7 million (2020: EUR 756.5 million) was achieved. The largest share of net value added, 39.7% or EUR 320.0 million (2020: 40.6% or EUR 307.1 million), went to our employees. A similarly high share of 36.6 % or EUR 295.0 million (2020: 38.0 % or EUR 287.2 million) was transferred to the public sector and social security. A total dividend of EUR 70.0 million or 8.7 % of net value added is to be distributed to the company's shareholders for the financial year 2021 (2020: EUR 64.0 million or 8.5 %). Profits in the amount of EUR 119.2 million or 14.8 % of net value added will be retained in the Group (2020: EUR 97.2 million or 12.8 %).

EU TAXONOMY DISCLOSURES

Achieving the goals of the EU Green Deal, such as climate neutrality in Europe, is only possible if money flows increasingly result in sustainable investments. For this purpose, the EU Commission has elaborated the Taxonomy Regulation, which will make sustainability financially measurable and comparable, leading to increased transparency regarding sustainability activities. In the year 2021, the environmental objectives "climate protection" and "adaptation to climate change" were published. Further environmental targets will follow in 2022, including in connection with the topic of the circular economy. As a listed company, the MM Group is obliged to disclose its activities in accordance with the Taxonomy Regulation.

The MM Group has reviewed the economic activities published by the EU Commission for the environmental goals "climate protection" and "sustainable development".

We have also reviewed "adaptation to climate change" with regard to the goal's relevance for our own economic activities. Due to the dynamic regulatory developments in the area of EU taxonomy, the delegated acts and the relevant annexes were used for the Group's reporting. The economic activities described therein are not in line with the substantive activities of the MM Group, as no activities are included that reflect the activities of the paper and board industry as well as the production of fiber-based packaging. Therefore, it is not possible for the MM Group to report taxonomy-compliant activities for the financial year 2021.

The EU Commission has announced the publication of further environmental targets for 2022. These include an environmental target related to the circular economy; the packaging industry and the recyclability of packaging solutions are to receive special attention therein.

In connection with the environmental goal in connection with the circular economy, the MM Group expects the economic activities contained therein to be well applicable to the core business of the company. Internal processes have already been introduced and analyses were carried out in the financial year 2021, which will allow for a taxonomy-compliant presentation as of the financial year 2022. This includes detailed life cycle analyses of products, verification of the recyclability of packaging solutions, as well as the availability, collection and evaluation of relevant data.

This should enable the MM Group to report on taxonomy capability according to the key figures of sales, capex and opex as of the financial year 2022.

COVID-19 PANDEMIC

In the reporting year 2021, the Covid-19 pandemic continued to have far-reaching effects on the MM Group's non-financial concerns and business model. The supply chain was kept intact despite continuous challenges. There were no significant immediate changes in environmental issues due to the continued operation of the plants. In addition, the limited travel activities within the Group has resulted in lower emissions. From a social point of view, the systemic relevance of cartonboard and cartonboard packaging for the supply of people with everyday goods continued to present itself as an opportunity.

In contrast, situations of high stockpiling in the supply chain and demand resulted in massive increases in input costs. Changes in working conditions resulted in particular from the maintenance of higher hygiene standards to reduce the risk of infection, the need for greater flexibility and new requirements in connection with remote work. Influences on fundamental rights or changes in susceptibility to corruption and bribery could not be identified in connection with business activities under pandemic conditions.

The objective of our pandemic management concepts is to ensure the safety of employees at all times in the best possible way and to maintain operations. With a view to maintaining the supply chain, broad-based monitoring of goods and logistics flows as well as flexible planning in and between the plants is used in close coordination with business partners. Control measures are cascaded at both the plant and divisional levels. A steering committee set up at the Group level also monitors ongoing developments and makes decisions on overarching guidelines and measures in the Group as well as on provisions at the Group's head-quarters. Hygiene management is the responsibility of the individual subsidiaries; there are general minimum standards, however.

Objective	Developments and measures 2021
Employee safety	Training and advice on hygiene measures, provision of protective equipment and testing, flexible work scheduling, enabling remote work
Maintaining operation	Ongoing monitoring involving supply chain partners, back-up concepts; in view of possible future pandemics, contingency plans will be further refined based on the status that has been significantly improved since the Covid-19 outbreak.

	2021	2020
Covid-19 cases	1,455	382
Covid-19-related deaths	0	0

MM Sustainability Management

CONCEPTS AND GOVERNANCE OF SUSTAINABILITY

Alongside quality, innovation and technology, sustainability is one of our central principles of success at MM. Efforts to achieve sustainable development are therefore firmly anchored in our corporate strategy. The MM Group's sustainability management is guided by established concepts to define, measure and further develop our performance while taking into account ecological, social and economic aspects. We focus on a science-based approach. This applies to both corporate and product sustainability.

At the corporate level, we understand sustainability as a transformation process. In terms of transformation research, the MM Group aligns its sustainability efforts with the criteria of "true business sustainability" (Business Sustainability Typology 3.0) according to Dyllick & Muff (2016)¹⁾. On the one hand, this means that sustainability is anchored within the company and, on the other hand, that the interests of external stakeholders are taken into account for the development of solutions for sustainability challenges in the areas defined by the Sustainable Development Goals (SDGs). As a member of the United Nations Global Compact, we are not only committed to the SDGs, but also support the "Agenda 2030" to promote sustainable peace and prosperity and to protect our planet.

The MM Group also acts based on scientific evidence, particularly with regard to our climate change mitigation targets. Corresponding targets for reducing the CO₂ footprint of the entire MM Group were submitted to the "Science Based Targets initiative" in 2021 and measures for implementing them were defined. For this purpose, we not only determine the direct and indirect greenhouse gas emissions of the Group, but also support the sustainability initiatives of our customers through individual life cycle assessments. Life cycle assessments at product level are carried out in accordance with the international standards of the GHG Protocol and ISO 14040 ff. Using the standards of the Global Reporting Initiative (GRI), we rely on recognized guidelines for the reporting of non-financial key figures. Within the framework of MM sustainability management, we thus meet the demand for increased transparency, international comparability and, as a result, the increasing information needs of our stakeholders to be able to assess the company in greater depth on the basis of ESG criteria (Environment, Social, Governance).

Governance structure of sustainability

As of the reporting year 2021, an independent department, "Group Sustainability", was established at Group level, which reports directly to the Management Board and ensures that sustainability management is implemented throughout the Group on behalf of and in the spirit of the Management Board. The respective local management in turn is responsible for management tasks, and every employee is required to make their contribution to the sustainable development of the MM Group. Sustainability management therefore does not take place in isolation, but is an integral part of the organization and its processes. The ultimate responsibility for non-financial matters always lies with the Management Board. The Supervisory Board fulfills its statutory auditing obligation and the disclosure of non-financial key figures is audited and validated by third parties. PwC Wirtschaftsprüfung GmbH, Vienna, has performed an independent limited assurance review of the consolidated non-financial report. The corresponding report can be found on page 143.

¹⁾ Dyllick T, Muff K. Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability. *Organization & Environment*. 2016;29(2):156-174.

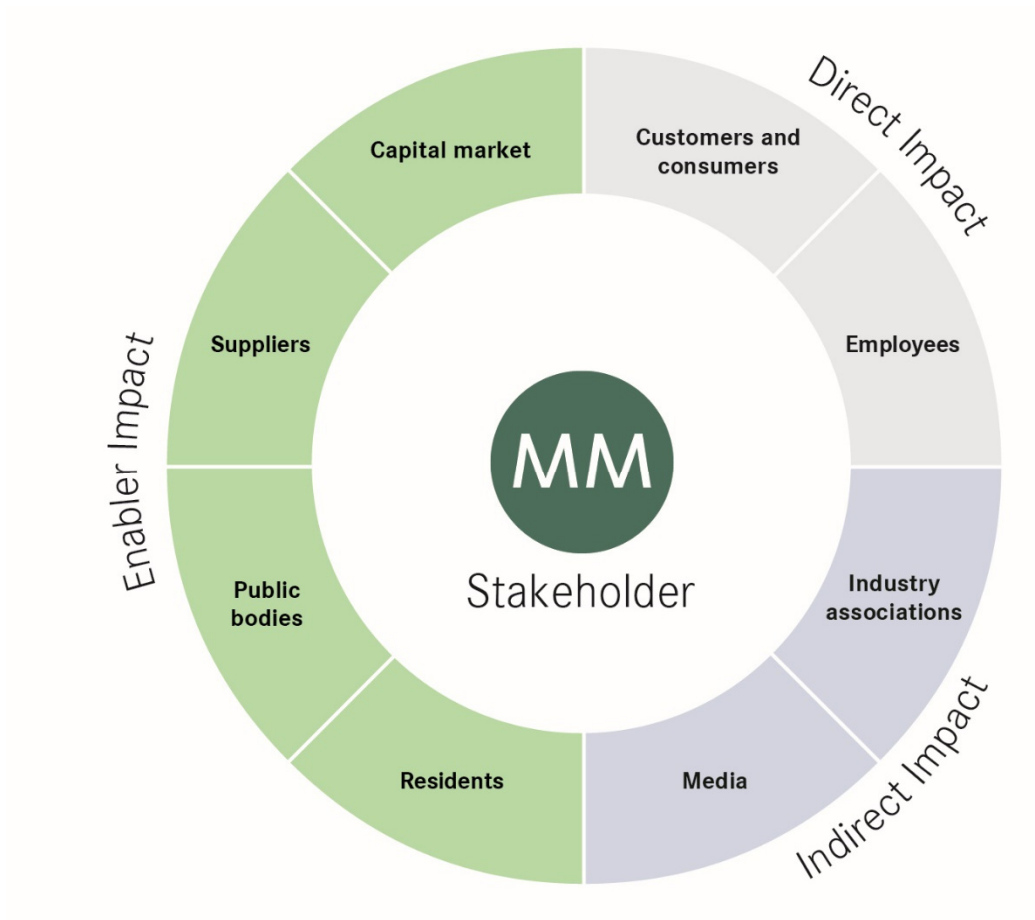
STAKEHOLDER GROUPS AND DIALOGUE

The MM Group knows its stakeholder groups and assumes long-term responsibility towards them. In the course of an analysis along the value chain, stakeholder groups were identified in previous reporting years with the involvement of internal experts from various corporate divisions. These stakeholder groups are the same as in previous years.

- Customers and consumers
- Employees
- Capital market (e.g. shareholders, analysts)
- Suppliers
- Public bodies (e.g. politicians, authorities, inspection bodies, science, NGOs)
- Residents
- Industry associations
- Media

In the reporting year 2021, however, the stakeholder groups were further classified in order to understand their influence on the MM Group even better in terms of a comprehensive sustainability strategy. The classification was based on the "Sustainability Stakeholders Framework" concept by Apte & Sheth (2017)¹⁾. Accordingly, the stakeholders of the MM Group were classified into groups with direct impact, indirect impact and enabler impact. Customers and end consumers as well as employees are stakeholders with direct impact, as the involvement of these stakeholders has a direct and significant influence on the sustainability targets and success of the MM Group. Industry associations and the media represent stakeholders with indirect influence. They are important multipliers in the public relations work for the sustainable development of the MM Group. Stakeholder groups representing the capital market, suppliers, local residents and public authorities support the MM Group's ability to achieve sustainability faster and smoother.

¹⁾ Apte, S.; Sheth, J. Developing the Sustainable Edge. Lead. Lead. 2017, 48-53.



Stakeholder dialogue

We attach great importance to an open and constructive exchange with our stakeholder groups, because it gives us the opportunity to learn more about their concerns and expectations, to identify areas in which there is room for improvement as well as opportunities and to take action accordingly. Exchanges with our stakeholders take place in various ways. We rely on digital exchange as well as direct personal contact in discussions and forums of various formats. In 2021, the MM Group organized a systematic stakeholder dialogue involving internal and external stakeholders.

The aim of this process was to identify the interests of internal and external stakeholders and to take them into account in the process of defining the key topics for the MM Group's sustainability strategy. Due to the Covid-19 pandemic, it was not possible to hold a face-to-face event. Instead, stakeholders were asked to participate in a survey and to share their opinion as to which topics pose a risk to the business activities of the MM Group in the future and to which sustainability topics MM can make a positive contribution. A total of 55 external stakeholders and 106 internal stakeholders took part in the survey.

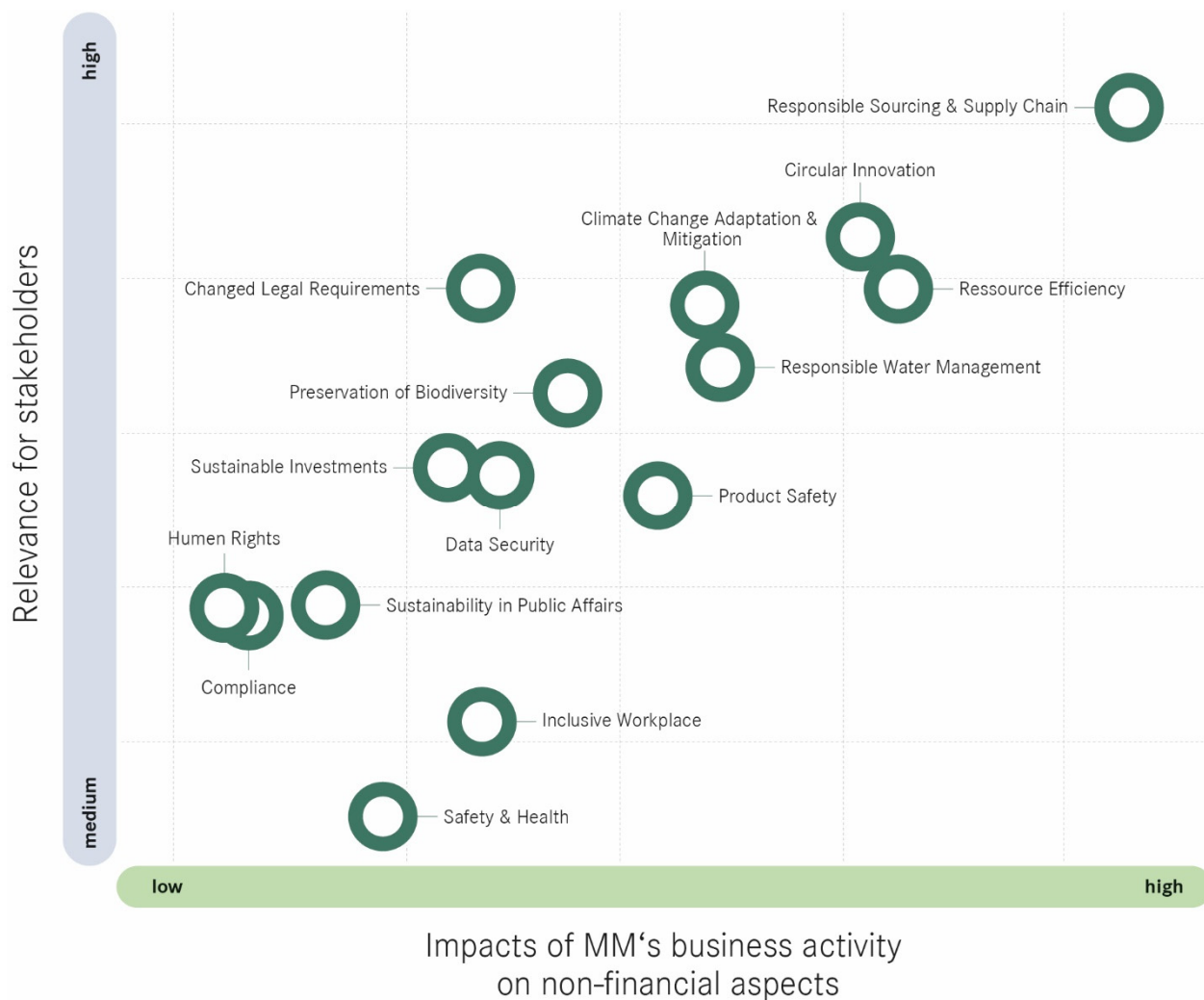
MATERIAL TOPICS OF SUSTAINABILITY

In order to determine the most important issues, relevant aspects from the areas of environment, social affairs and economy (ESG) were first identified and subjected to an internal and external classification. This was done according to the principle of double materiality. Both potential risks for the company ("outside-in") and the influence of the MM Group on the sustainability issues mentioned ("inside-out") were assessed. The analysis of relevant aspects is based on industry trends, legislative developments (e.g. EU Green Deal) and physical risks. In addition, industry associations as well as internal and external experts were involved in the process of identifying relevant topics.

Based on this initial analysis, a questionnaire was developed and further internal and external stakeholders were involved. The selection of the specific stakeholders was based on the claim to consider all groups and, in the sense of the stakeholder analysis, to consider all influencing variables ("direct impact", "indirect impact" and "enabler impact"). Employees were invited to complete the questionnaire via the MM Group intranet (should not allow any conclusions to be drawn about the internal response rate). External stakeholders were contacted via e-mail.

In the course of the evaluation of the questionnaire, certain priorities were identified. To ensure that the identified key issues are in line with global sustainability initiatives such as the "Agenda 2030", these key issues were subjected to further analysis. This ensures the conformity of our central topics with the contents of the Sustainable Development Goals (SDGs). The material topics of the MM Group are listed in the matrix below.

Compared to the previous reporting years, the evaluation of the identified central topics in 2021 shows an increased importance of environmental concerns. The greatest importance is attached to innovations to promote the circular economy and increased integration of the supply chain. Climate change mitigation, resource efficiency, biodiversity conservation and responsible water management are also of high relevance. The inclusion of sustainability agendas in investments is of great importance for the business activities of the MM Group, not least due to legal requirements such as the EU taxonomy.



Social issues such as occupational health and safety, attractive working conditions and human rights have partly become less important compared to previous years, but nevertheless continue to be essential aspects of the MM Group's business activities to ensure a comprehensive sustainability management. The fact that these aspects may have become less important may be in part attributed to the fact that the Group has already established high standards, resulting in only minimal risks. As an internationally active group, MM pursues the goal of promoting social sustainability within and outside the company. Public relations work on sustainability issues is prioritized in all areas of non-financial aspects. It is also relevant for the company to comply with new legal framework conditions, to fulfill compliance requirements and to always ensure data and product security, as these topics are of great importance for the company, especially from a risk perspective.

The material topics presented serve as the basis for the MM Group's sustainability strategy and have therefore been categorized for further elaboration and summarized with regard to double materiality in the following table. In addition, the table provides information on the allocation to the respective GRI standards.

Material topic	Impact by and on MM (double materiality)	Non-financial matters	GRI topic
Climate change mitigation and adaptation	Industrial cartonboard and paper production is associated with significant energy consumption and emissions. MM takes responsibility by reducing specific energy consumption and related emissions as well as optimizing energy production and the choice of energy sources. Climate change entails physical as well as transitory risks that can have a negative impact on production processes (e.g. disruption of production processes due to flooding).	Environmental matters	302 Energy; 305 Emissions
Resource efficiency and biodiversity conservation	MM assumes responsibility for the responsible use of resources by minimizing the specific use of raw materials and improving recyclability. When it comes to waste reduction, the priorities are clear from both an ecological and an economic point of view: avoiding waste before recycling and disposal. This also promotes the preservation of biodiversity. The availability of natural wood-based raw materials is a prerequisite for the company's activities. Biodiversity losses can negatively affect the availability of wood as a resource in the medium and long term.	Environmental matters	301 Materials; 306 Waste
Responsible water management	Water is an essential resource in the paper and board production process. MM takes this into account by controlling water consumption and use. The potential risk of water pollution and scarcity can thus be prevented. The availability of water is essential for cartonboard production. Droughts and associated water shortage can thus result in an impairment of production processes.	Environmental matters	303 Water and Effluents
Employee health and safety	Measures to ensure safety at work and health protection contribute to maintaining the health and a sustainable performance of our employees.	Employee matters	403 Occupational Health and Safety
Attractive and inclusive working conditions	An attractive working environment that promotes identification and satisfaction among employees has always been important to us. All employees of the MM Group are encouraged to fulfil their professional tasks in the best possible way and to develop both their professional and personal skills. Attractive working conditions help to retain qualified employees and prevent a shortage of skilled workers.	Employee matters	102 General Disclosure; 404 Training and Education
Respect for human rights	MM pays attention to ensuring socially acceptable working conditions in accordance with the core labor standards of the International Labour Organisation (ILO) and the principles of the UN Global Compact. We also pay attention to the protection of human rights in the cooperation with our partners.	Employee matters; respect for human rights	408 Child Labor; 409 Forced or Compulsory Labor

Changed legal framework, compliance, and data security	MM pursues consistent compliance with laws, guidelines and requirements. MM systematically prevents corruption, bribery and anti-competitive behavior. Data protection and information security are ensured through guidelines and training.	Social matters; fight against corruption and bribery	205 Anti-Corruption; 206 Anti-Competitive Behavior; 419 Socioeconomic Compliance
Innovations to promote the circular economy and product safety	Product and process innovations contribute to greater sustainability for both the company and society - in economic, ecological and social terms. We place our focus on promoting circular economy approaches and plastic substitution as well as ensuring product safety.	Environmental and social matters	416 Customer Health and Safety
Responsible sourcing & supply chain, sustainable investments and public affairs	Cooperation with partners along the entire value chain and a public commitment to the sustainable development of the MM Group are crucial for the company's success in the long term. For this purpose, an evaluation of the supply chain and investment projects based on non-financial criteria is particularly useful.	Environmental and social matters	102 General Disclosure

MM SUSTAINABILITY STRATEGY

Based on the results of the materiality analysis, an adapted sustainability strategy was defined for the entire Group in 2021. Along the lines of the United Nations' "Agenda 2030", the main topics and the respective objectives of the MM sustainability strategy were assigned to the categories "Planet", "People" and "Prosperity".

The category "Planet" includes all aspects of environmental sustainability and focuses on climate protection initiatives, the use of renewable raw materials and the responsible use of water resources. In this way, we want to contribute to the preservation of the natural habitat for our own and future generations. In connection with the category of "People", we as the MM Group fulfil our social responsibility towards all people in the context of our business activities, but especially towards our employees.

We place a particular focus on the safety of all workers, attractive working conditions and development opportunities as well as the protection of human rights. In the "Prosperity" category, we pursue the goal of implementing economic and technical progress in harmony with society and nature. We consider adherence to laws and behavior in line with compliance requirement to be just as much our duty as the promotion of the circular economy by means of innovations and the integration of the entire value chain to achieve a systemic change towards sustainable development.



MM Sustainability Program

Based on the strategic categories "Planet", "People" and "Prosperity", the MM Group has developed a sustainability program that takes into account the United Nations' Sustainable Development Goals (SDGs) and has defined specific targets for the MM Group. The following tables show the central points of the sustainability program, also listing specific objectives for the MM Group.

PLANET

Sustainability program	Material topics	SDGs	MM objectives
Decarbonization	Climate change mitigation and adaptation	13 Climate Action (13.1) 7 Affordable and Clean Energy (7.2; 7.3)	<ul style="list-style-type: none"> • Reduce absolute greenhouse gas emissions for Scope 1, 2 and 3 by 50.4 % by 2031 (base year 2019)¹⁾ • Increase the annual share of electricity from renewable energy sources from 15.61 % in 2019 to 40 % by 2031¹⁾ • Reduce Scope 3 greenhouse gas emissions by 58.1 % per unit of value added by 2031 (base year 2019)¹⁾
Resources	Resource efficiency and biodiversity conservation	12 Responsible Consumption and Production (12.2; 12.4; 12.5; 12.6) 15 Life on Land (15.1; 15.2; 15.5; 15.9)	<ul style="list-style-type: none"> • 99 % recovery of process residues (recycling/reuse/incineration with energy recovery) by 2030 • Reduce the intensity of waste landfilling by 75 % by 2030 (base year 2019) • 100 % of wood-based raw materials come from responsible sources by 2030 • 40 % less process waste per saleable ton by 2030 (base year 2019) • MM has a comprehensive understanding of its impact on and the risks it causes in relation to biodiversity by 2022
Water²⁾	Responsible water management	12 Responsible Consumption and Production (12.2) 6 Clean Water and Sanitation (6.3; 6.4; 6.5)	<ul style="list-style-type: none"> • Efficiency increase in water consumption by 30 % by 2030 (base year 2019) • Efficiency increase in the use of process water (total water consumption excluding cooling water) by 30 % per saleable ton by 2030 (base year 2019) • All production sites of the division MM Board & Paper will be certified by third parties by 2030 • MM has a comprehensive understanding of its impact on and the risks it causes in relation to water use by 2022

¹⁾ Climate targets were defined according to the "Science Based Targets initiative" and submitted accordingly in 2021.

²⁾ Water targets apply exclusively to the division MM Board & Paper.

PEOPLE

Sustainability program	Material topics	SDGs	MM objectives
Working environment	Attractive and inclusive working conditions	4 Quality Education (4.7) 8 Decent Work and Economic Growth (8.5)	<ul style="list-style-type: none"> MM Group as an attractive employer and workplace Promote professional and personal qualification MM as "Employer of Choice"
Human rights	Respect for human rights	8 Decent Work and Economic Growth (8.5)	<ul style="list-style-type: none"> Ensure compliance with human rights within the MM Group Assessment of the human rights performance of 100 % of the MM Group's "key suppliers" by 2023¹⁾
Health and safety	Employee health and safety	8 Decent Work and Economic Growth (8.8)	<ul style="list-style-type: none"> Promote accident prevention through mandatory reporting of near misses adjusted to the accident rate at all locations Reduce the number of occupational accidents resulting in downtime at all sites Internal on-site safety assessments, 30 % of all production sites per year External safety audits and re-certifications, 30 % of all production sites per year

¹⁾ The "key suppliers" are identified based on the scope/type of business activity and influence (turnover).

PROSPERITY

Sustainability program	Material topics	SDGs	MM objectives
Responsible management	Legal framework, compliance, data protection and information security	8 Decent Work and Economic Growth (8.7)	<ul style="list-style-type: none"> Demand and promote behavior in line with compliance requirements within and outside the MM Group Continue to promote internal training on competition law, data protection and information security
Innovation and quality	Innovations to promote circular economy and product safety	9 Industry, Innovation and Infrastructure (9.4)	<ul style="list-style-type: none"> Promote product and process innovations to optimize product end-of-life Improve the use of natural raw materials and support further substitution of plastics across the MM product range
Value chain	Responsible sourcing & supply chain, Sustainable investment and public relations	12 Responsible Consumption and Production (12.2)	<ul style="list-style-type: none"> Interaction with 90 % of the "key suppliers" based on sustainability objectives of the MM Group until 2025¹⁾ Assessment of the sustainability performance of 90 % of the MM Group's "key suppliers" by 2023¹⁾ Promote cooperation for circular innovations along the entire value chain

¹⁾ The "key suppliers" are identified based on the scope/type of business activity and influence (turnover).

Planet

Focus on MM Sustainability Topics



In terms of ecological sustainability, we as the MM Group define targets and measures to preserve the natural habitat for our own and future generations. Climate action initiatives, the use of renewable raw materials and the responsible use of water resources rank among our top priorities.



1 DECARBONIZATION

The framework for our energy management and decarbonization efforts includes the European Green Deal, which aims to achieve climate neutrality for the EU by 2050. All greenhouse gas emissions should preferably be avoided altogether, but, if they cannot be avoided, they should at least be reduced. Natural sinks (including forests) should be preserved or even expanded, and technologies to remove greenhouse gases should be developed and implemented cost-effectively. Significant environmental impacts resulting from the MM Group's business activities are mainly due to the consumption of high amounts of energy for cartonboard and paper production and the emissions associated therewith. In comparison, the energy demand of the Packaging Division is significantly lower.

MM Board & Paper's mills mainly use natural gas as a primary source of energy. The mills have their own power plants in which steam for cartonboard production is generated from natural gas as needed and electricity is generated from high-pressure steam via a turbine. The mills MM Kotkamills and MM Kwidzyn, which were acquired in the reporting year, have contributed to an increase in the amount of energy use and have added hard coal (only MM Kwidzyn) to the Group's energy mix. In addition, electricity is purchased from utility companies. Other fossil energy sources in the individual plants include heating oil, diesel and liquid gas. MM Board & Paper's production is increasingly fueled by energy from renewable sources such as biomass, biogas and hydropower. The mills MM Kwidzyn and MM Kotkamills use black liquor, which is an energy-rich by-product of cartonboard and paper production, as another energy source to generate electricity and process heat.

1.1 Impacts, risks and opportunities

Exhaust air emissions are generated in the course of cartonboard and paper production, in particular in the course of energy generation through the combustion of natural gas and hard coal (MM Kwidzyn). Emissions in the form of CO₂, NO_x and CO are continuously monitored and all legal requirements are complied with. In contrast, the direct exhaust air from the board and paper machines consists mainly of water vapor. MM Board & Paper continuously implements new measures to further reduce exhaust air emissions in accordance with the state of the art. Energy consumption at MM Packaging is much lower than at MM Board & Paper and accounts for less than 5 % of Group-wide energy consumption. Nevertheless, programs to increase energy efficiency are also being devised in the Packaging Division, especially for machinery and lighting. Waste heat from machinery is used to preheat premises in some plants, for example.

The use of energy is of economic importance for both divisions in the MM Group with regard to the purchase price, the basic availability and purchase possibilities. On the other hand, the effects of climate change must be taken into account as physical and transitory risks for the business activities of the MM Group. Physical risks (e.g. floods, forest fires, storm damage, drought) can result in direct production losses or delivery bottlenecks.

Transitory risks (e.g. emission certificates, changing market requirements and consumer behavior) are to be regarded primarily as a compliance issue and, although they do not result in short-term production losses, can result in declining sales figures and increased penalties, taxes (CO₂ tax) and fees in the event of violations. On the other hand, the reduction of greenhouse gases offers opportunities in connection with cost savings, the reduction of environmental damage and additional sales opportunities.

With regard to emissions, there is also a regulatory risk concerning the availability of emission certificates. The EU Emissions Trading Scheme (EU ETS) is the central European climate action instrument for reducing greenhouse gas emissions in the EU and a few non-EU countries, including Norway. It covers the energy industry as well as selected energy-intensive industrial sectors, such as the paper and cartonboard industry, and thus also MM's six cartonboard and paper mills within the EU as well as the FollaCell fiber mill in Norway. For the financial years 2021 to and including 2025, a certain quantity of CO₂ certificates will be allocated free of charge. The respective quantity will be based on technical criteria and criteria set by EU authorities.

1.2 Management concepts and due diligence processes

The MM Group attaches great importance to a responsible management of energy consumption and related emissions. In order to secure the environmental standards achieved so far, to meet new requirements and to review the effectiveness of the environmental management system, internal and external audits (especially in connection with certifications/re-certifications) as well as a management evaluation by means of management reviews are carried out. Energy management aims to sustainably reduce the energy consumption of our plants, increase efficiency and continue to increase the share of energy coming from renewable sources.

In the areas of energy and environmental management, there are certifications according to ISO 50001, EMAS and ISO 14001. Although the provisions of the ISO 50001 certification are increasingly applied to the plants of the more energy-intensive division MM Board & Paper, we also try to ensure a comprehensive energy management for our sites in the Packaging Division. Currently, four production sites of MM Board & Paper, including the FollaCell fiber plant, and seven packaging sites are certified according to this standard.

The Frohnleiten cartonboard mill has been voluntarily participating in the EC Eco-Audit Regulation ever since 1996. The "Eco-Management and Audit Scheme" (EMAS) is a community system for environmental management and environmental auditing. The fact that the MM Group participates in this scheme supports its information policy, presenting the corporate culture characterized by responsible action. Together with the ISO 14001 certification, EMAS forms the basis for the continuously ensuring an integrated environmental management system at MM. Today, the Frohnleiten sites and the FollaCell fiber plant are certified according to ISO 14001, Frohnleiten is additionally certified according to EMAS. Those cartonboard and paper mills that are not directly certified have internal environmental protection systems to achieve continuous improvement and use the synergies of the certified sites. In the Packaging Division, 24 sites are certified according to ISO 14001 and/or EMAS.

To further optimize energy management and reduce greenhouse gas emissions, the MM Group is committed to implementing science-based climate targets. The guidelines of the "Science Based Targets Initiative" serve as a basis for our climate strategy. With the help of "Science Based Targets", we are developing the MM Group's climate targets and measures in line with the Paris Climate Agreement in order to actively contribute to limiting global warming to below 1.5°C by 2050.

The organizations CDP, UN Global Compact, World Resources Institute and WWF have jointly launched the "Science Based Targets initiative" to support companies in calculating their fair share in climate protection. In the reporting year 2021, the MM Group calculated targets for the reduction of greenhouse gases until 2050 and submitted them accordingly to the Science Based Targets Initiative. Our targets were reviewed and confirmed by "Science Based Targets".

1.3 Measures and development

In the reporting year, we accelerated the establishment of a basis for decarbonization by calculating science-based climate targets for the MM Group. The definition of targets and measures was based on the "Science Based Targets initiative" and includes the determination of direct and indirect emissions (Scope 1, 2 and 3) according to the GHG Protocol. This means that we take into account those emissions that arise from the use of energy sources in the course of production (Scope 1), the purchase of electricity, steam as well as heating and cooling energy (Scope 2). All other emissions that are also caused by the company's activities but are beyond its control are also determined for purchased goods and services, fuel and energy-related activities, waste and transport of employees (Scope 3).

Objectives

- Reduce absolute greenhouse gas emissions for Scope 1, 2 and 3 by 50.4 % by 2031 (base year 2019)
- Increase the annual share of electricity from renewable energy sources to 40 % by 2031 (base year 2019)
- Reduce Scope 3 greenhouse gas emissions by 58.1 % per unit of value added by 2031 (base year 2019)

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 13.1, 7.2 and 7.3.

	MM Board & Paper ¹⁾	MM Packaging
ISO 14001 or EMAS certified production sites	4 of 7	24 of 43
ISO 50001-certified production sites	4 of 7	6 of 43
Energy consumption - total	10.5 TWh	0.4 TWh
Share of renewable sources - total	28 %	6 %
Specific energy consumption ²⁾	4 MWh/t	0.4 MWh/t
Fuel consumption	9.25 TWh	0.16 TWh
Share of renewable sources (mainly black liquor, biomass and biogas)	45%	5 %
Power consumption	0.9 TWh	0.23 TWh
Share of renewable sources	11 %	1 %
Purchased steam or heating and cooling energy	-	0.02 TWh
Share of renewable sources	-	12 %
Energy sold	3.11 TWh	-
Direct CO ₂ emissions (Scope 1) ³⁾	1.26 million t CO ₂ e	0.03 million t CO ₂ e
Specific direct CO ₂ emissions ²⁾	0.45 t CO ₂ e/t	0.03 t CO ₂ e/t
Indirect CO ₂ emissions (Scope 2, location-based) ⁴⁾	0.46 million t CO ₂ e	0.1 million t CO ₂ e
Indirect CO ₂ emissions (Scope 2, market-based) ⁴⁾	0.56 million t CO ₂ e	0.07 million t CO ₂ e
Indirect CO ₂ emissions (Scope 3) ^{1) 5)}	1.45 million t CO ₂ e	0.75 million t CO ₂ e

¹⁾ including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites at Eerbeek and Bayersbronn

²⁾ on the basis of net production or processed tonnage

³⁾ Emission factors used according to GHG Protocol

⁴⁾ Emission factors used according to the life cycle assessment databases GaBi and the respective emission factors of the electricity suppliers.

⁵⁾ Emission factors used according to the life cycle assessment database GaBi and Ecolnvent

2 RAW MATERIALS

Both divisions of the MM Group predominantly use fibers made of wood or their recyclates and thus mainly renewable raw materials. Non-renewable raw materials play a subordinate role. This is also reflected in the quantities consumed, which are shown on page 115. While MM Board & Paper relies on the use of virgin and recycled fibers in the cartonboard and paper mills in a ratio of approximately 60 to 40, the use of printing materials (cartonboard and paper) made of virgin and recycled fibers is balanced at MM Packaging. In addition to fibers, chemicals (mainly inorganic pigments, binders, starch and sizing agents) and packaging materials are essential materials in the production and marketing of cartonboard and paper. MM Packaging's products focus on cartonboard, papers, printing inks, varnishes, glues and finishing materials such as films as well as packaging materials as the main materials used. The efficient use of resources, waste avoidance in the course of production as well as a positive contribution to the long-term preservation of natural habitats and biodiversity rank among our top priorities. In this context, we attach particular importance to the fact that independent bodies monitor our raw material procurement and that the company's operations comply with international environmental standards.

2.1 Impacts, risks and opportunities

The raw materials used by MM, i.e. virgin and recycled fibers, is sufficiently available due to the geographical location of our cartonboard and paper production sites. All sites of the MM Board & Paper division are located in Europe as are the forests from which we obtain virgin wood fibers. Within the European Union, forest areas cover over 182 million hectares - this corresponds to around 42 % of the total land area of the EU (source: Eurostat, 2018). Around 60 million tons of waste paper are collected and recycled in Europe every year (source: Austropapier, 2019). MM Board & Paper processes around 1.2 million tons of recycled fibers. Risks arise from interruptions or slowdowns in the logistics chain and in connection with the collection volume and the price development of recovered paper. Stock preparation, i.e. the separation of individual fibers before they are applied to the board machine, is possible for recycled fibers in a highly energy efficient way. In addition to the factor of saving energy, the ecological advantage of using recovered paper lies in the conservation and preservation of natural resources. Opportunities for increasing fiber recovery (fiber efficiency) arise in particular thanks to technological progress.

Further risks in the raw materials area arise in particular in connection with the supply chain and the use of chemicals. Chemical leakage during production is a possible scenario for both divisions. This risk is minimized by complying with the relevant legal requirements and implementing specified safety measures, such as equipping chemical storage facilities with drip pans, training the workforce and establishing a detailed incident management system. The purchasing categories essentially correspond to the above-mentioned materials, which are predominantly sourced from European suppliers via a sustainable supply chain. The potential risk of interventions in local communities and ecosystems, e.g. through illegal logging, is counteracted by means of chain-of-custody certification according to FSC® standards as well as PEFC™ criteria. Opportunities lie in particular in the increasing awareness of end customers and the associated positive effects on the demand for fiber-based packaging.

2.2 Management concepts and due diligence processes

The objective for the MM Group is to ensure a continuous supply of raw materials, minimizing and ensuring environmental protection in connection with material consumption as well as achieving the highest possible recyclability of products. Recycled paper is subject to strict quality requirements. The different grades are precisely defined by the EN 643 standard. Our procurement organization is geared towards ensuring both optimal origin and quality control as well as the highest possible security of supply. Therefore, we pay particular attention to using only responsible sources of supply for virgin fibers in our cartonboard and paper production. In this way, we ensure that 100 % of the virgin fibers used come from certified and/or controlled sources.

The cartonboard and paper mills are constantly working on projects to optimize fiber use. Technological innovations to improve machines aim, among other things, at achieving a higher effectiveness in fiber utilization or a reduction in fiber use. Continuous monitoring ensures optimal use during operation. All chemicals used in our cartonboard and paper production comply with the 36th recommendation (papers, cartonboard and paperboard for food contact) of the Federal Institute for Risk Assessment (Federal Ministry of Food and Agriculture – Federal Republic of Germany) – BfR XXXVI and meet the requirements of the REACH regulation. Our chemical management has the objective of minimizing harmful effects on humans and the environment caused by the handling and storage of chemicals.

MM Packaging uses only low-migration inks and varnishes for food packaging that comply with all relevant legal requirements. In Europe, for example, these are EU regulations Nos. 1935/2004 and 2023/2006. The inks and varnishes are also manufactured in accordance with the EuPIA guideline for printing inks. We consider it important to implement these high European standards at all locations of the Group. "Food-contact" inks or mineral oil-free inks are used also used for other packaging in accordance with the EuPIA recommendation, as they are more environmentally friendly in the recycling cycle and beyond. With regard to the types of glue used, we have high demands when it comes to processability, adhesive seam strength and food safety for food packaging, and we continuously strive to optimize the glues we use. We use only adhesives and glues that comply with EU regulations Nos. 1935/2004 and 2023/2006 and are manufactured in accordance with the FEICA recommendation.

The MM Group follows a chain of custody standard (CoC) in order to comply with the principle of responsible use of resources and of proven sustainable raw materials in its production while preserving natural habitats and biodiversity. This is mainly achieved through management systems and certifications that have been specifically designed for this purpose – these include certifications according to FSC® and according to PEFC™. By certifying all MM cartonboard and paper mills according to FSC® standards (license FSC-C003336, license FSC-C005528, license FSC-C007894) and PEFC™ criteria, we prove that all virgin fibers used in our cartonboard and paper production come from responsibly managed forests and/or controlled sources. This is regularly verified by independent third parties.

In terms of the circular economy, the MM Group's waste management focuses on the concept of "avoiding waste before recycling before disposal". Waste management is implemented at the sites by the respective waste management officer. Disposal itself is carried out by authorized waste collectors, recyclers and disposers in accordance with the relevant legal requirements depending on the type of waste.

We meet our objective of combining economic advantage and ecological benefit in particular through continuously trying to minimize waste and implementing recycling. In terms of volume, the largest share of waste at MM Board & Paper in the recycling cartonboard mills consists of residues from recovered paper processing, the so-called rejects. Sewage sludge and commercial waste similar to household waste are either thermally recycled within the mill or handed over to authorized disposal companies. During pulp preparation, black liquor is produced as an energy-rich by-product that is recycled and used as an energy source to generate electricity and process heat.

Hazardous waste, such as used oil, chemicals, contaminated liquids, waste water contaminated by chemicals, workshop waste and batteries, is handed over to licensed disposal companies which dispose of the waste in accordance with legal regulations.

At MM Packaging, by far the largest share of waste in the production of folding carton also consists of non-hazardous materials that are fed into the recycling loop. The most significant waste category in terms of volume is cartonboard residues from the die-cutting process. A large share of these residues is recycled within the MM Group and by other companies and processed into new cartonboard. Solvent residues, ink and varnish residues, used oils as well as fountain solution and dirty water from printing machines are classified as hazardous waste, which only accounts for a small fraction of the total waste volume and is handed over to authorized waste disposal companies in accordance with legal requirements.

2.3 Measures and development

With regard to the use of raw materials, the focus continued to be placed on a comprehensive examination of the topic of plastic reduction and substitution with regard to the market and technology as well as with the close involvement of customers and experts. Increasing the use of fibers from responsible sources ranks among the top priorities of both divisions. The identification of synergy effects both between the existing plants and the newly acquired sites of MM Board & Paper as well as between the two divisions is an important goal.

In addition, we are continuously working on optimizing chemical consumption through process adjustments, such as the installation of measuring devices as part of the bleaching process. We implemented a large number of projects to reduce waste in the area of printing materials (cartonboard and paper) through process optimization and improvements in fiber recovery. With regard to waste management, our priorities were optimizing separate collection and minimizing hazardous waste (e.g. solvent and ink residues) through avoidance or substitution.

Objectives

- 99 % recovery of process residues (recycling/reuse/incineration with energy recovery) by 2030
- Reduce the intensity of waste landfilling by 75 % by 2030 (base year 2019).
- 100% of wood-based raw materials come from responsible sources by 2030
- 40 % less process waste per saleable ton by 2030 (base year 2019)
- By 2022, MM has a comprehensive understanding of biodiversity impacts and risks.

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 8.7.

	MM Board & Paper ¹⁾	MM Packaging
Renewable raw materials²⁾	2.8 million t	0.8 million t
Fiber input/cartonboard and paper input	2.8 million t	0.7 million t
Recycled fibers/cartonboard ³⁾	1.2 million t	0.4 million t
Virgin fibers ⁴⁾ /virgin fiber cartonboard	1.6 million t	0.3 million t
Share of renewable raw materials	79 %	97 %
Non-renewable raw materials	0.9 million t	0.03 million t
Virgin fiber use from responsible sources		
- of which from FSC-certified ⁵⁾ sources	59 %	19 %
- of which from PEFC-certified TM sources	33 %	16 %
- of which from controlled sources ⁵⁾	8 %	-
FSC-certified [®] production sites	7 of 7	36 of 43
PEFC-certified TM production sites	7 of 7	31 of 43
Waste		
Non-hazardous waste	0.38 million t	0.15 million t
Hazardous waste	0.40 thousand t	4.73 thousand t

¹⁾ including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites at Eerbeek and Baiersbronn.

²⁾ including packaging materials

³⁾ exclusive reject

⁴⁾ groundwood equivalent

⁵⁾ including FSC[®] Controlled Wood

3 WATER

Water is one of the most important resources of our planet – both for humans and for ecosystems and species. Water should be understood as a local resource, as its availability depends on local conditions. With regard to water as a resource, it is therefore important to take into account the existing sources, the quality of the local water reserves and the different users in the catchment area. Responsible water management is a high priority within the MM Group, as water is an essential resource, especially in the production of cartonboard and paper. In contrast, hardly any water is needed in the processing of cartonboard and paper. Therefore, significantly higher amounts of water effluents are generated in the division MM Board & Paper compared to the division MM Packaging.

3.1 Impacts, risks and opportunities

Water is used in large quantities during the entire production process in cartonboard and paper manufacturing – from the pulping of recycled paper and the preparation of virgin fibers to its use as a coolant and for the production of steam in energy generation. Water use and water consumption must be clearly distinguished. Some water is only used temporarily in production (e.g. as cooling water), then treated and returned. The risk of water shortage due to production is therefore low. Only a relatively small proportion of the water used is not recycled, but remains either as residual moisture in the product or evaporates.

In addition to efficient water consumption, the recycled water must meet the highest criteria in terms of water quality, temperature and quantity, so that there is no harmful impact on biodiversity. In this context, water samples are analyzed to compare the pollutant content of the discharged water with that of the recycled water. Since water is needed in large quantities for cartonboard and paper production, regional risks and developments must also be taken into account. Not only water scarcity, but also water overflow, in connection with flood risks, must be taken into account. As most of the mills of the division MM Board & Paper are located directly on watercourses, we consider the entire water catchment area in which the respective mill is located.

3.2 Management concepts and due diligence processes

In the year under review, a process was started at MM with the aim of using water as a resource even more efficiently in the future and further reducing the negative impact on water systems as well as risks associated with water. In order to implement responsible water management even more comprehensively within the MM Group in the future, a strategy process was initiated, which is oriented towards the standard of the "Alliance for Water Stewardship" as well as the "Water Mandate" of the UN Global Compact. This consists of four pillars: "Assessment", "Strategy", "Act" and "Monitoring".

The MM Group will carry out extensive assessments, especially for the mills of the Board & Paper division, in order to analyze the impact of MM on water systems as well as risks regarding the availability of water. A water catchment analysis was already carried out for the MM Board & Paper sites in 2021 using external programs such as AWaRe, ENCORE and the WWF Risk Assessment Tool. This identified mill-specific risks, such as the risk of flooding or water scarcity. This assessment process will be continued in 2022 at the factory level as well as at the product level.

Within the framework of the strategy, targets have been defined that are to be achieved by reducing water use through continuous optimisation of production processes and products. Specific water consumption is measured on an ongoing basis and kept very low or further reduced through closed-loop systems and efficiency improvements.

At MM Board & Paper we follow the concept of using the extracted groundwater or surface water several times, first as cooling water and then in several stages as process water. Excess water is first mechanically cleaned and then treated in a multi-stage biological wastewater treatment system before being discharged again - there is no overuse or pollution. Water used several times in the production process is cleaned and treated in state-of-the-art wastewater treatment plants before leaving the mills. The ongoing collection and evaluation of wastewater values is carried out by specially trained, in-house staff as well as regular external examinations. Compliance with the relevant legal requirements is checked by the competent national and regional authorities. Modernizations and expansions of wastewater treatment plants are regularly implemented with a view to the future. Certifications in the area of environmental management can be found on page 111.

3.3 Measures and development

In the year under review, we laid another foundation stone for optimizing water management – on the one hand, by defining a strategic process for the comprehensive evaluation of the impacts and risks of water use and, on the other hand, through analyses of wastewater. In connection with this strategic approach, we have set quantitative and qualitative targets and subsequently define measures to achieve them. External standards and tools serve as a basis for evaluating water management. Third-party certification in connection with water as a resource will also be sought for subsequent years.

Objectives

- Efficiency increase in water consumption by 30 % by 2030 (base year 2019)
- Efficiency increase in the use of process water (total water consumption without cooling water) by 30 % per saleable ton by 2030 (base year 2019)
- All production sites of the Board & Paper division are certified by third parties until 2030.
- MM has a comprehensive insight into the impacts and risks related to water use until 2022.

Note: Targets on "Water" apply exclusively to the division MM Board & Paper.

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 12.2, 6.3, 6.4 and 6.5.

	MM Board & Paper ¹⁾	MM Packaging
Water consumption	69.74 million m ³	0.74 million m ³
Surface water	62.96 million m ³	0.01 million m ³
Groundwater	6.57 million m ³	0.27 million m ³
Water from third parties	0.21 million m ³	0.46 million m ³

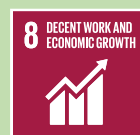
¹⁾ Including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites at Eerbeek and Baiersbronn.

People

Focus on MM Sustainability Topics



As MM Group, we assume social responsibility towards all people in the context of our corporate activities, but especially towards our employees. We particularly focus on the safety of all employees, attractive working conditions and opportunities for personal and professional development, as well as the protection of human rights.



4 WORKING ENVIRONMENT

Our employees are crucial for the sustainable success of the MM Group. Ensuring attractive, inclusive working conditions and development opportunities is therefore of great importance. At the end of 2021, the MM Group had 12,492 employees in 28 countries. This is an increase of 2,554 people compared to 2020, which is mainly due to the acquisitions of Kotkamills and the Kwidzyn plant. After the transactions had been closed, the integration process started in August 2021. Various organizational and process changes were initiated and some of them have already been implemented so that the employees of the acquired plants can be quickly integrated and the entire organization meets the new requirements.

4.1 Impacts, risks and opportunities

Ensuring a high level of attractiveness as an employer in terms of professional and personal development is at the heart of our human resources development concept. Employees at all levels can develop their skills in the long term and take on increasingly responsible tasks as they enhance their skills. The MM Group promotes the development of professional and personal qualifications through training and development programs as well as challenging professional tasks. We actively support promotion opportunities and international assignments within the Group in order to retain know-how and talent within the Group in the long term.

We pay great attention to ensuring that people enjoy working at MM and that the Group has a sustainable supply of qualified specialists and managers. The aim is to control the risk of sufficient availability of qualified workers and to keep our chances high in the competition for skilled workers. The latter is supported by targeted employer branding. We counter risks from fluctuation and the outflow of know-how through sustainable employee retention via attractive development opportunities and cooperation in a climate of mutual appreciation.

4.2 Management concepts and due diligence processes

The central function "Group Human Resources" manages the human capital in the Group with a focus on employee development, training and further education as well as recruiting for key positions. The individual measures are continuously evaluated and adapted to current requirements in terms of content, methods and technology (e.g. digitalization). MM has established numerous programs that systematically lead employees through their professional life in the MM Group. All our programs specifically focus on confronting participants with challenging tasks and content as well as helping them to make an active contribution to the company.

MM-Academy

The "MM-Academy" is the central training and further education platform for employees at all levels in the MM Group. Key points include teaching participants specialist knowledge and foreign languages as well as further developing social and leadership skills. In our "Leadership Program", we familiarize employees in management functions with the latest leadership tools and promote their orientation towards our corporate values: performance, responsibility and passion in a transnational exchange.

In the "MM-Academy", employees are trained in both face-to-face and online training courses; due to the Covid-19 pandemic, we only held online courses in 2021. In addition, our e-learning offer was further expanded. In addition to the Group-wide platform "MM-Academy", employees are also trained in locally organized and site-specific training courses at the plants, among other things, in occupational health and safety.

MM Next Generation

Our strong focus on employee development prompted us to re-evaluate our previous training programs. Analogous to the redesign of the trainee program, the apprentice program was also revised and renamed "MM Next Generation". This program is aimed at training our young talents in Austria and Germany in order to be able to cover our future demand for qualified employees. During training, apprentices go through a dual system that combines practical training in the company with theoretical lessons at vocational schools and is complemented by courses at the MM Apprentice Academy. In total, 97 apprentices/trainees are employed in the MM Group in the current reporting year.

MM Trainee+ Program

With the valuable feedback from the business and a workshop with top managers, the new Trainee+ Program was created. It replaces the previous "Ranger Management Program" and the "Explorer Program". "Rangers" and "Explorers" who have not yet completed their program will still be able to do so. The Trainee+ Program is aimed at graduates with a broad background and potential for future expert and management positions. During this 2-year program, the trainees gain insights into different areas such as sales, finance, engineering or business. The first trainees will start the new Trainee+ program in 2022.

"Fast Mover" Program

In order to be prepared in the best possible way for the challenges associated with a shortage of skilled workers on the labor market, the "Fast Mover" program was launched with the primary goal of strengthening our company in the area of production and acquisition, by training and retaining the best people for our company in the long term. The program includes individually adapted training plans and competence profiles that depend on the participants' respective positions within the company. It completes the training and development opportunities offered by the Group.

"Methusalem" Program

In the "Methusalem" (German for Methuselah) program, we tie many years of experience and the expert knowledge of experienced employees to our company in selected projects. The objective is to combine things that are tried and tested with innovative ideas in a way that is conducive to the success of complex projects. The exchange between young and old is a much appreciated, regular component of our personnel development programs.

Active personnel marketing

We offer the members of our team a wide range of opportunities to get to know each other and make contact with others even before they start working for our company. For example, we continuously cooperate with schools, technical colleges and universities and regularly participate in (virtual) career fairs to position the MM Group as an attractive employer and to get into contact with young people already at an early stage of their career planning.

4.3 Measures and development

The development programs described above were consistently implemented and continued. The virtual learning offers (e.g. on hybrid working, change management or communication in challenging times) were further expanded. Training courses are even more specific to the respective tasks and topics in the company. A special focus was placed on data security, compliance and ways to best deal with professional tasks and personal challenges in the situation of the Covid-19 pandemic. Another focus in 2021 was placed on strengthening our brand as employer among applicants. The external image was updated with new photos featuring current employees. Our "employer promise" was also revised and entitled "We get things done", which is an apt description of our corporate culture.

Objectives

- MM Group as an attractive employer and workplace
- Supporting employees in improving their professional and personal qualification
- MM as "Employer of Choice"

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 4.7 and 8.5.

Employees¹⁾

by location and gender

	Dec. 31, 2021		Dec. 31, 2020	
Northern and Western Europe (excl. Austria)	4,545	36.4 %	4,239	42.6 %
Austria	1,745	14.0 %	1,764	17.8 %
Eastern Europe (incl. Turkey)	4,858	38.9 %	2,626	26.4 %
Asia and MENA	823	6.6 %	841	8.5 %
The Americas	521	4.2 %	468	4.7 %
Total	12,492	100 %	9,938	100 %
Male	9,703	77.7 %	7,781	78.3 %
Female	2,789	22.3 %	2,157	21.7 %

¹⁾ Full employment equivalent taking into account all fully consolidated companies

Training and further education in the Group

	MM Group
Site-specific factory training - in hours ¹⁾	134,430
Group-wide training courses "MM-Academy" - in hours	25,660
Of which by participants - male	18,547
Of which by participants - female	7,088
Of which by participants - diverse	25
Group-wide training portfolio of the "MM-Academy"	284
Participants in "MM-Academy" trainings ¹⁾	4,245
Thereof Managers	792

Participants in central HR programs: Young Professional (apprentices/trainees): 46 in Germany, 51 in Austria; Leadership Academy: 31; Ranger: 5; Explorer: 10; Fast Mover: 3; Methusalem: 1.

¹⁾ Excluding the sites sold in 2021 and the newly acquired mills MM Kotkamills and MM Kwidzyn.

5 HUMAN RIGHTS

The MM Group is aware of the importance of human rights from both a value-oriented and an economic point of view and is fully committed to respecting and observing human rights and to actively avoiding human rights violations. On the one hand, this applies to the Group's own employees. All employees, regardless of age, gender, culture, religion, origin or other diversity characteristics, are granted the same rights and opportunities. On the other hand, we are also committed to respecting human rights in our cooperation along the value chain with regard to the selection of our business partners.

5.1 Impacts, risks and opportunities

Although large parts of the MM Group's sites are located in European countries, the company may nevertheless be exposed to human rights risks, particularly in the non-European countries in which MM operates. For example, in some of these countries there are risks of forced labor, child labor and violation of labor standards and equal opportunities. However, in relation to our industry and with regard to the supply chain, the risks are considered low.

This means that appropriate compensatory measures prescribed by law are offered to employees. Flexible working time models such as part-time work are intended to contribute to the compatibility of family and career. In the MM Group, around 2 % of employees, mostly women, make use of this option. The Group offers its employees mostly permanent employment contracts; only around 2 % of employees, which include apprentices and trainees, are employed on fixed-term contracts. At the end of the year, the Group employed 589 temporary workers.

We recognize the entitlement of our workers to appropriate remuneration, whereby the remuneration paid is based on the market remuneration for a comparable position in the relevant environment. This includes the application of collective agreements at some locations. Throughout the Group, almost two-thirds of the employees of the MM Group are in an employment relationship governed by a collective agreement. A high level of personal identification with the success of the company is an integral part of our corporate culture. Therefore, performance-related forms of remuneration, which ensure that individuals with high performance can participate in the company's success, have a long tradition in the Group. By including occupational safety as a success factor, we want to significantly increase Group-wide identification with this success factor as well.

The majority of the Group's employees are covered by defined contribution plans under the statutory pension scheme. In addition to the statutory pension scheme, the Group has granted defined benefit and defined contribution pension commitments to certain employees on the basis of individual commitments and company agreements. Furthermore, there are defined benefit and defined contribution severance payment obligations at individual locations as well as obligations within the framework of statutory partial retirement.

The MM Group is committed to respecting human rights within its sphere of influence and rejects any form of forced labor in its company and among its business partners. The risks of human rights violations are reduced by applying the Code of Conduct as well as regular external audits. We also reject child labor, regardless of local laws, everywhere in our company and among our business partners. Throughout the Group, we therefore follow international standards (ILO Conventions C 138 and C 182) and keep records showing that our employees are of the minimum age required by law.

5.2 Measures and development

To ensure the protection of human rights, we focus on awareness-raising measures such as employee training based on the Code of Conduct. Audits on human rights compliance were carried out at selected MM Group sites in 2021. In addition, business partners must also commit themselves to complying with our Code of Conduct. Increased attention will be paid to this requirement in the next years. To this end, we plan to carry out assessments of the human rights performance along the supply chain. We plan to evaluate the human rights performance of those among our suppliers who are classified as particularly important for the MM Group based on criteria such as scope/type of business activity and influence (sales).

Objectives

- Ensuring compliance with human rights within the MM Group
- Assessment of the human rights performance of 100 % of the MM Group's "key suppliers" by 2023

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 8.5.

Human rights

	MM Board & Paper ¹⁾	MM Packaging
Cases of child labor	0	0
Cases of forced labor	0	0
Producing countries with Fundamental Rights Index \leq 0.4 (Rule of Law)	0 of 6	0 of 18

¹⁾ including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding the sold sites at Eerbeek and Baiersbrunn.

6 SAFETY AND HEALTH

The health and safety of all stakeholders in the value chain is a top priority for MM. It is our corporate responsibility to ensure that all stakeholders return home safely from their workplace at the end of a working day. In line with the fact that safety risks are inherent in manufacturing operations, occupational safety is of particular importance in our production plants. Accidents are also a relevant economic factor, as downtime also causes costs. The promotion of occupational health and safety therefore is also an important contribution to the operational efficiency and competitive strength of MM.

6.1 Impacts, risks and opportunities

Despite accident prevention and health promotion measures, risks arise from work-related stress. Possible impairments arise from working in shifts, handling chemicals, working in confined spaces and from fire and hot work. Furthermore, psychological stress can have an impact on the health of employees. Actively planning health promotion measures reduces these risks.

6.2 Management concepts and due diligence processes

As the MM Group, we have prioritized employee health and safety by implementing the Group-wide function "Occupational Safety". As a result of this organizational change, this area has already been given a higher priority in MM's sustainability awareness from 2020 onwards. The Group has additionally underlined the importance of this area in 2021, for the first time taking into account key figures on occupational safety when determining bonus payments for management and employees. In this context, uniform, standardized reporting processes and key figures were established at all sites around the world in the current reporting year. Location-related concepts for accident prevention, such as training and further education of employees, were developed and investments were made in protective equipment and health-promoting measures. Our objectives at Group level continue to include the ongoing reduction of accidents and the promotion of safety awareness among the workforce. Immediate starting points for the establishment of new concepts in this field include the development of a sustainable safety strategy for the entire Group, awareness raising initiatives, the definition of projects and an increased focus on fire safety.

In addition to the central Group function, occupational health and safety is an essential area of responsibility and an important task of the respective local site management and safety officers, as they know best what is required at their sites and make sure that country-specific regulations are complied with. The certification of 13 production sites according to ISO 45001 confirms the successful implementation of occupational health and safety management systems. We adhere to local health and safety regulations and standards. Accordingly, workplaces are regularly evaluated; such evaluations are carried out in cooperation with employees, work-related hazards are identified through appropriate procedures, risks are assessed and preventive measures derived from these processes are then implemented. Training and awareness-raising campaigns aim to continuously improve health and safety in the workplace.

As in the previous year, health protection in 2021 was again dominated by the Covid-19 pandemic. Accordingly, in addition to the continuous improvement of health protection in general, we also pursued the goal of enabling the highest possible protection of our employees' health under the extraordinary conditions of a pandemic. Details on measures related to the Covid-19 pandemic can be found in a separate chapter on page 96.

6.3 Measures and development

In addition to the establishment of standardized reporting processes for occupational accidents, measures include ongoing company medical care, the continuous provision of training on health and safety, and preventive medical check-ups. The focus of health and safety management was placed on preventive measures at the workplace and in the work environment; depending on the situation, the focus continued to be on hygiene and organizational measures to prevent the spread of Covid-19. The main focus of training was placed on optimization in the areas of first aid and accident prevention. There are plans for further target group-specific, mandatory training courses and Group-wide guidelines for occupational safety and health protection.

Objectives

- Promoting accident prevention: mandatory reporting of near accidents for all MM sites
- Reduction of occupational accidents with downtime at all sites
- Internal on-site safety assessments, 30 % of all production sites per year
- External safety audits and recertification, 30 % of all production sites

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 8.8.

	MM Board & Paper ¹⁾	MM Packaging
ISO 45001 certified production sites ²⁾	2 of 7	11 of 43
Occupational ²⁾ accidents - employees	33	160
Accident rate ²⁾ - employees	1.6	2.5
Occupational accidents - temporary workers	0	19
Accident rate ²⁾ - temporary workers	0	3.7
Occupational accidents with serious consequences ²⁾ - employees	2	3
Fatal occupational accidents - employees	0	0

¹⁾ Excluding the sites sold in 2021 and the newly acquired plants MM Kotkamills and MM Kwidzyn.

²⁾ Number of employees covered: 4,313

³⁾ Occupational accidents with > 3 lost days; rate based on 200,000 hours worked.

Prosperity

Focus on MM Sustainability Topics



We focus on economic and technical progress that is consistent with the needs of society and nature. In this context, we consider it our duty to adhere to laws, promote compliance and the circular economy through innovations and the integration of the entire value chain with the aim of achieving sustainable development.



7 RESPONSIBLE MANAGEMENT

MM's objective is to sustainably increase the value of the company through responsible corporate activity in accordance with all legal regulations, common industry standards and the universal principles of the UN Global Compact in the areas of human rights, labor standards, environmental protection and anti-corruption. In this context, compliance with laws, standards and codes of conduct has been defined as an essential topic for the MM Group and as a contribution to society. This also includes measures to avoid corruption, to ensure compliance with anti-trust law and to protect data in the sense of corporate data responsibility.

7.1 Impacts, risks and opportunities

Compliance with guidelines and requirements is essential both for our customer relationships and for the trust of all other stakeholders. Potential risks of the MM Group's business activities include potential non-compliance with standards, laws, codes of conduct and, where applicable, voluntary commitments. Potential risks of the MM Group's business activities also include cases of corruption and anti-competitive behavior. The risk of corruption is considered very low in European countries due to legal regulations. Furthermore, we assume that the business of the MM Group is not the focus of fraudulent acts, in particular due to the low fungibility of the products we produce. We attach great importance to the protection of the data of our customers and employees. In this respect, we comply with the legal requirements for the protection of our stakeholders' data and take measures to minimize the risk of potential cyber attacks and ensure information security.

7.2 Management concepts and due diligence processes

The MM Board & Paper division generates 93 % of its sales in Europe and 7 % in non-European countries. The six board and paper mills are located in Germany, Poland, Finland, Austria and Slovenia. Our fiber mill is located in Norway. The MM Packaging division has 43 production sites in 18 countries on three continents. 82 % of sales are generated in European countries. MM Packaging's production outside Europe takes place in China, on the Philippines, in Canada, Colombia, Chile, Vietnam, Jordan and Iran. We comply with all relevant laws and regulations of the countries in which we do business and observe the respective social standards. Some of the essential requirements, guidelines, standards and certifications with regard to sustainability are mentioned in the preceding chapters. We always act in the best interests of the MM Group and keep corporate and private interests strictly separate. We want to avoid even apparent conflicts of interest. We make decisions according to reasonable economic considerations in accordance with laws and standards. In our business relationships, we always act within the framework of the relevant regulations against corruption, bribery, fraud and money laundering. We undertake to refrain from gifts, benefits or participations that could result in a conflict of interest. It is also prohibited to accept, offer or pay bribes or other illegal payments and benefits. In accordance with Rule 18a of the Austrian Corporate Governance Code, the Executive Board reports to the Supervisory Board at least once a year on the precautions taken to combat corruption in the Group.

We are fully committed to fair competition with our competitors, employees, business partners and other market participants. At the same time, we undertake to comply with the laws against restraint of competition in all countries in which the MM Group does business. Compliance, which includes all measures aimed at observing laws, codes of conduct and other standards, is a central management task of the Management Board of the Group, with the CFO (Chief Financial Officer) having special departmental responsibility. For this purpose, the "Compliance" department has been set up as part of the legal department of the MM Group; it coordinates the development of compliance management with the CFO. In addition, there is the function of a Compliance Officer who is responsible for the field of capital market law.

We counter compliance risk, i.e. the risk of potential non-compliance with standards, laws, codes of conduct and, if applicable, voluntary declarations, through a variety of measures:

In order to ensure compliance, we subject our internal and external processes to continuous monitoring and, in this context, also verify on an ongoing basis in cooperation with external experts that our business conduct complies with current legal provisions. Our employees have clear guidelines on compliance and lawful conduct as we provide respective organizational guidelines that apply throughout the Group. These guidelines are complemented by training offers, especially in complex areas such as competition law, data protection and information security.

In all companies of the MM Group, regardless of local legal provisions, a dual control principle applies for representing the respective company externally. Furthermore, all our managers are instructed to comply with certain defined approval processes when or before carrying out certain measures and legal acts. In addition, the systematic monitoring of individual organizational units (plants, divisions, central Group functions) by the Internal Audit department helps to ensure compliance. In addition, the MM Integrity Line has been set up as an internal reporting channel in accordance with EU Directive 2019/1937. It serves as a whistleblowing system both for employees of the MM Group and for external stakeholders who wish to report circumstances or ways of conduct within the Group which they consider to be non-compliant or ethically unacceptable.

7.3 Measures and development

MM stands for responsible corporate governance. Guided by the principles of integrity, honesty and transparency, the MM Group is committed to meeting the highest possible standards in terms of quality, safety and sustainability. In 2021, we implemented a whistleblowing system: the "MM Integrity Line". This allows for the reporting of concerns about misconduct affecting our company or the well-being of employees and third parties. All reports are strictly confidential and subject to our "Privacy Policy".

Objectives

- Demanding and promoting compliance
- Continue to promote internal training on competition law, data protection and information security.

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 8.7.

	MM Group
No significant fines or sanctions for non-compliance with laws and regulations in the social and economic sphere	✓

	MM Board & Paper ¹⁾	MM Packaging
Production countries with corruption index < 30 according to Transparency International Corruption Index 202	0 of 6	2 of 18
Confirmed cases of corruption	0	0
Claims/legal proceedings for anti-competitive behavior	0	0

¹⁾ including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding the sold sites at Eerbeek and Baiersbronn

8 INNOVATION AND QUALITY

At the MM Group, innovation is lived as a process that provides timely solutions for future challenges and creates new sustainable solutions that also go beyond previously established business areas. The focus is placed on sustainably securing and strengthening growth and competitiveness as well as efficiency increases and cost reductions in the long term. The MM Group aims to identify market and future trends at an early stage and exploit them for the benefit of its customers and the Group as a whole. Innovation is promoted in particular in view of sustainability and product safety. The safety of (food) packaging has long been a central issue for the MM Group. This means that, on the one hand, the MM Group's products themselves do not contain any harmful substances and, on the other hand, protect against migration and other external influences.

8.1 Impacts, risks and opportunities

On the one hand, innovation activities are driven by the need for continuous product and process optimization, and on the other hand, changing legal framework conditions sometimes make further development necessary. Finally yet importantly, the development of new business fields for the future and targeted applications is a driving force for innovation activities. The development and implementation of product innovations always takes into account possible product safety risks.

The risks of potential contamination of products, consumer health risks, possible violations of relevant regulations, laws and guidelines, and potential recalls in the supply chain are minimized by establishing high standards in quality management and carrying out regular internal and external inspections. Opportunities are offered in particular by the development of innovative and sustainable packaging solutions that combine high safety for packaged goods and consumers with ecological benefits in connection with resource conservation and recyclability.

8.2 Management concepts and due diligence processes

A newly created and continuously developed innovation process ensures that innovations are accompanied from idea generation to implementation in a targeted manner with the necessary resources and the right experts from our specialist departments. The focus is placed on evaluating innovations in detail and implementing them as projects as soon as possible in order to meet the requirements for state-of-the-art technological functionality, quality, safety and sustainability.

We rely on external certifications to ensure quality and safety. They are important proof for customers and end users that our product innovations are sustainable, socially acceptable and harmless to health. In addition, they serve as proof of legal conformity in the area of product safety. Regularly checking both existing products and innovative solutions for compliance with certification criteria also ensures rigorous quality assurance that is also visible to the outside world.

In the area of product quality and food safety, there is in particular a certification according to ISO 9001 for our quality management system; all production sites of the MM Board & Paper division as well as the vast majority of the plants of the Packaging division have been certified according to this standard. In addition, we apply recognized hygiene management systems with certifications such as BRC Packaging of the British Retail Consortium of Global Food Safety Initiative (GFSI) and further global standards such as FSSC 22000 or ISO 22000, ISEGA as well as EN 15593. All sites of the MM Board & Paper division as well as more than 60 % of the MM Packaging plants have been certified according to one or more of these international hygiene management standards. Delivering safe food packaging to customers and end consumers is a priority in the folding carton industry. Based on an initiative of the European Carton Makers Association (ECMA), the ECMA GMP Guideline was developed to ensure consumer safety of food products. All European packaging sites meet the requirements of this guideline.

The respective certifications of individual MM sites can be found on our divisional websites at <https://www.mm-board-paper.com/en/company/mills> and <https://www.mm-packaging.com/en/company/plants>.

8.3 Measures and development

In the reporting year, the first Group-wide ideas platform "we.invent" was launched. The aim of this ideas platform is to give all employees of the Group the opportunity to submit ideas, thus integrating our workforce into our innovation process. The MM Group is convinced that every single idea counts and can achieve great things. For this reason, all submitted ideas go through a stage-gate process, are evaluated and prioritized. The best ideas are awarded prizes and finally put into practice. About 300 creative ideas were collected already in the first ideas campaign. To further prioritize quality management within the MM Group, a new Group function is implemented in the following year: Group Quality. This is done in particular to create uniform standards and synergy effects.

Objectives

- Push product and process innovations to optimize product end-of-life
- Improve the use of natural raw materials and further substitution of plastics across the MM product range.

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 9.4.

	MM Board & Paper ¹⁾	MM Packaging
Proportion of carton types for which consumer health and safety impacts are assessed	100 %	
ISO 9001 certified production sites	7 of 7	39 of 43
Production sites certified according to food safety or hygiene standards (BRC, ISO 22000, EN 15593, ECMA GMP, HACCP)	7 of 7	24 of 43

¹⁾ including the newly acquired plants MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding the sold sites at Eerbeek and Baiersbronn

9 VALUE CHAIN

Together with our customers and partners, we pursue the goal of making our products even more sustainable along the entire value chain. As the MM Group, we see ourselves as part of a larger whole. In order to be able to further promote sustainable development, taking into account economic, ecological and social aspects, it is necessary to work together in partnership. Only then can a systemic change towards more sustainability be achieved. The integration of the entire value chain is a win-win situation for all stakeholders involved.

9.1 Impacts, risks and opportunities

Staying in close contact with partners along the value chain offers us flexibility and agility, and an intensive exchange enables us to quickly respond to changing market requirements. MM focuses on the accumulation of detailed knowledge along the product life cycle. Compliance with legal regulations is the minimum standard of our production. Violation of any type of applicable regulation represents a risk for the MM Group. As part of a long production chain, the MM Group depends not only on its own performance but also on the performance of the partners who are part of our supply chains. For this reason, the MM Group is stepping up its efforts to gain a more detailed understanding of its own suppliers and their production steps. We will therefore focus on a risk assessment of suppliers at Group level in the coming financial years in order to achieve this goal. Risks and opportunities are to be uncovered and appropriately classified, processed or eliminated. In this way, we also support our customers in the implementation of their sustainability goals. Ensuring transparency and sharing knowledge are fundamental prerequisites for this.

9.2 Management concepts and due diligence processes

For years, the MM Group has participated in the collection of emission and environmental data by CDP (Disclosure Insight Action) in order to have its sustainability performance assessed by external, internationally recognized institutions and disclosed within the value chain. In the most recent round of assessment, the MM Group was awarded an A- in the area of "climate change" and a B in the area of "forests". With an A- rating, the MM Group is one of the best practice companies in this area due to the comprehensive disclosure of its environmental data and demonstrates a thorough awareness of climate-related risks and their successful management. In the year under review, MM also joined the global initiative "Business Ambition for 1.5°C" in order to contribute to limiting global warming to 1.5 degrees by 2050.

The cooperation with international industry associations and interest groups is of particular importance within the MM Group in order to achieve sustainability goals. MM is regularly represented at relevant trade fairs and congresses, participates in global competitions and company representatives are involved in European (e.g. CEPI, ECMA) and national interest groups (e.g. VDP, Austropapier). Since 2019, the MM Group has been part of the 4evergreen Alliance, which was initiated by CEPI, the European Confederation of Paper Industries (<http://www.cepi.org/4evergreen>). In 4evergreen, companies from the entire value chain work together to promote the recycling of fiber-based packaging as well as cooperation in the development of recyclable materials. The aim is to increase the contribution of fiber-based packaging to a sustainable circular economy in order to minimize impacts on climate and the environment.

9.3 Measures and development

We expect our business partners to always comply with all legal regulations and industry standards along the entire supply chain and encourage them to introduce and implement similar principles of responsibility. According MM's purchasing conditions, suppliers are obliged to comply with the MM Group's Code of Conduct. Furthermore, we are pushing to expand supplier evaluations with regard to ecological and social criteria, especially for risk management, at Group level. The MM Group's sustainability targets defined in the year under review serve this purpose. The evaluation of the sustainability performance of our suppliers is aimed at those partners who are classified as particularly important for the MM Group according to criteria such as scope/type of business activity and influence (sales). By engaging in an intense exchange with our suppliers and partners, we want to achieve a systemic change towards sustainability together with them and implement innovations to promote the circular economy.

Objectives

- Exchange on the MM Group's sustainability targets with 90% of its "key suppliers" by 2025
- Assessment of the sustainability performance of 90 % of the MM Group's "key suppliers" by 2023
- Promoting cooperation for circular innovations along the entire value chain

This promotes the implementation of the following Sustainable Development Goals (SDGs): SDG 12.2.

Disclosures on the Consolidated Non-financial Report

With this report, the MM Group fulfills its obligation to prepare a separate consolidated non-financial report in accordance with Section 267a of the Austrian Commercial Code (UGB). Accordingly, MM has expanded its annual financial reporting for the fifth time to include information on material non-financial aspects of its business activities in the areas of employee, social and environmental topics as well as respect for human rights and the fight against corruption and bribery.

This year, the consolidated non-financial report was again prepared in accordance with the GRI standards issued by the Global Sustainability Standards Board (GSSB). The Global Reporting Initiative (GRI) standards have become established as an internationally recognized framework for sustainability reporting. The GRI content index is included in the appendix starting on page 138.

This consolidated non-financial report was prepared by Mayr-Melnhof Karton AG, Vienna, as of December 31, 2021. It includes the activities and key figures of the MM Group in accordance with the reporting boundaries and the reporting period of the 2021 Annual Report. Any deviations from the scope of consolidation are indicated in the individual chapters. The report refers to the financial year 2021, which corresponds to the calendar year 2021. The last available report is dated 31 December 2020. In the reporting period, there were the following significant changes in the size, structure and ownership of the organization: within the division MM Board & Paper, the cartonboard mills in Eerbeek in the Netherlands and Baiersbronn in Germany were sold; new mills were acquired in Finland and Poland; the MM Packaging site Graphia Bielefeld was shut down.

PwC Wirtschaftsprüfung GmbH, Vienna, has performed an independent limited assurance review of the consolidated non-financial report. The corresponding report can be found on page 143.

The consolidated non-financial report of Mayr-Melnhof Karton AG has been published every year since 2017 and is subject to a continuous improvement process. In 2021, sustainability management as well as non-financial reporting were significantly advanced. Based on an updated materiality analysis involving internal and external stakeholders, the sustainability strategy and corresponding targets were redefined for the entire MM Group. With regard to the determination of relevant data, a new reporting/controlling platform for non-financial key figures was implemented. We intend to continue the continuous development of data collection processes and reporting in the coming years.

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Vienna, March 14, 2022

The Board of Directors

Peter Oswald m. p.

Andreas Blaschke m. p.

Franz Hiesinger m. p.

Appendix: MM Sustainability performance at a glance

OVERVIEW OF THE NON-FINANCIAL INDICATORS

On the following pages, we present an overview of the MM Group's sustainability performance over the last three reporting years from 2019 to 2021. The disclosure of our non-financial key figures includes all production sites of the divisions MM Board & Paper and MM Packaging with full-year values. This also applies in particular to the newly acquired cartonboard and paper mills MM Kotkamills and MM Kwidzyn. However, those MM Board & Paper sites in Eerbeek and Baiersbronn that were sold in 2021 are no longer included. This will create a comprehensive basis for comparability in 2021 – especially for the future reporting of non-financial key figures in the next years.

PLANET

	2021	2020	2019
Energy consumption			
Energy consumption in cartonboard and paper production ¹⁾	10.5 TWh	3.4 TWh	3.3 TWh
Specific energy consumption ¹⁾	4 MWh/t	1.9 MWh/t	1.8 MWh/t
Energy consumption in packaging production	0.4 TWh	0.4 TWh	0.4 TWh
Specific energy consumption ²⁾	0.4 MWh/t	0.4 MWh/t	0.5 MWh/t
Emissions			
<i>MM Board & Paper¹⁾</i>			
Direct CO ₂ emissions in cartonboard and paper production (Scope 1) ³⁾	1.26 million t CO ₂ e	0.5 million t CO ₂ e	0.5 million t CO ₂ e
Specific direct CO ₂ emissions ^{1) 2) 3)}	0.45 t CO ₂ e/t	0.3 t CO ₂ e/t	0.3 t CO ₂ e/t
Indirect CO ₂ emissions (Scope 2, location-based) ³⁾	0.46 million t CO ₂ e		
Indirect CO ₂ emissions (Scope 2, market-based) ³⁾	0.56 million t CO ₂ e		
Indirect CO ₂ emissions (Scope 3) ^{1) 4)}	1.45 million t CO ₂ e		
<i>MM Packaging</i>			
Direct CO ₂ emissions in packaging production (Scope 1) ³⁾	0.03 million CO ₂ e t	0.03 million CO ₂ e t	0.03 million CO ₂ e t
Specific direct CO ₂ emissions ^{2) 3)}	0.04 CO ₂ e t/t	0.03 CO ₂ e t/t	0.04 CO ₂ e t/t
Indirect CO ₂ emissions (Scope 2, location-based) ³⁾	0.1 million t CO ₂ e		
Indirect CO ₂ emissions (Scope 2, market-based) ³⁾	0.07 million t CO ₂ e		
Indirect CO ₂ emissions (Scope 3) ^{1) 4)}	0.75 million t CO ₂ e		

¹⁾ including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites at Eerbeek and Baiersbronn.

²⁾ on the basis of net production or processed tonnage

³⁾ Emission factors used according to GHG Protocol, life cycle assessment databases GaBi and Ecolvent as well as respective emission factors of the electricity suppliers.

⁴⁾ Emissions considered for purchased goods and services, fuel- and energy-related activities, waste and transport by employees

Environmental and energy management	2021	2020	2019
ISO 14001 or EMAS certified production sites	28 of 50	31 of 50 ⁶⁾	33 of 52
ISO 50001-certified production sites	10 of 50	11 of 50 ⁶⁾	10 of 52

Raw materials	2021	2020	2019
<i>MM Board & Paper¹⁾</i>			
Renewable raw materials ²⁾	2.8 million t	1.7 million t	1.7 million t
Fiber input	2.8 million t	1.6 million t	1.6 million t
Recycled fibers ³⁾	1.2 million t	1.2 million t	1.1 million t
Virgin fibers ⁴⁾	1.6 million t	0.4 million t	0.4 million t
Share of renewable raw materials	79 %	89 %	88 %
Non-renewable raw materials	0.9 million t	0.2 million t	0.2 million t
<i>MM Packaging</i>			
Renewable raw materials ²⁾	0.8 million t	0.9 million t	0.9 million t
Cartonboard and paper	0.7 million t	0.8 million t	0.8 million t
Recycled fibers ³⁾	0.4 million t	0.4 million t	0.3 million t
Virgin fibers ⁴⁾	0.3 million t	0.4 million t	0.3 million t
Share of renewable raw materials	97 %	95 %	91 %
Non-renewable raw materials	0.03 million t	0.0 million t	0.1 million t

Responsible procurement	2021	2020	2019
Virgin fiber in cartonboard and paper production ^{1) 2)}			
- from FSC®-certified sources	59 %	23 %	17 %
- from PEFC™-certified sources	33 %	36 %	36 %
- from controlled sources ⁵⁾	8 %	41 %	47 %
Virgin fiber in packaging production			
- from FSC®-certified sources	19 %	17 %	
- from PEFC™-certified sources	16 %	10 %	
FSC®-certified production sites	44 of 50	46 of 52	46 of 52
PEFC-certified™ production sites	38 of 50	40 of 52	40 of 52

Waste in production¹⁾	2021	2020	2019
Non-hazardous waste in production	0.5 million t	0.4 million t	0.3 million t
Hazardous waste in production	5 thousand t	4 thousand t	4 thousand t

Water consumption	2021	2020	2019
Water consumption in cartonboard and paper production ¹⁾	70 million m ³	19.7 million m ³	21 million m ³
Water consumption in packaging production	0.7 million m ³	0.7 million m ³	0.7 million m ³

1) including the newly acquired mills MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites at Eerbeek and Baiersbronn

2) including packaging materials

3) exclusive rejects

4) groundwood pulp equivalent

5) including FSC®-controlled Wood

6) excluding MM Follacell and Hirschwang mill

PEOPLE

Significant local employment effects¹⁾	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
<i>Employees per country</i>			
Poland	3,122	670	687
Germany	2,201	2,632	2,715
Austria	1,745	1,764	1,846
France	889	919	916
Russia	648	624	609
Turkey	599	478	450
Finland	535	0	0
Slovenia	407	398	389
Chile	291	244	239
Great Britain	281	255	236
Iran	263	270	239
Romania	253	223	202
Ukraine	227	229	224
China	195	202	212
Colombia	181	174	204
Spain	152	139	143
Vietnam	147	137	123
Jordan	114	112	115
Philippines	101	117	120
Norway	66	73	69
Canada	49	49	44
Netherlands	2	209	202
Other	24	20	30
Total	12,492	9,938	10,014

¹⁾ Full employment equivalent for all fully consolidated companies

	2021	2020	2019
Employee education and training			
Group-wide training portfolio "MM-Academy"	284	273	149
Participants of "MM-Academy" trainings ¹⁾	4,245	4,055	1,447
Managers among them	792	706	
Group-wide training courses "MM-Academy" - in hours	25,660	32,078	12,494
Site-specific factory training - in hours ¹⁾	134,430	102,722	142,076

¹⁾ Excluding the sites sold in 2021 and the newly acquired plants MM Kotkamills and MM Kwidzyn.

Employee health and safety¹⁾	2021	2020	2019
ISO-45001- or OHSAS-18001-certified production sites	13 of 50	16 of 50 ⁴⁾	16 of 52
Occupational accidents of employees (>3 days lost)	193	254	
Accident rate ²⁾ employees (>3 lost days)	2.1	3.1	
Occupational accidents of temporary agency workers (>3 days lost)	19	25	
Accident rate ²⁾ temporary agency workers (>3 days lost)	2.9	5.2	
Occupational accidents with serious consequences	5	4	
Fatal occupational accidents	0	0	

Human rights³⁾	2021	2020	2019
Cases of child labor	0	0	0
Cases of forced labor	0	0	0
Producing countries with Fundamental Rights Index ≤ 0.4 (Rule of Law)	0 of 21	0 of 21	3 of 21

¹⁾ excluding the sites sold in 2021 and the newly acquired mills MM Kotkamills and MM Kwidzyn.

²⁾ based on 200,000 hours worked

³⁾ including all sites of the division MM Board & Paper, also those mills newly acquired in 2021: MM Kotkamills and MM Kwidzyn, excluding the sites sold in 2021 at Eerbeek and Baiersbronn

⁴⁾ excluding MM Follacell and Hirschwang mill

PROSPERITY

Violation of guidelines and requirements¹⁾	2021	2020	2019
Fines or sanctions for non-compliance with laws and regulations in the social and economic sphere	0	0	0

Anti-corruption and anti-competitive behaviour¹⁾	2021	2020	2019
Production sites in countries with corruption index < 30 according to 2017 Transparency International Corruption Index	2 of 21	1 of 21	2 of 21
Number of lawsuits for corruption or anti-competitive behavior	0	0	0

Quality and product safety¹⁾	2021	2020	2019
Percentage of cartonboard types for which the effects on consumer health and safety have been reviewed	100 %	100 %	100 %
ISO 9001 certified production sites	46 of 50	49 of 50 ²⁾	52 of 52
Production sites ¹⁾ that are certified according to food safety and hygiene standards (BRC, ISO 22000, EN 15593, ECMA GMP, HACCP).	31 of 50	33 of 50 ²⁾	34 of 52

¹⁾ including acquired plants MM Kotkamills and MM Kwidzyn for the entire reporting year 2021; excluding sold sites in Eerbeek and Baiersbronn.

²⁾ exclusive MM Follacell and Hirschwang mill

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¹⁾ This information can be found in the Annual Report outside the chapter "Consolidated non-financial report".

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TCFD CONTENT INDEX

The MM Group follows the framework of TCFD (Task Force on Climate-Related Financial Disclosures) in order to integrate climate-related risks and opportunities into the existing reporting structures in the best possible way. TCFD disclosures were used and assigned to the areas of "Governance", "Strategy", "Risk management" and "Metrics and targets".

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Governance	Description of how climate-related risks and opportunities are controlled by the board.	98
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	Description of the impact of climate-related risks and opportunities on the organization's business, strategy and financial planning.	96, 104-106 109-111
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Risk management	Description of the processes by which the organization identifies and assesses climate-related risks.	80 ¹⁾ , 101-104
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	Disclosure of Scope 1, Scope 2 and, where applicable, Scope 3 greenhouse gas emissions and associated risks.	101-104
	Description of the objectives (and their implementation) set by the organization to address climate-related risks and opportunities.	101-104

¹⁾ This information can be found in the Annual Report outside the chapter "Consolidated Non-financial report".

INDEPENDENT LIMITED ASSURANCE REPORT

We have performed the limited assurance engagement of the consolidated non-financial report pursuant to section 267 a UGB (hereinafter referred to as "non-financial report") of Mayr-Melnhof Karton Aktiengesellschaft, Vienna, and its subsidiaries (the "Group"), for the financial year 2021.

Summary assessment

Based on our audit procedures and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial report of the Group is not prepared, in all material respects, in accordance with the requirements pursuant to section 267 a UGB and the "EU Taxonomy Regulation" (EU Regulation 2021/852) and the GRI Standards Option "Core".

Responsibility of the legal representatives and the supervisory board

The legal representatives of the Group are responsible for the proper preparation of the non-financial report in accordance with the requirements pursuant to section 267 a UGB and the "EU Taxonomy Regulation" (EU Regulation 2021/852) as well as the GRI Standards Option "Core".

The responsibility of the legal representatives of the Group includes the selection and application of appropriate methods for non-financial reporting (in particular the selection of material topics) as well as making assumptions and estimates about individual sustainability disclosures that are reasonable in the circumstances. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of a non-financial report that is free from material misstatement, whether due to fraud or error.

The supervisory board is responsible for examining the non-financial report.

Responsibility of the auditor

Our responsibility is to express a conclusion with limited assurance, based on our audit procedures and the evidence we have obtained, as to whether any matters have come to our attention that cause us to believe that the non-financial report of the Group is not prepared, in all material respects, in accordance with the legal requirements as set out in section 267 a of the Austrian Commercial Code (UGB) and the "EU Taxonomy Regulation" (EU Regulation 2021/852) as well as the GRI Standards (option "Core").

We conducted our audit in accordance with Austrian Standards on Auditing on other audits (KFS/PG 13) and on selected issues for the separate audit of non-financial statements and non-financial reports pursuant to sections 243 b and 267 a UGB as well as sustainability reports (KFS/PE 28) and the International Standards on Assurance Engagements (ISAE) 3000 (Revised) - Assurance engagements other than audits or re-views of historical financial information. Those standards require that we comply with ethical requirements, including independence, and plan and perform the assurance engagement, under consideration of materiality, to express our conclusion with limited assurance.

We issue this report on the basis of the engagement concluded with you, which is also based, with effect vis-à-vis third parties, on the General Terms and Conditions of Engagement (AAB) 2018, published by the Chamber of Tax Advisors and Auditors (<https://www.ksw.or.at/desktopdefault.aspx/tabid-209/>). Our responsibility and liability vis-à-vis the Group and also vis-à-vis third parties is limited to the maximum liability limit of EUR 2 million applicable to audits of small and medium-sized companies, analogously to section 275 (2) of the Austrian Commercial Code (UGB).

In an audit to obtain limited assurance, the audit procedures performed are less extensive than in an audit to obtain reasonable assurance, and accordingly, less assurance is obtained.

The procedures selected depend on the auditor's judgment, including the following procedures:

- Assessment of the overall presentation of the disclosures and non-financial information
- Critically assessing the Group's materiality analysis, taking into account the concerns of external stakeholders, by interviewing the responsible employees and inspecting relevant documents
- Obtaining an overview of the concepts followed, including the due diligence processes applied, as well as the processes to ensure the true and fair view in the consolidated non-financial report, by conducting interviews with Group officers and reviewing internal policies, procedures and management systems related to non-financial matters/disclosures
- Obtaining an understanding of the reporting processes by interviewing relevant personnel and reviewing selected documentation
- Evaluating the reported information by performing analytical procedures on the non-financial performance indicators, interviewing relevant personnel and reviewing selected documentation. All interviews and audit procedures were performed virtually due to the ongoing Covid-19 pandemic and the Corona protection measures.
- Critical appraisal of the information in accordance with the requirements of the "EU Taxonomy Regulation" (EU-Regulation 2021/852)
- Review of the consolidated non-financial report regarding its completeness according to the requirements of section 267a UGB and the "EU Taxonomy Regulation" (EU Regulation 2021/852) as well as the GRI Standard Option "Core"

The following is not the subject of our engagement:

- the audit of processes and internal controls, in particular with regard to design, set-up and effectiveness
- the performance of audit procedures at individual locations as well as measurements or our own assessments to verify the reliability and accuracy of the data obtained
- examining the previous year's figures, forward-looking statements or data from external studies
- testing the correctness of the data and references from the annual or consolidated financial statements in the non-financial reporting, and
- the audit of information and statements on the homepage or further references on the Internet.

The subject matter of our engagement is neither an audit of financial statements nor a review of financial statements. Likewise, neither the detection and clarification of criminal offences, such as embezzlement or other acts of embezzlement and administrative offences, nor the assessment of the effectiveness and efficiency of the management is the subject of our engagement.

Restriction of use

Since our report is prepared exclusively on behalf of and in the interest of the client, it does not form the basis for any reliance by other third parties on its contents. Claims of other third parties can therefore not be derived from it.

Vienna, March 14, 2022

PwC Wirtschaftsprüfung GmbH

Frédéric Vilain m. p.
Austrian Certified Public Accountant

We draw attention to the fact that the English translation of this report is presented for the convenience of the reader only and that the German wording is the only legally binding version.

Consolidated Financial Statements

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Consolidated Balance Sheets

(all amounts in thousands of EUR)

Notes

Dec. 31, 2021

Dec. 31, 2020

ASSETS

Property, plant and equipment	6	1,490,031	996,472
Intangible assets including goodwill	6	914,793	346,347
Investments accounted for using the equity method, securities and other financial assets	8	8,415	7,404
Deferred tax assets	9	46,763	47,700
Non-current assets		2,460,002	1,397,923
Inventories	10	477,263	349,621
Trade receivables	11	541,603	415,804
Income tax receivables	9	32,212	12,158
Prepaid expenses and other current assets	12	136,807	72,593
Cash and cash equivalents	31	359,546	146,241
Non-current assets held for sale	5	6,785	5,230
Current assets		1,554,216	1,001,647
TOTAL ASSETS		4,014,218	2,399,570

EQUITY AND LIABILITIES

Share capital	13	80,000	80,000
Additional paid-in capital	13	172,658	172,658
Retained earnings	13	1,687,923	1,564,165
Other reserves	13	(284,750)	(274,477)
Equity attributable to shareholders of the Company		1,655,831	1,542,346
Non-controlling (minority) interests	13	6,047	4,752
Total equity		1,661,878	1,547,098
Non-current financial liabilities	14	1,349,074	215,511
Provisions for non-current liabilities and charges	15	149,834	143,001
Deferred tax liabilities	9	70,486	38,684
Non-current liabilities		1,569,394	397,196
Current financial liabilities	14	74,003	52,915
Current tax liabilities	9	24,371	19,809
Trade liabilities	16	437,726	220,437
Deferred income and other current liabilities	17	198,628	140,183
Provisions for current liabilities and charges	18	48,218	21,932
Current liabilities		782,946	455,276
Total liabilities		2,352,340	852,472
TOTAL EQUITY AND LIABILITIES		4,014,218	2,399,570

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Income Statements

(all amounts in thousands of EUR except share and per share data)	Notes	2021	2020
Sales	19	3,069,714	2,528,399
Cost of sales	21	(2,413,557)	(1,913,879)
Gross margin		656,157	614,520
Other operating income	20	84,860	19,808
Selling and distribution expenses	21	(296,107)	(244,758)
Administrative expenses	21	(175,158)	(158,074)
Other operating expenses	21	(137)	(116)
Operating profit		269,615	231,380
Financial income	25	3,319	1,712
Financial expenses	26	(24,369)	(7,863)
Other financial result – net	27	(4,016)	(3,155)
Profit before tax		244,549	222,074
Income tax expense	9	(53,848)	(59,844)
Profit for the year		190,701	162,230
Attributable to:			
Shareholders of the Company		189,174	161,188
Non-controlling (minority) interests	13	1,527	1,042
Profit for the year		190,701	162,230
Earnings per share for profit attributable to the shareholders of the Company during the year:			
Average number of shares outstanding	28	20,000,000	20,000,000
Earnings per share	28	9.46	8.06

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Comprehensive Income Statements

(all amounts in thousands of EUR)	Notes	2021	2020
Profit for the year		190,701	162,230
Other comprehensive income:			
Actuarial valuation of defined benefit pension and severance obligations	13	(1,518)	(583)
Effect of income taxes	9	1,107	(784)
Total of items that will not be reclassified subsequently to the income statement		(411)	(1,367)
Foreign currency translations ¹⁾	13	(9,557)	(59,690)
Effect of income taxes	9	(1,154)	2,948
Total of items that will be reclassified subsequently to the income statement		(10,711)	(56,742)
Other comprehensive income (net)		(11,122)	(58,109)
Total comprehensive income		179,579	104,121
Attributable to:			
Shareholders of the Company		177,687	103,219
Non-controlling (minority) interests	13	1,892	902
Total comprehensive income		179,579	104,121

The accompanying notes are an integral part of these consolidated financial statements.

¹⁾ In the financial year 2021, an amount of thous. EUR -1,940 (2020: thous. EUR -133) was reclassified from other comprehensive income to profit for the year.

Consolidated Statements of Changes in Equity

(all amounts in thousands of EUR)	Notes	Equity attributable to shareholders of the Company							Non-controlling (minority) interests	Total equity
		Share capital	Additional paid-in capital	Retained earnings	Other comprehensive income			Total		
					Foreign currency translations	Actuarial gains and losses	Other reserves			
Balance at Jan. 1, 2020		80,000	172,658	1,466,884	(150,580)	(65,928)	(216,508)	1,503,034	5,275	1,508,309
Profit for the year		0	0	161,188	0	0	0	161,188	1,042	162,230
Other comprehensive income		0	0	0	(56,593)	(1,376)	(57,969)	(57,969)	(140)	(58,109)
Total comprehensive income		0	0	161,188	(56,593)	(1,376)	(57,969)	103,219	902	104,121
Transactions with shareholders:										
Dividends paid	13	0	0	(64,000)	0	0	0	(64,000)	(1,196)	(65,196)
Change in majority interests	5	0	0	93	0	0	0	93	(229)	(136)
Balance at Dec. 31, 2020		80,000	172,658	1,564,165	(207,173)	(67,304)	(274,477)	1,542,346	4,752	1,547,098
Profit for the year		0	0	189,174	0	0	0	189,174	1,527	190,701
Other comprehensive income		0	0	0	(11,081)	(406)	(11,487)	(11,487)	365	(11,122)
Total comprehensive income		0	0	189,174	(11,081)	(406)	(11,487)	177,687	1,892	179,579
Reclassification of actuarial effects to retained earnings		0	0	(1,214)	0	1,214	1,214	0	0	0
Transactions with shareholders:										
Dividends paid	13	0	0	(64,000)	0	0	0	(64,000)	(1,220)	(65,220)
Change in majority interests	5	0	0	(202)	0	0	0	(202)	623	421
Balance at Dec. 31, 2021		80,000	172,658	1,687,923	(218,254)	(66,496)	(284,750)	1,655,831	6,047	1,661,878

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Cash Flow Statements

(all amounts in thousands of EUR)	Notes	Year ended Dec. 31, 2021	Year ended Dec. 31, 2020
CASH FLOW FROM OPERATING ACTIVITIES:			
Profit for the year		190,701	162,230
Adjustments to reconcile profit for the year to net cash from operating activities excluding interest and taxes paid:			
Income tax expense	9	53,848	59,844
Depreciation and amortization of property, plant and equipment, and intangible assets	6	148,953	135,964
Impairment of property, plant and equipment, and intangible assets	6	2,395	31,517
Gains (losses) from disposals of property, plant and equipment, and intangible assets	20	(9,497)	263
Financial income	25	(3,319)	(1,712)
Financial expenses	26	24,369	7,863
Result from the disposal of subsidiaries	5	(46,175)	0
Share of profit (loss) of other investments	27	(606)	(344)
Other adjustments	31	(1,985)	(10,105)
Net cash from profit		358,684	385,520
Changes in working capital:			
Inventories	10	(57,357)	(1,316)
Trade receivables	11	(112,218)	(18,017)
Prepaid expenses and other current assets	12	(21,184)	(7,221)
Trade liabilities	16	145,700	6,598
Deferred income and other current liabilities	17	24,745	15,148
Provisions for current liabilities and charges	18	(1,577)	12,222
Changes in working capital		(21,891)	7,414
Cash flow from operating activities excluding interest and taxes paid		336,793	392,934
Income taxes paid		(66,973)	(74,750)
Net cash from operating activities		269,820	318,184
CASH FLOW FROM INVESTING ACTIVITIES:			
Proceeds from disposals of property, plant and equipment, and intangible assets		16,536	2,214
Payments for acquisition of property, plant and equipment, and intangible assets (incl. payments on account)	16	(248,430)	(152,772)
Proceeds from government grants		0	6,150
Payments for acquisition of companies or other business entities, net of cash and cash equivalents acquired (2021: thous. EUR 67,747; 2020: thous. EUR 0)	5	(811,825)	0
Proceeds from disposal of companies or other business entities, net of cash and cash equivalents disposed (2021: thous. EUR 4,146, 2020: thous. EUR 0)	5	148,467	500
Proceeds from disposals of securities and other financial assets		177	155
Payments for securities and other financial assets		(251)	(1,226)
Dividends received	27	606	344
Interest received		3,319	1,775
Net cash from investing activities		(891,401)	(142,860)
CASH FLOW FROM FINANCING ACTIVITIES:			
Interest paid		(12,003)	(7,857)
Issuances of interest-bearing financial liabilities	31	1,225,114	642
Repayments of interest-bearing financial liabilities	31	(302,018)	(69,934)
Repayments of lease liabilities	31	(8,984)	(8,322)
Payments to non-controlling (minority) shareholders		(0)	(136)
Dividends paid to the shareholders of the Company	13	(64,000)	(64,000)
Dividends paid to non-controlling (minority) shareholders	13	(1,220)	(1,196)
Net cash from financing activities		836,889	(150,803)
Effect of exchange rate changes on cash and cash equivalents		(2,003)	(5,087)
Change in cash and cash equivalents		213,305	19,434
Cash and cash equivalents at the beginning of the year (according to the consolidated balance sheet)		146,241	126,807
Cash and cash equivalents at the end of the year (according to the consolidated balance sheet)		359,546	146,241

The accompanying notes are an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

1 BASIC INFORMATION

The MM Group

Mayr-Melnhof Karton AG and its subsidiaries ("the Group") are engaged in manufacturing and selling cartonboard, paper and folding cartons with a focus on Europe. The parent company of the Group is Mayr-Melnhof Karton AG, located at Brahmssplatz 6, 1040 Vienna, Austria. The shares of the Company are listed on the Vienna Stock Exchange.

Segment information

The Group is divided into two operating segments (see note 19): MM Board & Paper and MM Packaging. MM Board & Paper manufactures and markets numerous grades of cartonboard, focusing on coated cartonboard produced predominantly from recycled fibers as well as virgin fiber-based cartonboard. In addition, the division's product range also includes kraft papers and uncoated fine papers. MM Packaging processes cartonboard into folding cartons, mainly for the food industry (e. g., cereals, dried foods, sugar, and baked products, high-end confectionery packaging) as well as other consumer goods industries (e. g., cosmetics, toiletries, detergents, household goods, tobacco products, toys and pharmaceuticals).

Significant events affecting the Group's financial situation and profitability

The Group's financial situation and profitability are particularly affected by the changes in the consolidated companies, in particular the acquisitions of MM Kotkamills and MM Kwidzyn (see note 5), which impairs comparability with the previous year's figures.

2 PRINCIPLES OF PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS

Basic accounting principles and declaration of compliance

The consolidated financial statements of Mayr-Melnhof Karton AG and its subsidiaries and notes thereto have been prepared according to section 245 a of the Austrian Commercial Code in accordance with International Financial Reporting Standards and their interpretations released by the International Accounting Standards Board "IASB" to be applied within the European Union. Additional requirements according to section 245 a paragraph 1 of the Austrian Commercial Code have been met.

The consolidated financial statements are prepared based on historical acquisition or manufacturing costs, except for certain positions that are described in the relevant notes (e. g. note 7 and 15).

The present consolidated financial statements comprise the period from January 1 till December 31, 2021 and have been signed by the Management Board and have been approved by the Supervisory Board as of March 14, 2022.

The consolidated financial statements are reported in Euro. Unless stated otherwise, all amounts herein, except for share data and per share amounts, are specified in thousands of Euro.

Application of new and revised standards

During the preparation of the consolidated financial statements and notes thereto, relevant amendments to existing IAS and IFRS, as published in the Official Journal of the European Union no later than December 31, 2021 and with an effective date no later than this date, were taken into consideration:

Revised standards	Content	Effective
IFRS 4	Deferral of IFRS 9	2021
IFRS 9/IAS 39/IFRS 7/ IFRS 4/IFRS 16	Interest Rate Benchmark Reform – Phase 2	2021
IFRS 16	Leases – Covid-19 Related Rent Concessions	2021

If applicable, the effective regulations were applied in the present consolidated financial statements. The above mentioned changes did not have any significant impact on the Group's financial situation and profitability.

With the amendment to IFRS 4 "Insurance Revenue", insurance companies can temporarily continue to apply IAS 39 "Financial Instruments: Recognition and Measurement" instead of IFRS 9 "Financial Instruments" for the accounting of financial instruments until the application of IFRS 17 "Insurance Revenue" becomes effective. There are no cases in which IFRS 4 or IFRS 17 are applied in the MM Group. IFRS 9 is already fully applied for the accounting of financial instruments.

The amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 relate in particular to certain further simplifications with regard to interest-bearing primary financial instruments as well as simplifications in accounting of hedging relationships affected by the reform of the reference interest rate. In principle, there was no case of application for these simplification rules for the MM Group in the financial year.

The amendments to IFRS 16 provide lessees with an exemption from assessing whether lease concessions granted as a result of the coronavirus pandemic (e. g., rent-free periods or temporary rent reductions) constitute a lease modification. This simplification rule was not applied.

Furthermore, the following new and revised standards were endorsed by the EU until December 31, 2021; their application is, however, not yet compulsory for the financial year 2021:

New standards	Content	Effective
IFRS 17	Insurance contracts	2023
Revised standards	Content	Effective
IFRS 3	Reference to the Conceptual Framework in IFRS	2022
IAS 16	Proceeds before Intended Use	2022
IAS 37	Onerous Contracts – Costs of Fulfilling a Contract	2022
	Annual Improvements to IFRS 2018 – 2020	2022

Additionally, the following revised standards were published by IASB until December 31, 2021 but have not yet been endorsed by the EU:

Revised Standards	Content	Effective
IAS 1	Classification of Liabilities as Current or Non-current	2023
IAS 1	Disclosure of Accounting policies – Definition of Material	2023
IAS 8	Definition of Accounting Estimates	2023
IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	2023
IFRS 17	Initial Application of IFRS 17 and IFRS 9 – Comparative Information	2023

From today's point of view, the above mentioned new or revised standards are not expected to have any significant impact on the Group's financial situation and profitability.

3 ACCOUNTING PRINCIPLES

The significant accounting and recognition principles applied in the Group are explained in the corresponding note.

Consolidation principles and methods

The consolidated financial statements and notes thereto include Mayr-Melnhof Karton AG ("the Company") and its subsidiaries. These are all companies over which the Group has control. The Group has control when it is exposed to both, positive and negative variable returns of its involvement in the entity and has an influence on the amount of these variable returns. Generally, an ownership of more than 50 % of voting shares provides an entity with control. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. The criteria whether the Group has control over another entity are reviewed even when the Group holds less than 50 % of voting rights. The Group has the majority of shares and voting rights in all of its controlled entities. There are no additional agreements which rule out control.

The subsidiaries, provided that they are not of subordinate importance for the presentation of the financial situation and profitability, are consolidated as of the date on which control is transferred to the Group. They are deconsolidated on the date on which such control ceases to exist or a subsidiary is deemed to be insignificant by the Group.

Changes in shareholdings of the Group which do not lead to a loss of control over the subsidiaries are presented only as equity transactions (change in majority interests) and therefore have no impact on the consolidated income statement.

Non-controlling (minority) interests represent the external shareholders' proportionate share in equity and total profit for the year in subsidiaries of the Group. These minority interests are presented separately within equity.

Any effects of intercompany transactions are entirely eliminated.

Foreign currency translation

Assets including goodwill and liabilities of foreign subsidiaries with a functional currency other than the Euro are translated into Euro using the average exchange rates as of the balance sheet date. Revenues and expenses are translated using average exchange rates for the year. The annual average rates are calculated as the arithmetic mean of the individual closing rates at month-end, whereby the exchange rate of December 31 of the last year always being taken as the first closing rate. Differences arising from the translation of assets and liabilities in comparison with the previous periods are recognized as a separate component of equity. Gains and losses resulting from foreign currency transactions are recognized in the income statement as incurred.

The transactions of the Company in currencies other than the functional currency are translated using the exchange rates on the date of transaction. Monetary items in foreign currency are translated using the exchange rates on the balance sheet date. Resulting exchange rate differences as well as effects of the realization are recognized in the income statement.

Exchange rate differences arising in connection with monetary items that are part of a net investment in a foreign operation are initially reported as a separate component of equity and are recognized in the income statement only upon intentional repayment or disposal of the net investment.

The exchange rates of the relevant currencies of non-Euro participating countries used in preparing the consolidated financial statements and notes thereto were as follows:

Country:	Currency:	Exchange rate at Dec. 31, 2021	Exchange rate at Dec. 31, 2020	Annual average exchange rate 2021	Annual average exchange rate 2020
		1 EUR =	1 EUR =	1 EUR =	1 EUR =
Bulgaria	BGN	1.96	1.96	1.96	1.96
Canada	CAD	1.44	1.56	1.49	1.53
Chile	CLP	964	871	899	899
China	CNY	7.22	8.03	7.64	7.89
Colombia	COP	4,527	4,200	4,438	4,213
Czech Republic	CZK	24.86	26.24	25.69	26.39
Great Britain	GBP	0.84	0.90	0.86	0.89
Hungary	HUF	369	364	358	352
Jordan	JOD	0.80	0.87	0.84	0.81
Norway	NOK	9.99	10.47	10.18	10.69
Philippines	PHP	57.51	58.69	58.43	56.69
Poland	PLN	4.60	4.61	4.58	4.45
Romania	RON	4.95	4.87	4.92	4.84
Russia	RUB	84.07	90.68	87.42	82.03
Switzerland	CHF	1.03	1.08	1.08	1.07
Tunisia	TND	3.28	3.31	3.30	3.21
Turkey	TRY	14.68	9.01	10.33	7.88
Ukraine	UAH	30.92	34.74	32.38	30.61
Vietnam	VND	25,864	28,517	27,213	26,667

Business Combinations

All new acquisitions of subsidiaries and businesses are accounted for using the acquisition method.

The acquisition costs of the transaction classified as a business correspond to the fair values of the assets transferred and liabilities received or taken over on the acquisition date (value of consideration transferred).

The identifiable assets acquired and liabilities assumed in the course of business combinations are measured at fair value at the acquisition date. Depending on the nature and materiality of the acquisition, land, buildings, and machines are basically valued based on an independent external expert report. Intangible assets are, according to their nature and due to the complexity of identifying the fair values, measured based on reports of independent external experts or internally, applying adequate valuation methods. Any non-controlling (minority) interests in the acquiree are recognized at the non-controlling (minority) interests' proportionate share in the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred.

Potential contingent considerations are measured at fair value at the acquisition date. Additional changes in contingent consideration classified as asset or liability are also measured at fair value, and the resulting profit or loss is recognized in the profit for the year.

The excess of the consideration transferred and the amount of the non-controlling (minority) interest in the acquiree over the fair value of identifiable net assets acquired shall be capitalized as goodwill. After repeated assessment, negative goodwill shall be recognized directly in the income statement.

4 DISCRETIONARY DECISIONS, ASSUMPTIONS, AND ESTIMATES

The consolidated financial statements and the notes thereto are prepared in accordance with generally accepted accounting and recognition standards of IFRS using estimates and assumptions for certain items which affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the balance sheet date as well as the reported amounts of revenues and expenses during the reporting period and the reported values at the balance sheet date. In the process of applying the Group's accounting policies, management makes various judgments and actual values may ultimately differ from these assumptions and estimates. Estimates are obtained carefully and underlying assumptions are constantly monitored and prospectively recognized. These assumptions are based on past experience and other factors including expectations about future events that could have a financial impact on the Group and are applied appropriately under given circumstances.

The consolidated financial statements and notes thereto include the following material items, the determination of whose carrying amounts is highly dependent on the underlying assumptions and estimates:

Useful life of non-current assets

Property, plant and equipment as well as acquired intangible assets are recognized at acquisition and manufacturing costs and are depreciated/amortized on a straight-line basis over their estimated useful lives. The estimation of useful lives is based on assumptions concerning wear and tear, aging, technical standards, contract periods, and changes in demand. Changes in these factors may cause a reduction of the useful life of an asset. Hence, the carrying amount would be depreciated/amortized over the remaining shorter useful life, resulting in higher annual depreciation/amortization expenses (see note 6).

Bilanzierung von Unternehmenserwerben

As a consequence of company acquisitions a goodwill is reported in the consolidated balance sheet, or a negative goodwill is recognized directly in the income statement after repeated assessment. As part of the initial consolidation of a company acquisition, all identifiable assets, liabilities, and contingent liabilities are recognized at fair value as of the effective acquisition date. The valuation of intangible assets is in particular based on the forecast of the total expected cash flows and strongly depends on the management's assumptions regarding future developments and the underlying developments of the discount rate to be applied (see note 5).

Impairment of assets

Goodwill is tested for impairment in the course of an annual impairment test. Furthermore, a recoverability evaluation of fixed assets is performed whenever events that have occurred or circumstances that have changed indicate that the carrying amount of an asset or a group of assets exceeds its recoverable amount. In the course of this impairment test, the evaluation of fixed assets is also based on budget, assessments of market or company-specific discount rates, expected annual growth rates, and EBITDA margin/costs development. The assumptions involved in these calculations may change and may lead to an impairment loss in future periods (see note 6).

Other intangible assets

The Group is obliged to redeem CO₂ emission rights for carbon dioxide emissions incurred during cartonboard and paper production.

These emission rights have partly been allocated free of charge to the Group within the European Union and Norway. If this allocation is not sufficient to cover the volume of CO₂ emissions caused by the respective facility, the Group acquires further certificates on the market.

CO₂ emission rights are recognized in accordance with IAS 38 "Intangible Assets" as intangible assets in "Prepaid expenses and other current assets", measured at cost if they are acquired in return for payment. If the rights have been allocated free of charge, they are measured at cost amounting to zero. If actual carbon dioxide emissions exceed the amount of available emission rights in the course of the reporting period at the balance sheet date, a provision for the missing certificates has to be accounted for, which is presented under the position "Provisions for current liabilities and charges" (see note 18).

Only expenses from the use of certificates acquired in return for payment, for emissions for which no CO₂ certificates are yet available, as well as income from the sale of redundant emission rights are recorded in the income statement.

Income taxes

The Group operates in numerous countries and is therefore subject to a wide range of tax laws in numerous tax jurisdictions. Calculating global tax liabilities requires comprehensive assessments that may result in the actual outcome of such tax-related uncertainties differing from the original estimate and in consequences for tax liabilities and deferred taxes (see note 9).

Realization of deferred tax assets

Deferred taxes are calculated by applying the tax rates which are effective on the balance sheet date or have essentially been legally adopted and which are expected to be valid at the time of realization of a deferred tax asset or the settlement of a deferred tax liability as well as by evaluating the capacity of future taxable income. Future taxable results which differ from the assumptions may result in the fact that the realization of deferred tax assets becomes improbable, and a change in estimate of deferred tax assets for the respective assets has to be recorded (see note 9).

Duration of leases

The Group determines the duration of the lease based on the non-cancellable base term of the lease as well as by including the period arising from an option to extend the lease. When assessing whether there is sufficient certainty that the option to extend or terminate the lease is exercised or not, discretionary decisions are made. All relevant factors representing an economic incentive are considered. These are scrutinized and re-evaluated as circumstances change, which can result in an adjustment of the lease term and thus in adjustments of the lease liability and the right-of-use asset. The relevant assumptions for determining the useful life of significant leased offices and warehouses with unlimited agreements were adopted according to strategic objectives, location and costs (see note 14).

Provisions for pensions, severance payments, and anniversary bonuses

The actuarial calculation of obligations regarding pensions, severance payments, and anniversary bonuses is based on assumptions about discount rates, salary and pension adjustments, life expectancy, and retirement age. Additionally, the probable employee turnover depending on the years of service is used for assessing anniversary bonuses. Actual outcomes may be different from these assumptions due to changes in the economic environment and market conditions and, as a consequence, can result in a significant change in non-current provision as well as equity (see note 15).

Other provisions

The use and valuation of other provisions is based on the best possible estimation of probability of the future resources outflow as well as experience and known circumstances as of the balance sheet date. Therefore, the actual realized resources outflow can differ from the provision amount reported on the balance sheet date (see note 15 and 18).

5 CHANGES IN THE CONSOLIDATED COMPANIES AND OTHER SIGNIFICANT EVENTS

5.1 Changes in the consolidated companies in 2021

In August 2021, the MM Board & Paper division acquired 100 % of the shares in Kotkamills Group Oyj ("Kotkamills"), located in Kotka, Finland. MM Kotkamills operates one of the most modern virgin fiber board machines in Europe (built 2016) as well as a Saturating Kraft Paper machine and a sawmill.

The acquisition strengthens MM's position in the virgin fiber-based board market (FBB) with an attractive range of barrier board solutions that can replace PE (polyethylene)-coated board. In addition, MM enters the growing market for cartonboard for paper cups (cupstock). The acquisition complements MM's established market position in recycled cartonboard. Furthermore, MM diversifies its product offering with Saturating Kraft Paper, in which Kotkamills is one of the leading producers worldwide. The medium-term goal is to increase the sales volume to the capacity of approximately 400,000 tons of cartonboard per year and exploit synergy potential.

The closing of the acquisition was completed on August 2, 2021. The purchase price paid in cash amounts to thous. EUR 203,097 and was financed by issuing Schuldschein loans and Namensschuldverschreibungen.

Furthermore, MM repaid a loan in the amount of thous. EUR 28,621 for Kotkamills on the closing date. In addition, the loans of the previous shareholders (in total thous. EUR 164,987) were taken over by MM.

The preliminary fair values of the acquired assets and liabilities according to IFRS at the acquisition date are as follows:

(in thousands of EUR)	Aug. 2, 2021
Property, plant and equipment	213,296
Intangible assets	39,371
Deferred tax assets	7,828
Inventories	38,548
Trade receivables	15,619
Prepaid expenses and other current assets	32,104
Cash and cash equivalents	29,195
Deferred tax liabilities	(11,317)
Provisions for non-current liabilities and charges	(1,342)
Financial liabilities	(210,582)
Trade liabilities	(44,650)
Prepaid expenses, other current liabilities and provisions	(32,066)
Net assets	76,004
Goodwill	127,093

The fair values of buildings, machinery and technical equipment were determined by an independent external expert using a cost-based approach based on replacement costs.

The fair values of land and land rights were determined using the comparison approach, assuming that they were vacant and available as of the valuation date.

Intangible assets include, in particular, a customer relationship in an amount of thous. EUR 39,057, based on long-term customer relations and amortized over a useful life of approximately 9 years.

The acquired CO₂ emission certificates were valued according to a market approach, resulting in "other assets" in the amount of thous. EUR 5,095, which is reported under the line item "Prepaid expenses and other current assets". At the same time, a provision in the amount of thous. EUR 8,408 was recognized for CO₂ emissions in 2021 until the acquisition date.

Trade receivables comprise gross amounts of contractual receivables amounting to thous. EUR 15,700, of which thous. EUR 81 are estimated as presumably irrecoverable, resulting in a fair value of thous. EUR 15,619. For prepaid expenses and other current assets in the amount of thous. EUR 27,009 the fair values correspond to the gross amounts. Due to the short-term nature of the receivables, the Group assumes that the future cash flows correspond to the fair value. The Group has not recognized any contingent liabilities in the course of the transaction.

The remaining goodwill of thous. EUR 127,093 mainly reflects the strengthening of MM's market position in the virgin fiber cartonboard sector as well as expected synergies from the diversification and expansion of the portfolio. Recognized goodwill is not deductible for tax purposes.

Of the acquisition-related costs amounting to thous. EUR 7,377, thous. EUR 3,187 were recorded as expense in the financial year 2020 and thous. EUR 4,190 in the financial year 2021 and reported under administrative expenses in the consolidated income statement.

Sales and profit before tax from the time the business belonged to the Group and the division in the financial year 2021 amounted to thous. EUR 172,973 and thous. EUR 6,704, respectively. Profit before tax was impacted by a one-off effect of thous. EUR 1,342 resulting from the valuation of inventories performed in the course of the purchase price allocation and recognized in cost of sales. If the business combination had been concluded on January 1, 2021, Kotkamills would have additionally contributed approximately EUR 257 million to the Group's sales or approximately EUR 10 million to the Group's profit before tax.

The purchase price allocation had not yet been fully completed as of the balance sheet date, in particular with regard to acquired property, plant and equipment. This process is, however, not expected to result in any further significant changes.

In August 2021, the MM Board & Paper division acquired 100 % of the shares in International Paper (Poland) Holding Sp. z o. o ("Kwidzyn") from International Paper. At the integrated pulp and paper site in Poland, Kwidzyn operates a pulp mill with an annual capacity of approximately 400,000 tons and four integrated cartonboard/paper machines. The flagship is a virgin fiber-based board machine with a capacity of 260,000 tons p. a.. In addition, MM Kwidzyn has entered the market for MF kraft paper with a paper machine to meet the growing demand for flexible fiber-based packaging products with an annual capacity of 75,000 tons. Furthermore, Kwidzyn operates two of the most attractive copy paper machines (UWF) in Europe with a total annual capacity of 410,000 tons.

The acquisition will strengthen MM Board & Paper's competitive position in the attractive market for high-quality virgin fiber-based cartonboard with innovative, sustainable qualities as well as more efficiency compared to the two market leaders and complement the established market position in recycled fiber-based cartonboard. The entry into new business areas and the integration of pulp and paper at one site additionally create new perspectives. The aim is also to use the advantageous cost position for further growth in Folding Box Board or other packaging grades and to exploit synergy potential.

The closing of the acquisition was completed on August 6, 2021. The purchase price paid in cash amounts to thous. EUR 676,475 and was financed by committed credit lines from banks and the issuance of Schuldschein loans and Namensschuldverschreibungen. In addition to a fixed base amount, the calculation is based on the net financial liabilities and the net current assets.

The preliminary fair values of the acquired assets and liabilities according to IFRS at the acquisition date are as follows:

(in thousands of EUR)	Aug. 6, 2021
Property, plant and equipment	267,268
Intangible assets	98,727
Deferred tax assets	12,688
Inventories	67,889
Trade receivables	40,415
Prepaid expenses and other current assets	9,467
Cash and cash equivalents	38,552
Non-controlling (minority) interests	(475)
Deferred tax liabilities	(40,036)
Provisions for non-current liabilities and charges	(19,992)
Financial liabilities	(25,444)
Trade liabilities	(53,543)
Prepaid expenses, other current liabilities and provisions	(29,221)
Net assets	366,295
Goodwill	310,180

Real estate was valued by external independent appraisers at fair value using either a market-based or income-based approach depending on available market data.

The fair values of assets related to cartonboard production were determined by an independent external appraiser using a cost-based approach based on replacement costs.

The intangible assets include, in particular, a customer relationship in an amount of thous. EUR 98,716, based on long-term customer relations and amortized over a useful life of up to 10 years.

Trade receivables include gross amounts of contractual receivables of thous. EUR 40,730, of which thous. EUR 315 are estimated as presumably irrecoverable, resulting in a fair value of thous. EUR 40,415. For prepaid expenses and other assets in the amount of thous. EUR 9,467 the fair values correspond to the gross amounts. Due to the short-term nature of the receivables, the Group assumes that the future cash flows correspond to the fair value. The Group has not recognized any contingent liabilities in the course of the transaction.

In the course of the acquisition, a current provision in the amount of thous. EUR 13,496 was recognized for the amount representing CO₂ emissions in 2021 until the acquisition date and a non-current provision for environmental measures in the amount of thous. EUR 12,672 was recognized.

The non-controlling (minority) interests of thous. EUR 475 have been determined as a proportionate share of the identifiable net assets of the respective subsidiary.

The remaining goodwill of thous. EUR 310,180 mainly reflects the strengthening of MM's market position in the virgin fiber-based cartonboard sector as well as expected synergies from the diversification and expansion of the portfolio. Recognized goodwill is not deductible for tax purposes.

Of the acquisition-related costs amounting to thous. EUR 13,964, thous. EUR 343 were recorded as expense in the financial year 2020 and thous. EUR 13,621 in the financial year 2021 and reported under administrative expenses in the consolidated income statement.

Sales and profit before tax from the time the business belonged to the Group and the division amounted to thous. EUR 242,365 and thous. EUR -1,323, respectively, in the financial year 2021. Profit before tax was impacted by a one-off effect of thous. EUR 7,200 resulting from the valuation of inventories performed in the course of the purchase price allocation and recognized in cost of sales. If the business combination had been concluded on January 1, 2021, Kwidzyn would have additionally contributed approximately EUR 263 million to the Group's sales and approximately EUR 12 million to the Group's profit before tax.

The purchase price allocation had not yet been fully completed as of the balance sheet date, in particular with regard to acquired property, plant and equipment. This process is, however, not expected to result in any further significant changes.

In order to finance these acquisitions, Mayr-Melnhof Karton AG has taken out loans in the form of Schuldschein loans and Namensschuldverschreibungen (see note 14.1).

In August 2021, the MM Board & Paper division sold 100 % of the shares in the virgin fiber-based cartonboard mills Mayr-Melnhof Eerbeek B.V., Netherlands, and Baiersbronn Frischfaser Karton GmbH, Germany, to a subsidiary of funds managed by Oaktree Capital Management, L.P. for a purchase price of thous. EUR 110,501. In addition, the buyer settled the existing intercompany loan and cash pool liabilities in the amount of thous. EUR 41,749 to MM. The sale is in line with MM's strategy to focus on new acquisitions and growth investments. The Eerbeek and Baiersbronn mills together have an annual capacity of approximately 245,000 tons of virgin fiber-based cartonboard produced on two cartonboard machines and employ around 400 people. In 2020, sales of approximately EUR 195 million were generated.

From these disposals a total income before tax in the amount of thous. EUR 55,545 was recognized in the financial year 2021, which was offset by disposal and subsequent costs of thous. EUR 9,370 (see note 20).

The assets and liabilities transferred at the date of disposal are as follows:

(in thousands of EUR)	Aug. 2, 2021
Property, plant and equipment	(80,046)
Intangible assets	(385)
Deferred tax assets	(3,542)
Inventories	(26,760)
Trade receivables	(29,840)
Prepaid expenses and other current assets	(3,386)
Cash and cash equivalents	(4,646)
Provisions for non-current liabilities and charges	10,438
Financial liabilities	1,200
Trade liabilities	25,748
Prepaid expenses, other current liabilities and provisions	56,263
Net assets	(54,956)

In addition, there were further insignificant changes in individual subsidiaries (see note 33).

5.2 Changes in the consolidated companies in 2020

With the exception of immaterial changes at individual subsidiaries, there were no changes in the consolidated companies in the financial year 2020.

5.3 Other significant events in 2021

After the shutdown of a rotogravure printing line at the Bielefeld site had already been planned in the 4th quarter of 2020, the division MM Packaging now completed the closure of the Bielefeld site of MM Graphia Bielefeld GmbH in 2021 due to necessary market-related structural adjustment measures. This mainly resulted in expenses for impairment of inventories and for the social plan, which impacted the Group's profit before tax in the amount of thous. EUR 20,111. Furthermore, carrying amounts of thous. EUR 5,076 were reclassified to "Non-current assets held for sale".

In addition, there were other restructuring measures which were not of significance for the Group.

5.4 Other significant events in 2020

Restructuring measures in 2020

In both divisions, restructuring measures were taken at individual sites in 2020.

In the cartonboard division, the 70-year-old, uncompetitive cartonboard machine at Mayr-Melnhof Karton GmbH's site in Hirschwang, Austria, was decommissioned at the beginning of November due to high upcoming expenses that were not justifiable. In the course of the discontinuation of production, impairment losses had to be recognized on the site's property, plant and equipment, and intangible assets as well as inventories. A social plan was negotiated in connection with the necessary staff reductions. In addition, expenses arose from post-closure obligations for inherited liabilities. Total expenses amounting to thous. EUR 23,486 arose from the closure of the cartonboard mill in Hirschwang. In this context, non-current assets in the amount of thous. EUR 5,230, mainly technical equipment and machinery, were classified as held for sale and reclassified accordingly.

Structural adjustment measures were announced in the packaging division, among others, at MM Graphia Bielefeld GmbH in Bielefeld and at R + S Stanzformen GmbH in Niederdorfelden, both in Germany.

With the planned discontinuation of a rotogravure printing line in Bielefeld, the Group intended to focus on its high-performance sites for this printing technology. This resulted in expenses mainly for impairment losses on property, plant and equipment, and inventories. In addition, there was a reduction in the number of employees, for whom a social plan was negotiated. The Group's result was burdened with thous. EUR 6,702 from this decommissioning.

At R + S, the Group itself has produced cutting dies as tools for use in the packaging division so far. This production was discontinued, resulting mainly in expenses for impairment of property, plant and equipment, and inventories as well as for a social plan. This plant closure caused expenses in the amount of thous. EUR 5,871.

In addition, there were other restructuring measures which were not material for the Group.

Other significant events in 2020

In February 2020, a fire in Hirschwang irreparably destroyed a large warehouse building and inventories therein. In this context, Neupack Ges. m. b. H. in the packaging division received an insurance compensation of thous. EUR 8,750.

As a result of the termination agreement with the former chairman of the Management Board, a total of thous. EUR 7,206 was booked in administrative expenses, equally divided within the divisions.

6 DEVELOPMENT OF FIXED ASSETS

6.1 Property, plant and equipment including leases

Property, plant and equipment

Property, plant and equipment are recognized at acquisition or manufacturing cost less accumulated depreciation and impairment. Depreciation expense is recognized applying the straight-line method over the following estimated useful lives:

Buildings	10 – 50 years
Technical equipment and machines	3 – 20 years
Other equipment, fixtures and fittings	3 – 20 years

The Group capitalizes significant renewal investments and leasehold improvements. Generally, costs resulting in a prolongation of utilization or in an increase in future utilization of assets are capitalized. Current costs of maintenance and repairs are recognized as expenses as incurred.

The costs of internally generated assets include the respective direct costs as well as attributable material and manufacturing overhead costs including depreciation.

Development of property, plant and equipment 2021

(in thousands of EUR)	Lands, similar land rights and buildings	Technical equipment and machines	Other equipment, fixtures and fittings	Construction in progress	Property, plant and equipment
ACQUISITION OR MANUFACTURING COSTS:					
Balance at Jan. 1, 2021	666,801	1,818,669	186,049	74,552	2,746,071
Effect of exchange rate changes	1,101	(7,101)	(786)	328	(6,458)
Changes in consolidated companies	104,685	114,272	(2,520)	2,488	218,925
Additions	15,264	72,233	9,074	151,225	247,796
Disposals	(20,609)	(46,957)	(14,970)	(35)	(82,571)
Reclassifications	659	39,640	(16,091)	(79,119)	(54,911)
Balance at Dec. 31, 2021	767,901	1,990,756	160,756	149,439	3,068,852
ACCUMULATED DEPRECIATION AND IMPAIRMENT:					
Balance at Jan. 1, 2021	312,301	1,292,788	143,303	1,207	1,749,599
Effect of exchange rate changes	738	(4,253)	(400)	0	(3,915)
Changes in consolidated companies	(21,692)	(154,107)	(5,795)	0	(181,594)
Disposals	(17,988)	(46,457)	(12,373)	(10)	(76,828)
Depreciation/amortization expense for the year	23,881	97,062	13,184	0	134,127
Impairments	0	0	0	0	0
Reclassifications	(9,551)	(14,667)	(18,350)	0	(42,568)
Balance at Dec. 31, 2021	287,689	1,170,366	119,569	1,197	1,578,821
NET BOOK VALUE:					
Net book value at Dec. 31, 2021	480,212	820,390	41,187	148,242	1,490,031
Net book value at Dec. 31, 2020	354,500	525,881	42,746	73,345	996,472

Development of property, plant and equipment 2020

(in thousands of EUR)	Lands, similar land rights and buildings	Technical equipment and machines	Other equipment, fixtures and fittings	Construction in progress	Property, plant and equipment
ACQUISITION OR MANUFACTURING COSTS:					
Balance at Jan. 1, 2020	669,816	1,819,449	190,085	78,676	2,758,026
Effect of exchange rate changes	(14,229)	(34,797)	(3,269)	(951)	(53,246)
Additions	9,364	61,784	10,640	66,976	148,764
Disposals	(2,635)	(18,303)	(7,638)	(804)	(29,380)
Reclassifications	4,485	(9,464)	(3,769)	(69,345)	(78,093)
Balance at Dec. 31, 2020	666,801	1,818,669	186,049	74,552	2,746,071
ACCUMULATED DEPRECIATION AND IMPAIRMENT:					
Balance at Jan. 1, 2020	294,171	1,286,173	143,211	0	1,723,555
Effect of exchange rate changes	(4,099)	(20,914)	(2,156)	0	(27,169)
Disposals	(1,931)	(17,034)	(6,904)	(18)	(25,887)
Depreciation/amortization expense for the year	22,213	89,394	13,821	0	125,428
Impairments	12,667	14,898	933	1,225	29,723
Reclassifications	(10,720)	(59,729)	(5,602)	0	(76,051)
Balance at Dec. 31, 2020	312,301	1,292,788	143,303	1,207	1,749,599
NET BOOK VALUE:					
Net book value at Dec. 31, 2020	354,500	525,881	42,746	73,345	996,472
Net book value at Dec. 31, 2019	375,645	533,276	46,874	78,676	1,034,471

Leases

The Group is a lessee of leases. The tables present additional information for the right-of-use assets by classes of underlying assets:

(in thousands of EUR)	Lands, similar land rights and buildings	Technical equipment and machines	Other equipment, fixtures and fittings	Property, plant and equipment
Balance at Jan. 1, 2021	43,934	2,600	1,576	48,110
Effect of exchange rate changes	34	(138)	65	(39)
Changes in consolidated companies	35,258	5,707	695	41,660
Additions	3,055	2,689	100	5,844
Disposals	(19)	(54)	(43)	(116)
Depreciation/amortization expense for the year	(7,169)	(2,236)	(943)	(10,348)
Reclassifications	33	(33)	167	167
Balance at Dec. 31, 2021	75,126	8,535	1,617	85,278

(in thousands of EUR)	Lands, similar land rights and buildings	Technical equipment and machines	Other equipment, fixtures and fittings	Property, plant and equipment
Balance at Jan. 1, 2020	51,469	3,363	1,743	56,575
Effect of exchange rate changes	(283)	(88)	(26)	(397)
Additions	990	736	802	2,528
Disposals	(575)	(142)	(99)	(816)
Depreciation/amortization expense for the year	(6,667)	(1,269)	(844)	(8,780)
Reclassifications	(1,000)	0	0	(1,000)
Balance at Dec. 31, 2020	43,934	2,600	1,576	48,110

Disposals of the right-of-use assets also include contract adjustments and changes in term assumptions.

6.2 Intangible assets including goodwill

Intangible assets acquired for valuable consideration which are determined to have a finite useful life are capitalized at acquisition cost and amortized on a straight-line basis over the following estimated useful lives:

Concessions, licenses and similar rights	5 – 10 years
Customer relationships and other intangible assets	5 – 21 years

Amortization of intangible assets is recognized based on the nature of the respective intangible assets in cost of sales, selling and distribution as well as administrative expenses.

Development of intangible assets including goodwill 2021

(in thousands of EUR)	Concessions, licenses and similar rights	Goodwill	Customer relationships and other intangible assets	Intangible assets including goodwill
ACQUISITION OR MANUFACTURING COSTS:				
Balance at Jan. 1, 2021	67,296	243,508	139,648	450,452
Effect of exchange rate changes	(347)	(2,984)	(1,817)	(5,148)
Changes in consolidated companies	(556)	437,273	137,793	574,510
Additions	4,517	0	0	4,517
Disposals	(6,492)	0	(3,784)	(10,276)
Reclassifications	7,314	0	17	7,331
Balance at Dec. 31, 2021	71,732	677,797	271,857	1,021,386
ACCUMULATED DEPRECIATION AND IMPAIRMENT:				
Balance at Jan. 1, 2021	57,646	9,040	37,419	104,105
Effect of exchange rate changes	(324)	(2)	(1,068)	(1,394)
Changes in consolidated companies	(550)	0	0	(550)
Disposals	(6,490)	0	(3,784)	(10,274)
Depreciation/amortization expense for the year	3,399	0	11,427	14,826
Impairments	0	0	0	0
Reclassifications	(137)	0	17	(120)
Balance at Dec. 31, 2021	53,544	9,038	44,011	106,593
NET BOOK VALUE:				
Net book value at Dec. 31, 2021	18,188	668,759	227,846	914,793
Net book value at Dec. 31, 2020	9,650	234,468	102,229	346,347

Development of intangible assets including goodwill 2020

(in thousands of EUR)	Concessions, licenses and similar rights	Goodwill	Customer relationships and other intangible assets	Intangible assets including goodwill
ACQUISITION OR MANUFACTURING COSTS:				
Balance at Jan. 1, 2020	66,825	245,898	144,282	457,005
Effect of exchange rate changes	(298)	(2,390)	(1,348)	(4,036)
Additions	2,222	0	0	2,222
Disposals	(418)	0	(3,286)	(3,704)
Reclassifications	(1,035)	0	0	(1,035)
Balance at Dec. 31, 2020	67,296	243,508	139,648	450,452
ACCUMULATED DEPRECIATION AND IMPAIRMENT:				
Balance at Jan. 1, 2020	56,569	9,048	32,392	98,009
Effect of exchange rate changes	(215)	(8)	(1,198)	(1,421)
Disposals	(413)	0	(3,286)	(3,699)
Depreciation/amortization expense for the year	2,805	0	7,731	10,536
Impairments	14	0	1,780	1,794
Reclassifications	(1,114)	0	0	(1,114)
Balance at Dec. 31, 2020	57,646	9,040	37,419	104,105
NET BOOK VALUE:				
Net book value at Dec. 31, 2020	9,650	234,468	102,229	346,347
Net book value at Dec. 31, 2019	10,256	236,850	111,890	358,996

In the financial year 2021, depreciation, amortization and impairment expenses recorded under “Property, plant and equipment” and “Intangible assets including goodwill” amounted to thous. EUR 148,953 (2020: thous. EUR 167,481). The amortization and impairment of the position “Intangible assets including goodwill” is recorded mainly for assets related to customer relationships and is included in selling and distribution expenses as well as for software licences which are recognized in cost of sales, selling and distribution as well as administration expenses.

There was no pledge right implied on the Group's property to secure the liabilities.

6.3 Recoverability of non-current assets

A recoverability evaluation of non-current assets is performed as soon as events have occurred or circumstances have changed, indicating that the carrying amount of an asset or a group of assets could exceed its recoverable amount. In such a case, the carrying amount of the asset or the group of assets is compared to the higher of fair value less costs to sell or its present value of estimated future cash flows from use of the asset. The impairment loss resulting from the comparison of the carrying amounts with the recoverable amount is allocated proportionally to the assets based on the carrying amounts of each asset. The individual assets are not to be reduced below their fair value less costs to sell. If the reason for an impairment no longer exists, a reversal has to be conducted.

Property, plant and equipment and intangible assets with a finite useful life

Property, plant and equipment and intangible assets with a finite useful life are recognized at acquisition or manufacturing cost less accumulated depreciation and impairment and depreciated over their useful lives. Based on external and internal information sources, the Group monitors events and changed circumstances indicating that those assets could have been impaired (e. g., technical or physical obsolescence of assets or unscheduled downtimes as well as changed economic circumstances).

As soon as such events have occurred or circumstances have changed, value in use is determined for the concerned subsidiary based on the present value of estimated future cash flows (Free Cash Flows) before taxes using the discounted cash flow method. If and when necessary, external expert opinions for determining the fair value less costs to sell are additionally obtained. If, based on this procedure and these underlying assumptions, the recoverable amount (value in use or fair value less costs to sell) is lower than the respective book value of the group of assets, the difference is recorded as impairment.

In 2021 and 2020, the Group assessed whether there was any indication of impairment of assets due to the Covid-19 pandemic and the associated uncertainties. Both external and internal sources of information were used for the analysis. Based on the currently available information, the Group does not expect any material negative effects on the future cash flows of its operating divisions MM Board & Paper and MM Packaging.

Based on currently available estimates and assumptions, impairment losses of thous. EUR 2,395 had to be recorded in connection with “non-current assets available for sale” from the Hirschwang shutdown (see note 5.4). In the previous year, impairment losses of thous. EUR 31,517 had to be recorded, of which thous. EUR 29,723 were related to property, plant and equipment and were mainly recognized in cost of sales, while thous. EUR 1,794 were related to intangible assets and had to be recognized in selling expenses.

Goodwill

Goodwill is recognized at acquisition cost and is not amortized but tested for impairment on an annual basis as of December 31 or when there is an indication that a significant impairment may exist.

Goodwill allocation

Goodwill within the Group is monitored at the level of the operating segments MM Board & Paper and MM Packaging (see note 19). The impairment test is carried out at this organizational level. Goodwill is allocated to the operating segments as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Goodwill MM Board & Paper	439,484	4,612
Goodwill MM Packaging	229,275	229,856
Goodwill Group	668,759	234,468

Any possible impairment will be recorded in the amount by which the book value of the respective operating segment including the respective goodwill assigned to this segment exceeds the recoverable amount. The recoverable amount is defined as the higher of value in use and fair value less cost to sell of the Group's respective cash generating units. For the impairment test, the respective recoverable amount is determined based on the calculation of value in use for each operating segment.

Calculation of value in use

Value in use is determined for the respective operating segment based on the present value of estimated future cash flows (Free Cash Flows) before taxes using the discounted cash flow method (DCF method) based on the following underlying assumptions (parameters):

Discount rate	The discount rate represents the weighted average cost of capital (WACC) of the Group before taxes, and, for the current financial year, it amounts to 9.46 % (2020: 9.95 %) for the segment MM Board & Paper and to 12.25 % (2020: 12.90 %) for the segment MM Packaging. Cost of equity is derived from a general risk premium for which the Group's specific risk premium is taken into consideration by applying the beta factor as well as country-specific risk indicators. The beta factor and cost of debt are derived from peer-group capital market information.
The detailed forecast period	The detailed forecast period is five years (2020: five years). The last planned year is also used for the cash flow calculation hereafter and modified using further assumptions for the terminal value.
Free Cash Flow	The free cash flows in the detailed forecast period are based on the estimates of the medium-term corporate planning of the two segments, which was approved by the Supervisory Board. This includes assumptions about volume and earnings developments which were derived from external forecasts, historical experience, and internal management projections of the market environment, such as material and selling prices, and internal input factors, such as investment and personnel planning.
Growth rate	For the free cash flows after the five year detailed forecast period a continuous growth rate of 1.5 % p. a. (2020: 1.5 % p. a.) including a retention rate is considered.
EBITDA margin/Cost development	Based on the expectation of the Company, a stable EBITDA margin and fixed cost development is assumed. Planned capital expenditures are offset by depreciation and amortization in an appropriate amount.

If, based on this procedure and these underlying assumptions, the recoverable amount (value in use) is determined to be lower than the respective book value of the cash generating operating segment including the respective goodwill assigned, the difference is recorded as impairment.

The Group has conducted its annual impairment test as of December 31, 2021 and December 31, 2020. Neither in 2021 nor in 2020 an impairment on goodwill was recognized on this basis.

Sensitivity of underlying assumptions

Regarding the underlying parameters for calculating the value in use, the above stated assumptions were met. From today's perspective, after due deliberation, no significant changes of one or more underlying assumptions used for determining the value in use of both operating segments are expected, which would result in the book value of the respective operating segments including goodwill assigned to this segment exceeding the recoverable amount in the following financial year.

The respective pre-tax discount rate according to which the value in use would equal the book value as of December 31, 2021 amounts to 11.28 % (December 31, 2020: 17.91 %) for the operating segment MM Board & Paper and to 14.69 % (December 31, 2020: 17.63 %) for the operating segment MM Packaging.

A decrease in free cash flows by 5.0 % points or in growth rate by 0.5 % points would not have led to any impairment, neither as of December 31, 2021 nor as of December 31, 2020, for both operating segments.

As of December 31, 2021 the Group's market capitalization amounted to thous. EUR 3,532,000 (December 31, 2020: thous. EUR 3,300,000) and the book value of equity amounted to thous. EUR 1,661,878 (December 31, 2020: thous. EUR 1,547,098).

7 FINANCIAL INSTRUMENTS DISCLOSURES

7.1 Classification and measurement of financial instruments

Financial instruments comprise financial assets and financial liabilities and are recognized in different categories which determine the respective measurement method and thus also the resulting type of income and expense. Below, the financial instruments are assigned to the respective categories. Afterwards, the carrying amounts included in the balance sheet that correspond to the respective categories are presented. In conclusion, the income and expenses resulting from the different categories are shown.

Financial assets of the Group comprise securities, other financial assets, loans, trade receivables, other receivables and assets (except for certain positions which do not represent financial instruments, such as receivables regarding taxes and other charges), cash and cash equivalents as well as derivative financial instruments with a positive balance.

Financial assets are classified and measured as follows:

Category	Examples in MM Group
At amortized cost	Trade receivables, cash and cash equivalents
At fair value through other comprehensive income	–
At fair value through profit or loss	Derivatives

The categories of financial assets are explained in greater detail below.

A financial asset shall be measured at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Group classifies trade accounts receivable and all other financial receivables in this category. In addition, all cash and cash equivalents, such as fixed deposits, are classified in this measurement category.

A debt instrument that meets the following two conditions is measured at fair value through other comprehensive income (as items that will subsequently be reclassified to the income statement):

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Group does not hold debt instruments that are measured at fair value through other comprehensive income.

A financial asset that is not measured at amortized cost or at fair value through other comprehensive income shall be valued at fair value through profit or loss. This includes, for example, debt instruments held which do not meet the two business model conditions (e. g., trading portfolio) and/or whose cash flows are not solely payments of principal and interest.

Investments in equity instruments (shareholdings) are basically measured at fair value through profit or loss, if, at their initial recognition, they are not irrevocably designated as at fair value through other comprehensive income, provided that they are not held for trading. However, in limited circumstances, cost may be an appropriate estimate of fair value for (non-listed) equity instruments. This may be the case if insufficient current information is available to measure fair value or if there is a wide range of possible fair value measurements and cost represents the best estimate of fair value within that range. In the Group, there are equity investments in unconsolidated companies. In general, these are to be measured at fair value. The acquisition costs, however, represent an appropriate estimate of fair value. Due to the minor importance of these entities, particularly with regard to their low business volume and their significance for the Group, fair value has not been calculated.

In the Group, derivative financial assets with a positive fair value and certain securities are classified as at fair value through profit or loss.

Recognition and derecognition

A regular purchase or sale of financial assets is recognized using the trade date, i. e. the day on which the Group commits itself to purchasing or selling the asset. Financial assets are derecognized when the rights for payment have been transferred or expired and the Group has transferred considerable risks and rewards associated with ownership.

Measurement

Financial assets classified in the category “at amortized cost” are initially measured at fair value plus transaction costs. At their initial recognition, trade receivables are measured at their transaction price, if they do not contain a significant financing component. In the Group, financial assets are not valued in accordance with the effective interest rate method, thus there is no result recorded from this method in the comprehensive income.

Financial assets classified as “at fair value through profit or loss” are first measured at their fair value; associated transaction costs are directly recognized in profit and loss.

In subsequent periods, financial assets are evaluated either at amortized costs or at their fair value through profit and loss.

Impairment

Financial assets are assessed at the end of each reporting period to determine whether an impairment exists. The impairment model of IFRS 9 is based on the premise of providing for expected losses. The Group has implemented a framework for determining simplified expected credit losses from trade receivables in accordance with IFRS 9, which provides reliable results by using suitable parameters based on historical defaults. A detailed description of the model can be found in this note under section c) under credit and default risk.

The Group considers the other financial assets as insignificant regarding a potential impairment.

Financial liabilities of the Group comprise interest-bearing financial liabilities, lease liabilities, trade liabilities, other liabilities (except for certain positions which do not represent financial instruments, such as liabilities regarding taxes and other charges) as well as derivative financial liabilities with a negative balance.

Financial liabilities are classified and measured as follows:

Category	Examples in MM Group
At fair value through profit or loss	Derivatives
At amortized cost	Financial liabilities, trade liabilities

Financial liabilities measured at fair value through profit and loss are initially recorded at their fair value, transaction costs are directly recognized in profit and loss. At their initial recognition, financial liabilities valued at amortized cost are measured at their fair value net of transaction costs.

In subsequent periods, financial liabilities are evaluated either at amortized costs, using the effective interest method, or at their fair value through profit and loss.

The following table shows in which category financial assets included in the balance sheet are recognized respectively by which method these financial instruments are measured:

	At fair value through profit and loss	At amortized cost ²⁾	Total
(in thousands of EUR)	Carrying amount at Dec. 31, 2021		
Securities and other financial assets ¹⁾	1,840	905	2,745
Trade receivables	0	541,603	541,603
Other receivables and assets incl. derivatives ³⁾	4,441	15,304	19,745
Cash and cash equivalents	0	359,546	359,546
Total	6,281	917,358	923,639
	Carrying amount at Dec. 31, 2020		
Securities and other financial assets ¹⁾	1,774	936	2,710
Trade receivables	0	415,804	415,804
Other receivables and assets incl. derivatives ³⁾	2,663	8,128	10,791
Cash and cash equivalents	0	146,241	146,241
Total	4,437	571,109	575,546

¹⁾ For measurement of "other financial assets" classified as "at fair value through profit and loss", see note 7.6.

²⁾ The reported amounts regarding financial assets measured at amortized cost represent a proper approximation to the fair value.

³⁾ see note 12

The following table shows in which category financial liabilities included in the balance sheet are recognized respectively by which method these financial instruments are measured:

	At fair value through profit and loss	At amortized cost ¹⁾	Total
(in thousands of EUR)	Carrying amount at Dec. 31, 2021		
Interest-bearing financial liabilities	0	1,338,312	1,338,312
Lease liabilities	0	84,765	84,765
Trade liabilities	0	437,726	437,726
Other liabilities incl. derivatives ²⁾	5,957	23,624	29,581
Total	5,957	1,884,427	1,890,384
	Carrying amount at Dec. 31, 2020		
Interest-bearing financial liabilities	0	221,792	221,792
Lease liabilities	0	46,634	46,634
Trade liabilities	0	220,437	220,437
Other liabilities incl. derivatives ²⁾	2,625	9,812	12,437
Total	2,625	498,675	501,300

¹⁾ The reported amounts regarding financial liabilities measured at amortized cost represent a proper approximation to the fair value. The fair value of fixed-interest financial liabilities can be found in note 14.1.

²⁾ see note 17

The following table shows the types of income and expenses from financial assets assigned to categories and measurement methods, respectively:

	At fair value through profit and loss	At amortized cost	Total
(in thousands of EUR)	Income and expense 2021		
In profit for the year	2,364	2,474	4,838
Interest/dividends received	606	3,319	3,925
Fair value/carrying amount changes	1,758	(845)	913
In other comprehensive income	0	0	0
Change in fair value	0	0	0
Net profit/loss	2,364	2,474	4,838
	Income and expense 2020		
In profit for the year	1,351	1,341	2,692
Interest/dividends received	344	1,712	2,056
Fair value/carrying amount changes	1,007	(371)	636
In other comprehensive income	0	0	0
Change in fair value	0	0	0
Net profit/loss	1,351	1,341	2,692

All income and expenses are recognized in the income statement.

The following table shows the types of income and expenses from financial liabilities assigned to categories and measurement methods, respectively:

	At fair value through profit and loss	At amortized cost	Total
(in thousands of EUR)			
Income and expense 2021			
In profit for the year	(3,332)	(24,068)	(27,400)
Interest	0	(24,369)	(24,369)
Fair value/carrying amount changes	(3,332)	301	(3,031)
Net profit/loss	(3,332)	(24,068)	(27,400)
Income and expense 2020			
In profit for the year	(785)	(7,698)	(8,483)
Interest	0	(7,863)	(7,863)
Fair value/carrying amount changes	(785)	165	(620)
Net profit/loss	(785)	(7,698)	(8,483)

7.2 Factoring

The Group recognizes factoring transactions for the first time in connection with the acquisition of MM Kotkamills. Thereby, trade receivables are transferred to a bank against cash and cash equivalents. The receivables were not fully derecognized, as all opportunities and risks associated with the sold receivables were neither transferred nor retained (allocation of significant opportunities and risks between MM and the bank). The assessment of risks resulting from the receivables sold is based on partially retained default risk and late payment risk. MM continues to perform receivables management (servicing) for the receivables sold. MM retains control of the receivables.

The Group continues to recognize the trade receivables sold in the amount of its continuing involvement and reports a corresponding associated liability. The amounts mainly correspond to the maximum retention of thous. EUR 4,972 (December 31, 2020: thous. EUR 0). At the balance sheet date, trade receivables related to the factoring agreement amount to thous. EUR 49,718 (December 31, 2020: thous. EUR 0) prior to the transfer.

7.3 Derivatives

The Group recognizes derivative financial instruments as financial assets or liabilities measured at their fair value. These hedging relationships established to secure cash flows or fair values related to single underlying transactions reduce the currency risk in the Group.

Thereby foreign exchange forward, swap and option contracts are used in order to mitigate the short-term effects of exchange rate fluctuations.

The most important foreign currencies for which the Group protects itself against fluctuation effects are the British Pound, the US Dollar as well as the Euro for the companies with functional currencies other than the Euro. The changes in market values of these derivatives are recognized in "Foreign currency exchange rate gains (losses) – net" (see note 27). The settlement of these transactions and the trade are generally executed by Corporate Treasury.

As of December 31, 2021, the Group had concluded foreign exchange forward and swap contracts with a nominal value of receivables of thous. EUR 357,917 (December 31, 2020: thous. EUR 205,290) and liabilities of thous. EUR 359,310 (December 31, 2020: thous. EUR 205,072) with negative total market value of thous. EUR 1,516 (December 31, 2020: positive total market value of thous. EUR 38).

The derivative financial instruments are recorded in the consolidated balance sheet under "Prepaid expenses and other current assets" as current assets in the amount of thous. EUR 4,441 (December 31, 2020: thous. EUR 2,663) and under "Deferred income and other current liabilities" as current liabilities in the amount of thous. EUR 5,957 (December 31, 2020: thous. EUR 2,625).

As there is no hedge accounting in the MM Group, the corresponding rules in accordance with IFRS 9 are not applied.

7.4 Financial Risk Management

The Group is exposed to various financial risks arising from its operating activities and the structure of its financing. These financial risks include primarily credit risk, liquidity risk, currency risk, and risk of interest rate changes. These risks are limited using centralized risk management which is applied throughout the Group. The identification, analysis, and evaluation of financial risks as well as the decisions concerning the application of financial instruments to manage these risks are basically carried out by the Group's headquarters.

Credit and default risk

Credit risk is the risk arising from a non-fulfillment of contractual obligations by business partners, which may result in losses. The immanent risk of default of business partners resulting from the underlying transaction is widely hedged in the Group by credit risk insurance, bank guarantees, and letters of credit. The criteria to be applied for credit ratings are based on contractual agreements with credit insurance institutions and are defined by internal guidelines.

Credit and default risks are continuously monitored; existing and identifiable risks are provided for by recording appropriate allowances or provisions. For the assessment of the overall risk, existing insurance coverage, possible guarantees, and letters of credit are taken into consideration. Financial instruments which may in certain cases cause a concentration of financial risks within the Group comprise primarily cash and cash equivalents and trade receivables. Trade receivables derive from a broad and diversified customer base with different credit ratings. The financial risk arising from customers

is monitored by ongoing credit rating assessments. Additionally, the Group concludes credit insurance contracts in order to cover losses arising from certain potentially non-collectible receivables and goods that have already been produced.

Furthermore, the Group forms allowances based on the expected loss of the total volume of receivables. If trade accounts receivable are insured against default and if an allowance becomes necessary, only the amount not covered by insurance is to be recognized. The Group reports single or specific lump-sum allowances, respectively at Group level the expected credit loss model according to IFRS 9 is applied. The impairment model is based on the premise of providing for expected losses. The Group has implemented a framework for determining simplified expected credit losses from trade receivables in accordance with IFRS 9, which provides reliable results by using suitable parameters based on historical defaults. For the measurement, the Group applies a simplified approach using an allowance matrix which considers probability-weighted total credit losses ("life-time expected credit loss model"). The calculation of estimated expected credit losses is based on actual credit loss experiences over the past four years separately for the regions Europe, the Americas, as well as Asia and MENA. The inclusion of forward-looking information in the determination is taken into account by using CDS spreads for the calculation, as they reflect the future default risk. The Group considers the other financial assets as insignificant in view of a potential impairment.

As a result of the broad and diversified customer base and the existing credit insurance contracts, there is no concentrated risk of default. There are mainly trade receivables against customers with credit insurance and customers with very good creditworthiness; accordingly, bad debt losses were insignificant in the past.

The Group also uses foreign exchange forward, swap and option contracts. All the respective contract partners are renowned international financial institutions with which the Group has ongoing business relations. Therefore, the Group considers the risk of non-fulfillment by a contract partner and the related risk of loss as low.

Money market investments are concluded with corporate banks with investment-grade ratings.

The carrying amounts of financial assets reflect the theoretical maximum default risk.

Liquidity risk

The liquidity risk is referred to as the risk of having to raise the required funds at any time in order to settle the amounts payable in due course. The Group's financing policy is oriented towards long-term financial planning and is managed centrally and monitored constantly. Based on well-timed liquidity management, sufficient liquidity of all the Group's subsidiaries is provided for by the availability of adequate cash and cash equivalents as well as unused credit lines available. The companies of the MM Group are financed mostly internally. Consequently, inter-company credit lines and a cash-pooling system with financial limits are available. Liquidity risk is thus assessed as low.

The following table shows the undiscounted future cash outflows arising from interest-bearing financial liabilities, lease liabilities, trade liabilities, payment obligations and payment entitlements arising from derivative financial instruments as well as interest for interest-bearing financial liabilities and lease liabilities based on the remaining maturity as of the balance sheet date or referred to the contractually agreed maturity.

(in thousands of EUR)	Up to 3 months	3 months up to 1 year	1 – 2 years	2 – 5 years	Over 5 years
Balance at Dec. 31, 2021					
Interest-bearing financial liabilities	22,607	40,609	96	324,500	950,500
Interest for interest-bearing financial liabilities	14,577	6,285	20,734	58,224	98,838
Lease liabilities	3,466	7,321	9,444	14,468	50,066
Interest for lease liabilities	593	1,722	2,119	5,532	45,914
Trade liabilities	423,493	14,233	0	0	0
Payment obligations from derivative financial instruments	359,310	0	0	0	0
Payment entitlements for derivative financial instruments	(357,917)	0	0	0	0
Balance at Dec. 31, 2020					
Interest-bearing financial liabilities	2,484	43,359	23,685	102,264	50,000
Interest for interest-bearing financial liabilities	217	3,305	3,345	7,301	1,350
Lease liabilities	1,973	5,099	5,562	11,254	22,746
Interest for lease liabilities	362	1,011	1,209	2,907	12,745
Trade liabilities	212,470	7,951	16	0	0
Payment obligations from derivative financial instruments	196,311	8,761	0	0	0
Payment entitlements for derivative financial instruments	(196,571)	(8,719)	0	0	0

Currency risk

Currency risk is the risk arising from changes in the value of financial instruments due to exchange rate fluctuations. This risk exists when business transactions are processed in currencies other than the functional (local) currency of the Company. This is particularly the case for business relations to customers and suppliers in the British Pound, the US Dollar and the Euro, from the perspective of companies which do not have the Euro as their functional currency. The respective currency risks are, as far as possible, reduced by matching business transactions in similar currencies and by price adjustment mechanisms in longer-term agreements as well as foreign exchange forward, swap and option contracts.

Provided that currencies related to current and non-current financial receivables and financial liabilities as of December 31, 2021 (December 31, 2020) stated below changed by the below-stated percentage ("volatility"), assuming that all other variables remained constant, the profit for the year and hence equity would have increased or decreased by the following values.

Currency	Volatility	Impact on profit for the year and equity in thousands of EUR	
		2021	2020
EUR ¹⁾	+/- 5 %	-/+ 1,565	-/+ 425
GBP	+/- 5 %	+ /- 194	+/- 143
USD	+/- 5 %	- /+ 121	-/+ 63

¹⁾ From the perspective of companies which do not have the Euro as functional currency.

Interest rate risk

The interest rate risk is referred to as the risk arising from changes in market interest rates which can result in a fluctuation of the values of balance sheet items or a fluctuation in cash flows. For balance sheet items with fixed interest, the risk consists mainly in fluctuations in value (price risk); when the market interest rate changes, the (present) value of financial instruments with fixed interest payments will also change. Due to these value fluctuations, profit or loss can arise; these are particularly realized when the financial instrument is sold before maturity. For balance sheet items with a variable interest rate, there is mainly the risk of fluctuating cash flows. In case the market interest rate changes, the amount of interest receivable or payable from financial instruments with variable interest payments will also change. Such changes would alter the ongoing interest payments and thus also interest income and expense. As of December 31, 2021, the Group is financed via financial liabilities with variable as well as fixed interest rates and holds almost only financial assets with variable interest rates.

If the interest rates as of December 31, 2021 (December 31, 2020) had been higher or lower by ten basis points (i.e. 0.1 %), assuming that all other variables remained constant, the profit for the year and hence equity would have increased or decreased for the whole year as follows:

	Change in interest rate	Impact on profit for the year and equity in thousands of EUR	
		2021	2020
Financial assets with variable interest	+/- 0.1 %	+/- 53	+/- 39
Financial liabilities with variable interest	+/- 0.1 %	-/+ 273	-/+ 103

7.5 Capital management

Capital employed includes the equity of the Group and interest-bearing financial liabilities less cash and cash equivalents.

Capital management aims in particular at ensuring an equity to total assets ratio that is appropriate for the long-term economic development of the Group, taking into consideration a continuous dividend policy, as well as to ensure the necessary liquidity reserves

Equity and total assets as of December 31, 2021 and December 31, 2020 amounted to:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Total equity	1,661,878	1,547,098
Total assets	4,014,218	2,399,570
Equity ratio	41.4 %	64.5 %

The aim of capital management is an equity ratio ranging from 35 % to 50 %. The Company fulfills legal and statutory minimum capital requirements. Mayr-Melnhof Karton AG is subject to the minimum capital requirements of the Austrian Stock Corporation Act. The Articles of Association do not stipulate capital requirements.

Net debt is calculated as of December 31, 2021 and December 31, 2020 as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Cash and cash equivalents	359,546	146,241
Financial liabilities	(1,423,077)	(268,426)
Net debt	(1,063,531)	(122,185)

There are financial covenants partly agreed on with lenders for the interest-bearing financial liabilities. The financial covenants are mainly related to the equity ratio and the net debt to EBITDA ratio. Mayr-Melnhof Karton AG has complied with all of these clauses in the financial year.

7.6 Measurement at fair value

The amounts of financial assets and financial liabilities which are recognized at fair value are as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Financial assets:		
Derivative financial instruments (level 2)	4,441	2,663
Securities (level 1)	350	371
Financial liabilities:		
Derivative financial instruments (level 2)	5,957	2,625

Measurement methods

The Group applies the following hierarchy to determine the measurement method and to identify the fair value of financial instruments, depending on the availability of information about market prices:

Availability of information, sorted by level	Measurement method used
Level 1 – Quoted market prices are available	Measurement based on quoted market prices for similar financial instruments
Level 2 – Quoted market prices for identical instruments are not available, but all necessary measurement inputs can be derived from active markets	Measurement based on measurement methods using directly or indirectly observable market data

The fair value of securities (level 1 measurement) is determined based on the prices quoted on active markets.

The fair value of derivative financial instruments (level 2 measurement) is mostly determined on the basis of spot prices as of the balance sheet date, taking into account forward premiums or discounts with relevant maturity.

In general, there are also financial instruments measured at fair value using parameters for which no observable market data exist (level 3 measurement). There are currently no financial instruments for which this measurement method would be applicable in the Group.

As of December 31, 2021 other financial assets classified as “at fair value through profit or loss” include investments in unconsolidated companies in the amount of thous. EUR 1,490 (December 31, 2020: thous. EUR 1,403). In general, these must be measured at fair value. However, cost represents an appropriate estimate of fair value. Due to the minor importance of these entities, particularly with regard to their low business volume and their significance to the Group, fair value has not been calculated.

8 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD, SECURITIES, AND OTHER FINANCIAL ASSETS

Investments in associated companies

Investments in associated companies in which the Group has the ability to exercise significant influence, but no dominant control over their operating and financial policies are accounted for using the equity method and are primarily recognized at their acquisition costs. This is generally the case when the voting interest is between 20 % and 50 %. Additionally, the Group also has investments in associated companies which are not measured using the equity method. In general, these are to be measured at fair value. The acquisition costs, however, represent an appropriate estimate of the fair value or the amount is immaterial for the Group.

Investments in joint ventures

Investments in joint ventures are accounted for using the equity method and are primarily recognized at their acquisition costs. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Securities

The Group measures its securities mostly at fair value through profit and loss. Premiums and accretions of discount of debt securities are allocated over their maturity period and are included in the income statement under the positions “financial income” or “financial expenses”.

Securities are to be classified as non-current if they are not going to be sold or not intended to be sold within 12 months of the balance sheet date. Otherwise, they must be classified as current. Currently the Group does not hold any current securities.

Other financial assets

Other financial assets comprise other investments, loans, and other financial investments. Other investments are defined as part of the category “at fair value through profit and loss”. Cost represents an appropriate estimate of the fair value and the amount is of low significance for the Group, however.

The carrying amounts of investments in associated companies and joint ventures, non-current securities, and other financial assets consist of:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Investments in associated companies	2,497	2,057
Investments in joint ventures	3,173	2,637
Other investments	1,490	1,403
Liability insurance not pledged to beneficiaries	784	813
Non-current securities	471	494
Investments accounted for using the equity method, securities and other financial assets	8,415	7,404

As of December 31, 2021 non-current securities of the Group comprised investment funds and fixed-interest-bearing securities in the amount of thous. EUR 471 (December 31, 2020: thous. EUR 494).

The Group holds 45 % of shares in Société Tunisienne des Emballages Modernes (STEM), Tunis, Tunisia (see note 33). The shares in this company represent an individually immaterial associated company that is accounted for using the equity method.

The Group holds 40 % of shares in Zhejiang TF Special Papers Co., Ltd., Quzhou City, China (see note 33). Decisions on relevant activities must be made unanimously. The shares in this company thus represent a joint venture that is individually immaterial and accounted for using the equity method.

The following table summarizes the financial information:

(in thousands of EUR)	Investments in associated companies		Investments in joint ventures	
	2021	2020	2021	2020
Share of result for the year ¹⁾	491	74	229	210
Share of other comprehensive income ²⁾	23	(121)	307	(94)
Share of total comprehensive income	514	(47)	536	116
Total carrying amounts of the Group's shares	2,440	1,925	3,173	2,637

¹⁾ recognized in "other financial result - net"

²⁾ share of foreign currency translations in the consolidated comprehensive income statement

9 INCOME TAXES

Income taxes are recognized in profit and loss unless they are associated with positions directly recognized in equity or other comprehensive income of total comprehensive income. In this case, income taxes are also recorded in equity or other comprehensive income of total comprehensive income.

Current tax expense of the period comprises current and deferred taxes and is recognized according to the tax regulations of the countries in which the subsidiaries are active and obtain their taxable income.

Deferred tax assets and liabilities are recognized for all temporary differences between tax and the consolidated balance sheet. Deferred taxes are evaluated using the tax rates which are already in force on the balance sheet date or which have essentially been legally adopted and which are expected to be valid at the time of realization of the deferred tax asset or the settlement of deferred tax liability. Deferred tax assets are recognized only if there is a probability that sufficient taxable profit will be available for the utilization of the deductible temporary differences. Unrecognized deferred tax entitlements are reassessed at every balance sheet date. If losses are incurred in the current period or have been incurred in the previous period, deferred tax assets are only recognized in case of objective evidence of a future taxable result, as, for example, following an internal reorganization of subsidiaries.

Deferred tax liabilities arising from temporary differences related to investments in subsidiaries, joint ventures and associated companies are recognized unless the Group is able to control the date of reversal and it is probable that these temporary differences will not be reversed in the foreseeable future due to this influence. This is the case for dividends within the Group that are subject to withholding tax or that are not covered by the international participation exemption, for example.

Deferred tax assets will be offset with deferred tax liabilities only if the entity has the legal right to settle on a net basis, if they are related to income taxes, and if they are levied by the same tax authority on the same taxable entity or different taxable entities that intend to realize the asset and settle the liability at the same time. This applies, in particular, to subsidiaries that are part of the Austrian tax group or to entities of the MM Group that are part of a tax unity.

The effect of tax rate changes on deferred tax assets and liabilities is recognized as income tax expense or in the consolidated comprehensive income statement in the period of a tax rate change.

9.1 Deferred taxes recognized in the balance sheet

Deferred tax assets and liabilities due to temporary differences and tax loss carryforwards recognized in the balance sheet as of the balance sheet dates are as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Intangible assets	1,411	1,772
Property, plant and equipment	9,415	10,862
Inventories	11,582	7,591
Defined benefit plans and other liabilities and charges	24,908	28,870
Loans receivable, investments and securities	9,445	2,372
Loss carryforwards	10,187	11,614
Interest carryforwards	10,057	0
Financial liabilities	19,134	12,079
Trade and other liabilities	7,997	2,791
Other	4,173	1,431
Gross deferred tax assets	108,309	79,382
Unrecognized deferred tax assets	(5,054)	(8,907)
Net deferred tax assets	103,255	70,475
Offset	(56,492)	(22,775)
Deferred tax assets in the balance sheet	46,763	47,700
Intangible assets	(58,925)	(25,913)
Property, plant and equipment	(55,086)	(22,831)
Inventories	(811)	(1,108)
Defined benefit plans and other liabilities and charges	(5,612)	(4,919)
Trade and other liabilities	(3,380)	(1,179)
Other	(3,164)	(5,509)
Net deferred tax liabilities	(126,978)	(61,459)
Offset	56,492	22,775
Deferred tax liabilities in the balance sheet	(70,486)	(38,684)

The interest carryforwards result from previously unused interest expenses due to the interest barrier regulation in Finland. The unrecognized deferred tax assets in the amount of thous. EUR 5,054 (December 31, 2020: thous. EUR 8,907) comprise thous. EUR 4,661 (December 31, 2020: thous. EUR 7,904) of unrecognized loss carryforwards.

The following table shows the expected realization of deferred tax assets and liabilities:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Deferred tax assets, realized within 12 months	29,889	15,194
Deferred tax assets, realized after 12 months	73,366	55,281
Deferred tax assets	103,255	70,475
Deferred tax liabilities, realized within 12 months	(8,828)	(3,433)
Deferred tax liabilities, realized after 12 months	(118,150)	(58,026)
Deferred tax liabilities	(126,978)	(61,459)

Deferred tax liabilities which result from the difference between the tax carrying amount of investments and pro-rata equity (Outside-Basis-Differences) were not recognized for certain subsidiaries and investments in joint ventures and associated companies, as it is probable that this temporary difference will not be dissolved in the near future. These retained earnings amounted to thous. EUR 1,325,648 at December 31, 2021 (December 31, 2020: thous. EUR 1,226,492). For retained earnings which are intended for distribution, the valuation of deferred tax liabilities was adjusted according to the applicable capital gains and withholding taxes on profit distribution.

The Group is exposed to various risks arising from its operating activities as well as from national and international regulations. After detailed analyses of potential risks, the Group assumes that due to the lack of predictability regarding the assessment by tax authorities in Austria and abroad, these uncertainties have been sufficiently covered at the time of preparing the financial statements.

9.2 Tax loss carryforwards

An overview of the Group's tax loss carryforwards as of the respective balance sheet dates is presented below:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Loss carryforwards with expiration	13,964	21,074
Loss carryforwards with no expiration	24,889	28,463
Loss carryforwards	38,853	49,537

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Recognized loss carryforwards	22,324	14,997
Unrecognized loss carryforwards	16,529	34,540
Loss carryforwards	38,853	49,537

The loss carryforwards limited in time will expire between 2022 and 2026 unless they are utilized before these dates.

The assessment of the recognition of loss carryforwards showed that for thous. EUR 22,324 (December 31, 2020: thous. EUR 14,997) deferred tax assets amounting to thous. EUR 5,524 (December 31, 2020: thous. EUR 3,710) were recognized. For the remaining amount of thous. EUR 16,529 (December 31, 2020: thous. EUR 34,540), deferred tax assets amounting to thous. EUR 4,661 (December 31, 2020: thous. EUR 7,904) were not recorded in the balance sheet. The expiry dates of this unrecognized loss carryforwards are as follows:

(in thousands of EUR)	2021	2020
1 year	2,126	2,571
2 years	1,544	2,516
3 years	2,422	5,607
4 years	1,003	2,494
5 years	1,597	6,228
After 5 years	3,376	1,170
No expiration	4,461	13,954
Total	16,529	34,540

9.3 “Income tax expense” recognized in the income statement

The position “income tax expense” is comprised as follows:

(in thousands of EUR)	2021	2020
Current taxes:		
Current period	56,745	63,240
Due to utilization of previously unrecognized loss carryforwards	(1,939)	(285)
Prior periods	32	1,222
Deferred taxes:		
Due to temporary differences	(128)	(3,827)
Due to tax credits and interest carryforwards	(57)	0
Due to tax loss carryforwards of the current period	(1,538)	(285)
Due to utilization of recognized loss carryforwards	2,207	503
Due to tax loss carryforwards of previous periods and changes in recoverability	(966)	(243)
Due to changes in estimates of deferred tax assets	(420)	0
Due to tax rate changes	(88)	(481)
Income tax expense	53,848	59,844

9.4 Tax effects on “Other comprehensive income”

The basis for the amount of income taxes affecting directly to other comprehensive income is the gain from actuarial effects from defined benefit plans and foreign currency translations on net investments booked in 2021 amounting to thous. EUR 4,457 (2020: losses of thous. EUR 5,225). Thereon income taxes amounting to thous. EUR -47 (2020: positive amount of thous. EUR 2,164), were recognized for the financial year 2021. As a result, gains from actuarial effects from defined benefit plans and from foreign currency translations after tax amounted to thous. EUR 4,410 (2020: losses of thous. EUR 3,061).

9.5 Group tax rate

Reconciliation from the applicable tax rate which results from the geographical allocation of income and the applicable nominal tax rates of the respective tax jurisdictions to the effective tax rate, which burdens the profit before tax is as follows:

(in thousands of EUR)	2021	2020
Profit before tax	244,549	222,074
Theoretical tax expense 25 %	61,137	55,519
Foreign tax rate adjustments	(2,536)	(1,271)
Non-deductible expenses and tax-free income	(12,492)	130
Unrecognized loss carryforwards of the financial year	505	1,459
Recognition of loss carryforwards of previous years	(941)	(297)
Utilization of unrecognized loss carryforwards	(1,939)	(285)
Changes of estimates of deferred tax assets	(420)	0
Capital gains and withholding tax	5,272	1,496
Tax rate changes	(88)	(481)
Non-periodic income tax expense or revenue (current and deferred)	3,773	3,541
Other effects	1,577	33
Income tax expense recognized	53,848	59,844
Effective tax rate	22.02 %	26.95 %

10 INVENTORIES

Inventories are valued at the lower of acquisition or manufacturing costs and the net realizable value. The net realizable value is based on expected selling prices and takes into consideration remaining costs of completion as well as estimated selling and distribution expenses. In order to determine purchase costs of raw materials, manufacturing and operating supplies as well as goods for resale, a weighted average price method, taking into consideration the sales market, is primarily applied in the division MM Board & Paper. In the packaging division, the purchase costs of raw materials, manufacturing and operating supplies as well as goods for resale are basically recognized using the actual sequence of consumption (specific identification method). The value of raw materials, manufacturing and operating supplies recognized in the balance sheet is based on data from physical stock-taking or from the inventory management system. The devaluation of raw materials, manufacturing and operating supplies depends on each individual case.

Work in process and finished goods consist of direct costs, such as material and labor costs, and material and production overheads as well as administrative costs. Write-downs for slow moving and obsolete inventories are recognized considering the storage period and sales situation.

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Raw materials, manufacturing and operating supplies	300,446	202,889
Work in process	31,778	26,746
Finished goods and goods for resale	205,315	156,119
Total	537,539	385,754
Write-downs	(60,276)	(36,133)
Inventories – net	477,263	349,621

In the financial year 2021, write-downs of inventories recognized as an expense amounted to thous. EUR 9,445 (2020: thous. EUR 9,485) the reversal of write-downs of inventories recognized as income amounted to thous. EUR 1,111 (2020: thous. EUR 1,655), both under cost of goods sold. The carrying amount of inventories carried at net realizable value amounted to thous. EUR 28,692 (December 31, 2020: thous. EUR 8,340).

Cost of materials and purchased services recognized in cost of goods sold presented in the Group's income statement can be broken down as follows:

(in thousands of EUR)	2021	2020
Cost of materials	1,759,135	1,288,624
Cost of purchased services	39,495	29,264
Total	1,798,630	1,317,888

11 TRADE RECEIVABLES

Receivables are accounted for at amortized cost, i. e. at par value less allowances.

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Trade receivables	544,182	417,274
Allowances	(2,579)	(1,470)
Trade receivables – net	541,603	415,804

As of December 31, 2021 und December 31, 2020, the aging of trade receivables overdue but not impaired is as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Up to 30 days overdue	9,105	5,306
31 – 60 days overdue	6,140	3,400
61 – 365 days overdue	5,509	2,317
More than 365 days overdue	172	265
Total of trade receivables overdue but not impaired	20,926	11,288

For an explanation of the criteria which were considered for the determination of the allowances please refer to the remarks on credit and default risk (see note 7).

Allowances for trade receivables developed as follows:

(in thousands of EUR)	2021	2020
Allowances at the beginning of the year	1,470	1,391
Effect of exchange rate changes	16	(41)
Changes in consolidated companies	391	0
Utilization	(143)	(251)
Reversal	(458)	(124)
Increase	1,303	495
Allowances at the end of the year	2,579	1,470

12 PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets are as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Value-added tax receivables	42,964	19,652
Prepaid expenses	25,267	10,989
Payments on account of property, plant and equipment and inventory	19,163	9,540
Other tax receivables	14,879	14,639
Derivative assets	4,441	2,663
Other receivables and other assets	30,093	15,110
Prepaid expenses and other current assets	136,807	72,593
Thereof financial assets	19,745	10,791
Thereof non-financial assets	117,062	61,802

The change in the line item “Other receivables and other assets” is mainly due to the assets from CO₂ emission certificates recognized in connection with the acquisition of Kotkamills (see note 5.1) and receivables from factoring transactions.

13 EQUITY

13.1 Share capital/additional paid-in capital

Ordinary shares are classified as equity.

As in the previous year, the fully-paid share capital of the Company amounts to thous. EUR 80,000 and comprises 20,000,000 approved and issued no-par value shares. One no-par value share grants a calculated share of EUR 4.00 in share capital. Each share participates equally in equity and grants the same rights and responsibilities, especially the entitlement to resolved dividends and the voting right at the Ordinary Shareholder’s Meeting. There are neither any different share classes nor shares with special control rights.

Additional paid-in capital derives from the share premium raised at the capital increase in the course of the initial public offer in 1994 and the cancelation of treasury shares less the increase of share capital by conversion of additional paid-in capital in 2008 and 2010, representing the amount of the tied capital reserve.

13.2 Retained earnings/dividend

Retained earnings comprise accumulated results from previous years.

Under the Austrian Stock Corporation Act, the amount of dividend available for distribution to share-holders is based on the unappropriated retained earnings from the annual financial statements of Mayr-Melnhof Karton AG, determined in accordance with the Austrian Commercial Code. As of December 31, 2021, the distributable unappropriated retained earnings amounted to thous. EUR 130,000 (December 31, 2020: thous. EUR 130,000).

Extract from the individual financial statements of Mayr-Melnhof Karton AG

(in thousands of EUR)	2021	2020
Unappropriated retained earnings at Jan. 1	130,000	75,000
Net profit of the Company for the year ended Dec. 31	101,181	132,106
Changes in reserves	(37,181)	(13,106)
Dividend paid	(64,000)	(64,000)
Unappropriated retained earnings at Dec. 31	130,000	130,000

For the year ended December 31, 2021, the Management Board has proposed to the Supervisory Board and subsequently to the Shareholders' Meeting a dividend of EUR 3.50 per voting share after EUR 3.20 for 2020, resulting in a dividend of thous. EUR 70,000 as of the balance sheet date of 2021. The dividend for 2020, amounting to thous. EUR 64,000, was paid out according to schedule on May 12, 2021 (see consolidated statement of changes in equity).

13.3 Non-controlling (minority) interests

Non-controlling (minority) interests comprise the interest in equity and total profit for the year attributable to external shareholders' investments in subsidiaries of Mayr-Melnhof Karton AG. The non-controlling (minority) interests as of the acquisition date are presented as part of net assets (equity) of the respective entity or businesses and are adjusted in the following period taking into consideration profit or loss attributable to the shareholders, dividend paid as well as paid-in or paid-out capital.

The summarized information about the subsidiaries in which the Group holds non-controlling (minority) interests is stated below. The disclosures correspond to the amounts before intra-group eliminations. Further information on these subsidiaries can be found in note 33.

(in thousands EUR)	Dec. 31, 2021		Dec. 31, 2020	
	MM Board & Paper	MM Packaging	MM Board & Paper	MM Packaging
Non-current assets	3,007	51,616	527	53,324
Current assets	10,913	68,349	3,109	59,702
Non-current liabilities	1,363	21,257	687	33,242
Current liabilities	4,470	28,681	1,319	16,809
Net assets	8,087	70,027	1,630	62,975
Carrying amount of the non-controlling (minority) interests	1,504	4,543	646	4,106

	2021		2020	
Sales	12,603	84,257	6,067	80,379
Profit for the year	2,091	16,394	524	11,480
Thereof attributable to non-controlling (minority) interests	498	1,029	178	864
Total comprehensive income	586	19,860	749	10,920
Thereof attributable to non-controlling (minority) interests	489	1,403	189	713
Dividend paid to non-controlling (minority) interests	105	1,115	247	949
Net change in cash and cash equivalents	2,110	8,709	0	561

13.4 Other comprehensive income of the consolidated comprehensive income statement

Other reserves comprise certain changes directly recognized in equity. These are in particular differences arising from foreign currency translation as well as actuarial gains and losses arising from the defined benefit pension and severance obligations, the latter after considering deferred income taxes.

In 2021, profit and loss recognized in other comprehensive income consisted of foreign currency translations with a negative amount of thous. EUR 9,557 (2020: negative amount of thous. EUR 59,690) as well as actuarial losses in the amount of thous. EUR 1,518 (2020: losses of thous. EUR 583). Thereon income taxes in the amount of thous. EUR -47 (2020: positive amount of thous. EUR 2,164) were recognized for the financial year 2021 (see note 9.4).

14 FINANCIAL LIABILITIES AND LEASES

Financial liabilities comprise interest-bearing financial liabilities and lease liabilities and are recognized at amortized cost. This amount is calculated as initially paid out nominal value less redemptions plus accrued interest.

The financial liabilities of the Group are as follows:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Non-current interest-bearing financial liabilities	1,275,096	175,949
Non-current lease liabilities	73,978	39,562
Non-current financial liabilities	1,349,074	215,511
Current interest-bearing financial liabilities	63,216	45,843
Current lease liabilities	10,787	7,072
Current financial liabilities	74,003	52,915
Financial liabilities	1,423,077	268,426

14.1 Interest-bearing financial liabilities

As of December 31, 2021 and December 31, 2020, interest-bearing financial liabilities comprised liabilities against banks and insurance companies. These financial liabilities at current interest rates can be summarized as follows:

(in thousands of EUR)	Dec. 31, 2021
0.618 % EUR loan(s) due 2022	59,980
6.082 % CNY loan(s) due 2022	629
6.012 % CNY loan(s) due 2023	96
1.800 % EUR loan(s) due 2024	80,000
0.507 % EUR loan(s) due 2025	20,000
1.528 % EUR loan(s) due 2026	224,500
1.400 % EUR loan(s) due 2028	396,000
1.600 % EUR loan(s) due 2031	218,500
1.900 % EUR loan(s) due 2033	51,000
2.000 % EUR loan(s) due 2035	17,500
2.100 % EUR loan(s) due 2036	142,500
1.882 % EUR loan(s) due 2039	125,000
Used loan facilities	2,607
Interest-bearing financial liabilities	1,338,312
Thereof non-current interest-bearing financial liabilities	1,275,096
Thereof current interest-bearing financial liabilities	63,216

(in thousands of EUR)	Dec. 31, 2020
0.596 % EUR loan(s) due 2021	42,674
6.082 % CNY loan(s) due 2021	685
0.806 % EUR loan(s) due 2022	23,000
6.082 % CNY loan(s) due 2022	685
6.473 % CNY loan(s) due 2023	2,138
1.811 % EUR loan(s) due 2024	80,000
5.715 % EUR loan(s) due 2024	126
0.552 % EUR loan(s) due 2025	20,000
2.673 % EUR loan(s) due 2026	50,000
Used loan facilities	2,484
Interest-bearing financial liabilities	221,792
Thereof non-current interest-bearing financial liabilities	175,949
Thereof current interest-bearing financial liabilities	45,843

As of December 31, 2021, the weighted average interest rate for these financial liabilities was 1.578 % (December 31, 2020: 1.614 %).

As of December 31, 2021, the Group had available current interest-bearing loan facilities in the amount of thous. EUR 2,607 (December 31, 2020: thous. EUR 2,484), of which thous. EUR 2,607 (December 31, 2020: thous. EUR 2,484) had been used as of the balance sheet date. As of December 31, 2021, the weighted average interest rate of these current loans, used by foreign subsidiaries, was 1.138 % (December 31, 2020: 1.279 %). These loans are subject to common banking terms and conditions.

At the end of February, Mayr-Melnhof Karton AG issued Schuldschein loans and Namensschuldverschreibungen in the amount of thous. EUR 1,000,000, which are subject to both fixed and variable interest rates over terms of 5 to 15 years with an average maturity of 8.8 years and an average interest rate of 1.5 %. In addition, further Namensschuldverschreibungen in the amount of thous. EUR 125,000 with a maturity of 18 years and a fixed interest rate of 1.88 % were issued at the end of September 2021. These loans serve to finance the acquisition of the mills in Kotkamills, Finland, and Kwidzyn, Poland, as well as organic growth projects.

Of the interest-bearing financial liabilities, loans in the amount of thous. EUR 1,065,725 (December 31, 2020: thous. EUR 118,328) are subject to a fixed interest rate, whose fair value amounts to thous. EUR 1,112,777 (December 31, 2020: thous. EUR 126,929). The calculation is based on the present value of future cash flows discounted by the currently observable yield curve (Level 2). Amortized costs represent a proper approximation to the fair value for financial liabilities subject to variable interest rates.

No collaterals were provided in order to secure the financial liabilities described above. As of December 31, 2021, the Group had unused non-current credit lines available in the amount of thous. EUR 470,000 (December 31, 2020: thous. EUR 900,000).

As of December 31, 2021, the current revolving bank credits in an amount of thous. EUR 37,980 (December 31, 2020: thous. EUR 37,980) are included in the interest-bearing financial liabilities.

14.2 Leases

The Group is predominantly the lessee in lease transactions. Leases are recognized as right-of-use asset and a corresponding liability at the date at which the leased asset has become available for use by the Group.

Lease liabilities with a term of more than twelve months are measured at the present value of the remaining lease payments.

In principle, the implicit interest rate based on the lease contract is applied, if it can be determined. Otherwise, leases are discounted using the lessee's incremental borrowing rate, i. e. the interest rate that a lessee would have to pay for comparable transactions.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are not recognized on the balance sheet, but as an expense. Lease contracts with terms of up to 12 months are classified as short-term leases.

The Group mainly rents and leases buildings, land, warehouses, offices, and other facilities that are necessary for the operating business. Extension and termination options are included in a number of property and equipment leases. The Group has assessed these and considered them accordingly. These contract conditions are used to maximise operational flexibility in terms of managing assets used in the Group's operations. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

An overview of the lease liabilities recognized in the balance sheet as of December 31, 2021 and December 31, 2020 is presented below:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Non-current lease liabilities	73,978	39,562
Current lease liabilities	10,787	7,072
Lease liabilities	84,765	46,634

Total cash outflows for leases in 2021 were thous. EUR 10,851 (2020: thous. EUR 9,907).

Expenses related to payments not included in the measurement of the lease liability are as follows:

(in thousands of EUR)	2021	2020
Expenses related to variable lease payments	5,563	5,283
Expenses related to short-term leases	2,194	1,414
Expenses related to leases of low value assets	621	526

15 PROVISIONS FOR NON-CURRENT LIABILITIES AND CHARGES

Defined benefit pension obligations and other benefits related to severance obligations are valued actuarially in accordance with IAS 19 “Employee benefits” using the projected unit credit method. The present value of defined benefit obligations is calculated based on the years of service, the anticipated development of the employee’s compensation as well as the enacted contractual and statutory pension revaluation requirements. The service cost is recognized in personnel cost; the net interest cost for the provisions is recognized in “other financial result – net”. Actuarial gains and losses as well as gains from plan assets, excluding the amounts which are already included in the net interest on net liability, are recognized in other comprehensive income in the statement of comprehensive income in accordance with IAS 19.

Provisions for anniversary bonuses are valued actuarially for non-current obligations against employees related to the number of years of their service based on collective or plant bargaining agreements using the projected unit credit method. The service cost is recognized in personnel cost; the net interest cost for the provisions is recognized in “other financial result – net”. Actuarial gains and losses are recognized in the income statement in accordance with IAS 19.

Provisions for pre-retirement programs are accrued upon conclusion of individual contractual agreements as well as for probable pre-retirement agreements in the future, if employees have the right to participate in pre-retirement programs based on plant bargaining agreements or collective agreements. Statutory deposits of securities for covering pre-retirement programs are netted with the provisions for pre-retirement programs, provided that they meet the definition of plan assets.

The item “Other” mainly includes post-closure obligations for inherited liabilities and obligations for environmental measures.

15.1 Development of provisions for non-current liabilities and charges

In the financial year 2021, provisions for non-current liabilities and charges developed as follows:

(in thousands of EUR)	Pensions	Severance	Anniversary bonuses	Pre-retirement programs	Other	Total
Balance at Jan. 1, 2021	81,960	37,284	13,806	317	9,634	143,001
Effect of exchange rate changes	1,003	(751)	0	0	(95)	157
Changes in consolidated companies	(3,739)	7,290	(727)	(224)	8,265	10,865
Reclassifications	0	0	0	0	103	103
Utilization	(4,335)	(4,502)	(608)	0	(427)	(9,872)
Reversal	(37)	(4)	(261)	0	(3)	(305)
Increase	1,884	2,059	990	315	189	5,437
IAS 19 remeasurements through other comprehensive income	581	1,422	0	0	0	2,003
Benefit payments from and contributions to plan assets	(1,555)	0	0	0	0	(1,555)
Balance at Dec. 31, 2021	75,762	42,798	13,200	408	17,666	149,834

In 2020, provisions for non-current liabilities and charges developed as follows:

(in thousands of EUR)	Pensions	Severance	Anniversary bonuses	Pre-retirement programs	Other	Total
Balance at Jan. 1, 2020	85,010	44,113	14,933	576	2,907	147,539
Effect of exchange rate changes	(810)	(450)	0	0	0	(1,260)
Reclassifications	0	0	(36)	0	2,816	2,780
Utilization	(4,780)	(9,998)	(1,048)	(368)	(5)	(16,199)
Reversal	0	0	(2,020)	0	(699)	(2,719)
Increase	2,083	2,628	1,977	109	4,615	11,412
IAS 19 remeasurements through other comprehensive income	(411)	991	0	0	0	580
Benefit payments from and contributions to plan assets	868	0	0	0	0	868
Balance at Dec. 31, 2020	81,960	37,284	13,806	317	9,634	143,001

As of December 31, 2021, securities with a fair value of thous. EUR 954 (December 31, 2020: thous. EUR 1,356) have been provided as security for provisions for pre-retirement programs within the scope of the respective legal commitments. At December 31, 2021 and December 31, 2020, those securities were deducted as plan assets from the underlying obligations.

The change in the position "Other" mainly results from changes in consolidated companies, of which thous. EUR 12,921 relate to additions to obligations for environmental measures in connection with the acquisition of Kotkamills and Kwidzyn (see note 5) and thous. EUR -4,656 to disposals from the deconsolidation of Eerbeek and Baiersbronn.

15.2 Provisions for pensions and severance payments

The majority of the Group's employees are covered by government-sponsored pension and welfare programs, whereas the Group makes periodic payments to various government agencies, which are expensed as incurred. In addition, the Group provides certain employees with additional retirement benefits through the sponsorship of defined contribution plans and defined benefit plans. The benefits provided by the Group depend on the legal, fiscal, and economic circumstances of each individual country and are primarily based on the length of service and the employee's compensation.

Under the defined contribution plans, the Group makes fixed payments to external pension funds. Once the contributions have been made, the Group does not have any further payment obligations towards the employees. These periodical contribution payments are recognized as part of the annual pension and severance costs and amounted to thous. EUR 7,868 in the financial year 2021 (2020: thous. EUR 6,396).

Defined benefit obligations in the Group consist of pensions and severance payments. These obligations exist in several countries where the Group has employees, in particular in Germany, Austria, and Great Britain.

The pension obligations cover the arrangement of a pension program for active employees and, after fulfilment of the vesting period, for former employees, including their surviving dependants. Essentially, these are managers and also employees for whom a corresponding commitment originating from a time before the acquisition of the respective subsidiary was assumed by the Group. Therefore, obligations exist both towards employees in existing employment relationships and also towards employees who have left or retired.

Expected payments under the pension plan may depend on the salary received by the employee in the last year of service or on an average of several years and, as a rule, are based on the length of service. Pension benefits are granted as a non-recurring payment or as monthly retirement payments. In case of retirement payments, the Group bears the risk of longevity and inflation due to pension adjustments to the full extent.

In Great Britain, the Group operates a defined benefit pension plan which is governed by a board of trustees composed of representatives of the Company and plan participants. The responsibility for investment decisions and contribution schedules lies jointly with the Company and the board of trustees.

Obligations arising from the severance of employees cover legal and contractual claims for non-recurring severance payments made by the Group to employees due to certain reasons, such as termination, dissolution of an employment relationship by mutual agreement, retirement, or death of an employee. These payments significantly depend on the number of years of service and the cause of termination.

Defined benefit pension and other benefit plans are measured and recognized applying the internationally common projected unit credit method according to IAS 19. According to this method, the actuarial calculation of future obligations is based on the proportionate obligations as of the balance sheet date. The valuation was conducted based on assumptions and assessments as of the balance sheet date. Significant influencing factors were discount interest rate, estimated life expectancy, expected salary growth rate, expected pension growth rate as well as retirement age.

Actuarial gains and losses which result from changes in the number of plan participants and from differences between actual trends and estimates that are the basis for calculation are recognized in other comprehensive income in the consolidated comprehensive income statement according to IAS 19.

The calculation of pension and other benefit obligations is based on the following actuarial assumptions:

(in %)	Dec. 31, 2021		Dec. 31, 2020	
	Pensions	Severance	Pensions	Severance
Discount rate	1.24 %	1.85 %	1.02 %	1.35 %
Salary growth rate	2.47 %	3.01 %	2.51 %	2.85 %
Pension growth rate	2.44 %	-	2.00 %	-

The information presented above shows the weighted average of all relevant entities of the Group.

Valuation of life expectancy was performed based on local mortality tables. These are in particular for Austria: AVÖ 2018-P “Angestellte” or “Gemischt” (2020: AVÖ 2018-P “Angestellte” or “Gemischt”), for Germany: Heubeck-Richttafeln 2018 G (2020: 2018 G), for Great Britain: Post Retirement and Pre Retirement: S3PA CMI_2020_M/F [1.25 %] (2020: S3PA CMI_2019_M/F [1.25 %]). As a rule, the retirement age corresponds to the respective country-specific legal regulations.

The following expenses were recorded for defined benefit pension and severance commitments:

(in thousands of EUR)	2021		2020	
	Pensions	Severance	Pensions	Severance
Service cost	970	1,502	1,074	2,040
Net interest on the net defined benefit liability	760	533	877	517
Past service costs	0	5	0	47
Effects due to plan changes	(4)	15	(27)	24
Administration costs	121	0	159	0
Net periodic benefit cost	1,847	2,055	2,083	2,628

The defined benefit obligation and plan assets developed as follows:

(in thousands of EUR)	2021		2020	
	Pensions	Severance	Pensions	Severance
Defined benefit obligation at the beginning of the year	142,106	37,284	146,887	44,113
Effect of exchange rate changes	2,813	(751)	(2,176)	(450)
Changes in consolidated companies	(252)	7,290	0	0
Service cost	970	1,502	1,074	2,040
Interest cost	1,429	533	1,685	517
Past service costs	0	5	0	47
Remeasurements	907	1,422	(557)	991
<i>Thereof (gains)/losses from change in demographic assumptions (e.g. life expectancy, retirement age)</i>	<i>(209)</i>	<i>792</i>	<i>(87)</i>	<i>89</i>
<i>Thereof (gains)/losses from change in financial assumptions (e.g. discount rate, salary growth rate, pension growth rate)</i>	<i>1,555</i>	<i>(688)</i>	<i>651</i>	<i>803</i>
<i>Thereof experience (gains)/losses (deviation between actual value and planned value)</i>	<i>(439)</i>	<i>1,318</i>	<i>(1,121)</i>	<i>99</i>
Benefit payments	(4,335)	(4,502)	(4,780)	(9,998)
Effects due to plan changes	(4)	15	(27)	24
Defined benefit obligation at the end of the year	143,634	42,798	142,106	37,284

(in thousands of EUR)	Pensions	
	2021	2020
Fair value of plan assets at the beginning of the year	60,146	61,877
Effect of exchange rate changes	1,810	(1,366)
Changes in consolidated companies	3,487	0
Interest income	669	808
Administrative expense	(121)	(159)
Remeasurements	326	(146)
<i>Thereof return on plan assets excluding amounts included in interest income - net</i>	<i>326</i>	<i>(146)</i>
Employer contributions	3,705	1,483
Benefit payments from plan	(2,150)	(2,351)
Fair value of plan assets at the end of the year	67,872	60,146

An overview of the geographic and divisional allocation of net periodic benefit costs for defined benefit pensions and severance, defined benefit obligation, and the fair value of plan assets for the financial years 2021 and 2020 is represented as follows:

(in thousands of EUR)	2021							
	MM Board & Paper				MM Packaging			
	Germany	Austria	Other countries ¹⁾	Total	Germany	Austria	Other countries	Total
Net periodic benefit cost	286	700	309	1,295	691	939	977	2,607
Defined benefit obligation at the end of the year	20,047	44,841	55,221	120,109	36,413	21,757	8,153	66,323
Fair value of plan assets at the end of the year	881	29,197	32,825	62,903	846	3,788	335	4,969

¹⁾ This primarily includes the pension plan in Great Britain.

(in thousands of EUR)	2020							
	MM Board & Paper				MM Packaging			
	Germany	Austria	Other countries ¹⁾	Total	Germany	Austria	Other countries	Total
Net periodic benefit cost	363	981	562	1,906	818	1,057	930	2,805
Defined benefit obligation at the end of the year	24,197	46,094	42,347	112,638	34,842	22,451	9,459	66,752
Fair value of plan assets at the end of the year	902	29,835	24,685	55,422	809	3,531	384	4,724

¹⁾ This primarily includes the pension plan in Great Britain.

The employers' contributions to plan assets for the year 2022 are expected to amount to thous. EUR 1,155. This includes a contribution for increasing plan assets and for other expenses in Great Britain in the amount of thous. EUR 893.

The structure of plan assets

There are plan assets for pension obligations in Austria and Germany in the form of qualifying insurance policies which are pledged to the respective beneficiaries. The Group contributes to qualifying insurance policies as required.

Further plan assets include a pension plan in Great Britain which is assessed by external asset management according to directives of the responsible board of trustees. Current directives allow for a proportionate investment of 30 % to 40 % in equity instruments and of 60 % to 70 % in debt instruments; minimum diversification is prescribed to diversify the default risk, by which the single investment value is limited to 2 % of the portfolio and the total value of all investments in one company is limited to 4 % of the portfolio. Investments in Private Equity Funds and Hedge Funds are forbidden. The objective of asset management is to maximize the return at an adequate level of risk; index-based benchmarks are given to asset management to measure the achievement of objectives. The Group is obliged to provide regular contributions to the plan assets in Great Britain based on a contribution plan over several years. Furthermore, there are plan assets in the form of a pension plan in the Philippines and a collective foundation in Switzerland.

The portfolio structure of plan assets as of December 31, 2021 and of December 31, 2020:

(in thousands of EUR)	Dec. 31, 2021	in %	Dec. 31, 2020	in %
Equity instruments:				
– developed markets	9,951		7,460	
– emerging markets	994		969	
Total	10,945	16 %	8,429	14 %
Debt instruments:				
– Corporate bonds	13,216		12,311	
– Government bonds	2,021		1,987	
Total	15,237	22 %	14,298	24 %
Qualifying insurance policy pledged to beneficiaries	40,439	60 %	36,309	60 %
Money market investment/Bank deposit	1,251	2 %	1,110	2 %
Total	67,872	100 %	60,146	100 %

All instruments in the category equity instruments and debt instruments are traded on active markets. Ratings of investments in debt instruments correspond at least of an “Investment Grade”.

Plan assets market price risk

Return on plan assets is assumed in accordance with IAS 19 using the discount rate for the underlying obligation. That corresponds to the return on corporate bonds with good credit ratings. Provided that the actual return on plan assets exceeds (falls below) the discount interest rate used, net liability from the present plans decreases (increases). Due to the proportion of investments in equity in the plan assets in Great Britain, the actual return may, on the one hand, exceed the return on corporate bonds with good credit ratings in the long term and, on the other hand, result in higher plan asset volatility in the short term. Related price risk is considered as manageable by the Group, as the proportion of investments in equity in total plan assets is low. Furthermore, the obligations which reach maturity in the next years can be fulfilled using current cash flow of the Group and other components of plan assets.

The net liability from pension and severance obligations and the reconciliation to the net liability recognized are as follows:

(in thousands of EUR)	Dec. 31, 2021		Dec. 31, 2020	
	Pensions	Severance	Pensions	Severance
Defined benefit obligation	143,634	42,798	142,106	37,284
<i>Thereof obligations covered by provisions</i>	<i>58,308</i>	<i>42,798</i>	<i>57,210</i>	<i>37,284</i>
<i>Thereof obligations covered by funds</i>	<i>85,326</i>	<i>0</i>	<i>84,896</i>	<i>0</i>
Less fair value of plan assets	(67,872)	0	(60,146)	0
Net liability recognized as provision for non-current liabilities and charges	75,762	42,798	81,960	37,284

The following sensitivity analysis for pension and severance provisions presents the impact a possible change in significant actuarial assumptions might have on the obligation. If one significant assumption is changed, the other assumptions are kept constant.

Impact on the defined benefit obligation 2021			
(in %)	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25 %	Decrease by 3.4 %	Increase by 3.6 %
Salary growth rate	0.25 %	Increase by 0.7 %	Decrease by 0.7 %
Pension growth rate	0.25 %	Increase by 2.4 %	Decrease by 2.3 %
		Increase by one year in assumption	
Retirement age		Decrease by 0.9 %	
Life expectancy		Increase by 3.0 %	

Impact on the defined benefit obligation 2020			
(in %)	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25 %	Decrease by 3.6 %	Increase by 3.8 %
Salary growth rate	0.25 %	Increase by 0.8 %	Decrease by 0.7 %
Pension growth rate	0.25 %	Increase by 2.5 %	Decrease by 2.4 %
		Increase by one year in assumption	
Retirement age		Decrease by 0.8 %	
Life expectancy		Increase by 3.0 %	

The weighted average duration of the defined benefit obligation is 14.3 years as of the balance sheet date (December 31, 2020: 14.8 years).

The expected maturity analysis of defined benefit obligations for the next ten years as of December 31, 2021 and December 31, 2020 in relation to actual payments is as follows:

(in thousands of EUR)	Less than a year	Between 1 – 2 years	Between 2 – 5 years	Between 5 – 10 years	Total
As of Dec. 31, 2021					
Defined benefit plans	7,049	6,726	22,106	49,662	85,543
As of Dec. 31, 2020					
Defined benefit plans	6,705	5,989	19,943	42,432	75,069

16 TRADE LIABILITIES

Current liabilities are, as a rule, stated at cost which presents the consideration to be paid.

Trade liabilities amounting to thous. EUR 437,726 (December 31, 2020: thous. EUR 220,437) as of December 31, 2021 comprise liabilities from acquisition of property, plant and equipment, and intangible assets amounting to thous. EUR 23,222 (December 31, 2020: thous. EUR 21,521) which are taken into consideration by the cash flow from investing activities as non-cash transactions as well as advances from customers in an amount of thous. EUR 4,550 (December 31, 2020: thous. EUR 2,609).

17 DEFERRED INCOME AND OTHER CURRENT LIABILITIES

Accruals comprise the liabilities for which the exact time of utilization or amount is uncertain and which, at the same time, are definable to a high degree of certainty. Even if the amount and the exact time are occasionally only estimated, the measurement precision of accruals is significantly higher than that of provisions. Therefore they are recognized according to their origin as trade liabilities (see note 16) and other current liabilities, especially in personnel and social costs.

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Obligations for personnel and social costs	103,180	91,275
Liabilities for customer rebates and bonuses	22,049	13,266
Other tax liabilities	20,058	14,339
Deferred income	10,153	7,194
Other liabilities	43,188	14,109
Deferred income and other current liabilities	198,628	140,183
Thereof financial liabilities	29,581	12,437
Thereof non-financial liabilities	169,047	127,746

Obligations for personnel and social costs particularly include premiums and bonuses for employees, unused vacations as well as other deferred personnel-related obligations.

The calculation of liabilities for customer rebates and bonuses is based on the bonus and rebates claims of customers included in the underlying customer arrangements. Bonuses are set up in a way that customers receive a retrospective reimbursement if a certain purchase volume was reached within an invoicing period.

The change in the position "Other liabilities" is mainly due to accrued interest in connection with the issuance of Schuldschein loans and Namensschuldverschreibungen as well as factoring transactions.

18 PROVISIONS FOR CURRENT LIABILITIES AND CHARGES

Provisions are created when the Group has a present legal or constructive obligation to a third party as a result of a past event, when it is probable that it will be settled and when the amount of the obligation can be reliably estimated. The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period.

Provisions for large numbers of similar obligations, e. g. warranties, are measured at a probability-weighted expected value of assets reduction based on this group of obligations. A provision is also recognized under liabilities if the probability of a claim on assets is negligible within a single obligation included in this group.

In the financial year 2021, provisions for current liabilities and charges developed as follows:

(in thousands of EUR)	Sales	Other provisions	Total
Balance at Jan. 1, 2021	4,036	17,896	21,932
Effect of exchange rate changes	(208)	3	(205)
Reclassifications	0	97	97
Changes in consolidated companies	(115)	21,413	21,298
Utilization	(795)	(15,421)	(16,216)
Reversal	(351)	(1,341)	(1,692)
Increase	3,956	19,048	23,004
Balance at Dec. 31, 2021	6,523	41,695	48,218

In the financial year 2020, provisions for current liabilities and charges developed as follows:

(in thousands of EUR)	Sales	Other provisions	Total
Balance at Jan. 1, 2020	4,363	7,827	12,190
Effect of exchange rate changes	(190)	(69)	(259)
Reclassifications	0	(2,816)	(2,816)
Utilization	(2,041)	(1,393)	(3,434)
Reversal	(132)	(268)	(400)
Increase	2,036	14,615	16,651
Balance at Dec. 31, 2020	4,036	17,896	21,932

The provisions for sales are recognized on product warranties and guarantees as well as returned goods. The provisions for product warranties and guarantees are made both on a legal and a contractual basis. Single risks, on the one hand, and the overall risk based on past experience, on the other hand, are taken into consideration by the calculation.

The position "Other provisions" primarily comprises provisions for CO₂ emissions in the amount of thous. EUR 20,556 (December 31, 2020: thous. EUR 0), provisions for restructuring measures in the amount of thous. EUR 8,818 (December 31, 2020: thous. EUR 11,208), litigations and legal costs, provisions for other taxes as well as a variety of immaterial individual items.

19 SEGMENT REPORTING INFORMATION

Mayr-Melnhof Karton AG and its subsidiaries operate in two operating areas, the production of cartonboard and paper (division MM Board & Paper) and the production of folding cartons and packaging (division MM Packaging). The Group is organized according to these two operating areas and is managed by the Management Board based on the financial information acquired thereon. Hence, the segments reported correspond to these two operating areas.

The division MM Board & Paper manufactures and distributes numerous grades of cartonboard, focusing in particular on coated cartonboard made from recycled and virgin fibers. In the course of the strategic acquisitions of the cartonboard and paper mills in Kwidzyn, Poland, and Kotkamills, Finland, kraft papers and uncoated fine papers were added as new business areas to the division MM Board & Paper (formerly MM Karton).

The division MM Packaging converts cartonboard into printed folding cartons purchased by customers in a variety of industries including food and consumer goods (e. g., packaging for cereals, dried foods, sugar, confectionary and baked goods, cosmetics and toiletries, detergents, domestic appliances, toys, tobacco products, pharmaceutical packaging, and high-grade confectionary).

Data provided by the management information system on which segment reporting is based is in accordance with the accounting and recognition principles applied to the consolidated financial statements. Central operations are completely allocated to the operating segments by an allocation system in analogy with the procedures in the management information system. Results from intersegment transactions have already been eliminated in the segment results.

The Group measures the performance of its operating segments by assessing operating profit and profit for the year as presented in the Group's income statement.

Intersegment sales are carried out on an arm's length basis.

Revenues are allocated based on the shipment destinations of finished goods, whereas non-current assets are allocated according to the location of the respective units.

Capital expenditures and depreciation/amortization and impairment refer to the acquisition or depreciation/amortization and impairment of property, plant and equipment as well as intangible assets including goodwill (see note 6).

Revenue recognition

Revenues comprise all income generated by the typical business activities of the MM Group and include income from the sale of numerous grades of cartonboard and folding cartons. The dis-aggregation of performance obligations under certain circumstances may result in a separation of performance obligations related to rendered transportation services, depending on the individual terms of delivery agreed with customers. These transportation services are, however, of low significance for the Group. Apart from this, no further material multiple-component contracts covering, for example, the performance of services besides the delivery of goods were identified. Tools, such as die cutting tools and engravings, are not to be considered as individual service obligations, because they are necessary for the fulfilment of contracts.

The transaction price to which the Group is entitled in exchange for the transfer of goods consists of the price for the transferred goods and any variable element in the form of customer rebates and bonuses and is to be paid on credit. Due to the agreed terms of payment, there is no financial component. The variable component is considered as "liability for customer rebates and bonuses". The amount of this liability depends on the probable claim of a customer and is regularly evaluated and adjusted, if necessary.

Revenues from manufacturing and selling cartonboard and folding cartons are recognized at a point in time based on the agreed individual terms of delivery.

The segment reporting information concerning the Group's operating segments can be illustrated as follows:

(in thousands of EUR)	2021			
	MM Board & Paper	MM Packaging	Eliminations	Consolidated
Sales to external customers	1,428,838	1,640,876	0	3,069,714
Intersegment sales	132,233	759	(132,992)	(0)
Total sales	1,561,071	1,641,635	(132,992)	3,069,714
Operating profit	107,694	161,921	0	269,615
Financial income	394	3,231	(306)	3,319
Financial expenses	(20,678)	(3,997)	306	(24,369)
Profit before tax	86,766	157,783	0	244,549
Income tax expense	(16,845)	(37,003)	0	(53,848)
Profit for the year	69,921	120,780	0	190,701
Capital expenditures	113,082	144,716	0	257,798
Depreciation and amortization ¹⁾	(75,156)	(73,797)	0	(148,953)
Impairments ¹⁾	(2,395)	0	0	(2,395)
Segment assets	2,747,648	1,597,304	(330,734)	4,014,218
Segment liabilities	1,865,433	817,637	(330,730)	2,352,340
Employees as of December 31	4,787	7,705	0	12,492

¹⁾ for property, plant and equipment, and intangible assets

(in thousands of EUR)	2020			
	MM Board & Paper	MM Packaging	Eliminations	Consolidated
Sales to external customers	934,501	1,593,898	0	2,528,399
Intersegment sales	116,251	318	(116,569)	0
Total sales	1,050,752	1,594,216	(116,569)	2,528,399
Operating profit	86,695	144,685	0	231,380
Financial income	421	1,593	(302)	1,712
Financial expenses	(3,158)	(5,007)	302	(7,863)
Profit before tax	83,346	138,728	0	222,074
Income tax expense	(24,987)	(34,857)	0	(59,844)
Profit for the year	58,359	103,871	0	162,230
Capital expenditures	95,022	62,617	0	157,639
Depreciation and amortization ¹⁾	(54,262)	(81,702)	0	(135,964)
Impairments ¹⁾	(23,735)	(7,782)	0	(31,517)
Segment assets	1,218,682	1,421,188	(240,300)	2,399,570
Segment liabilities	378,009	714,763	(240,300)	852,472
Employees as of December 31	2,417	7,521		9,938

¹⁾ for property, plant and equipment, and intangible assets

The following table shows a country-by-country breakdown of net sales based on shipment destinations as well as a summary of non-current assets and capital expenditures based on locations:

(in thousands of EUR)	2021			2020		
	Net sales	Non-current assets	Capital expenditures	Net sales	Non-current assets	Capital expenditures
Austria	65,193	527,808	74,996	47,387	488,216	44,551
Germany	509,420	280,394	40,933	428,202	316,134	42,619
France	296,988	79,729	11,571	273,938	74,546	8,033
Poland	374,298	727,630	36,333	221,139	41,405	2,935
Great Britain	232,191	24,811	18,427	231,991	15,237	3,652
Other Western European countries	563,227	423,314	25,057	415,486	78,885	12,915
Eastern Europe (including Turkey)	619,285	209,516	42,490	494,846	190,239	33,024
Asia and MENA	241,804	97,681	4,444	256,693	100,649	7,224
The Americas	146,814	33,941	3,547	123,859	37,508	2,686
Other	20,494	0	0	34,858	0	0
Consolidated total	3,069,714	2,404,824	257,798	2,528,399	1,342,819	157,639

Non-current assets and capital expenditures comprise property, plant and equipment as well as intangible assets including goodwill (see note 6) as well as payments on account of property, plant and equipment (see note 12).

20 OTHER OPERATING INCOME

(in thousands of EUR)	2021	2020
Income from the deconsolidation of subsidiaries	47,335	0
Gains and losses from disposal of property, plant and equipment, and intangible assets – net	9,497	625
Insurance claims	1,787	6,645
Rental income	1,750	1,641
Other income – net	24,491	10,897
Other operating income	84,860	19,808

Income from the deconsolidation of subsidiaries includes thous. EUR 46,175 from the disposal of the sites in Eerbeek and Baiersbronn (see note 5.3.) and thous. EUR 1,160 from the deconsolidation of Al-Ekbal Printing and Packaging Co., Amman, Jordan.

The gains and losses from disposal of property, plant and equipment and intangible assets – net mainly result from the sale of “non-current assets held for sale” in connection with the decommissioning of Hirschwang.

Other income – net mainly includes income from energy sales and energy efficiency refunds in the amount of thous. EUR 15,670 (2020: thous. EUR 3,759), as well as a variety of individual items.

21 EXPENSES BY NATURE

The consolidated income statements are prepared using the presentation of expenses by function. The following tables comprise a breakdown of expenses by nature for the financial years 2021 and 2020:

(in thousands of EUR)	2021	2020
Cost of materials and purchased services	1,798,630	1,317,888
Personnel expenses	540,472	526,548
Depreciation and amortization ¹⁾	148,953	135,964
Impairments ¹⁾	2,395	31,517
Other expenses	394,509	304,910
Total cost of sales, selling and distribution, administrative and other operating expenses	2,884,959	2,316,827

¹⁾ for property, plant and equipment, and intangible assets

(in thousands of EUR)	2021	2020
Cost of materials and purchased services	1,798,630	1,317,888
Personnel expenses	375,296	363,329
Depreciation and amortization ¹⁾	123,385	114,716
Impairments ¹⁾	2,395	29,237
Other expenses	113,851	88,709
Cost of sales	2,413,557	1,913,879

¹⁾ for property, plant and equipment, and intangible assets

(in thousands of EUR)	2021	2020
Personnel expenses	165,176	163,219
Depreciation and amortization ¹⁾	25,568	21,248
Impairments ¹⁾	0	2,280
Other expenses	280,658	216,201
Total selling and distribution, administrative and other operating expenses	471,402	402,948

¹⁾ for property, plant and equipment, and intangible assets

22 PERSONNEL EXPENSES

Personnel expenses from all Group areas can be broken down as follows:

(in thousands of EUR)	2021	2020
Gross wages	211,062	224,767
Gross salaries	202,683	176,034
Severance expenses	21,871	25,540
Pension expenses	8,336	7,116
Expenses for statutory social security as well as payroll-related taxes and compulsory contributions	84,197	82,917
Other welfare expenses	12,323	10,174
Total	540,472	526,548

The average number of employees is as follows:

(Number of persons)	2021	2020
Factory workers	8,489	7,689
Office staff	2,529	2,287
Total	11,018	9,976

Remuneration of the management

The key management of the Group includes the Management Board and the Supervisory Board. The remuneration of the management is as follows:

(in thousands of EUR)	2021	2020
Salaries and other short-term employee benefits (incl. remuneration of the Supervisory Board)	10,230	10,196
Post-employment benefits	1,017	575
Termination benefits	0	6,716
Long-term employee benefits (Board of Management)	326	0
Total	11,573	17,487

The payment of long-term benefits (long-term profit-sharing) is conditional on the achievement of a certain operating margin for the next three years based on a three-year plan. For an operating margin determined at the beginning, the

Management Board is entitled to a profit-sharing payment in a defined amount. Deviations from this average operating margin lead to increases or decreases in the target amount.

The remuneration of the members of the Management Board is as follows:

(in thousands of EUR)	2021	2020
Fixed remuneration	2,492	3,500
Variable remuneration	7,347	5,999
Total	9,839	9,499

The provision for variable compensations that has not yet been paid out amounted to thous. EUR 6,918 as of December 31, 2021 (December 31, 2020: thous. EUR 7,376).

In the financial year 2021 a company pension was paid to former board members and their surviving dependents, amounting to thous. EUR 841 (2020: thous. EUR 328).

The remuneration of the members of the Supervisory Board elected by the shareholders for the financial year 2021 amounted to thous. EUR 717 (2020: thous. EUR 697).

23 EXPENSES FOR THE GROUP AUDITOR

The 27th Ordinary Shareholders' Meeting on April 28, 2021 appointed PwC Wirtschaftsprüfung GmbH as auditor for the consolidated and individual financial statements of Mayr-Melnhof Karton AG. Furthermore, they audited the individual financial statements of all material Austrian subsidiaries. In 2021, expenses for services rendered by PwC Wirtschaftsprüfung GmbH in Austria amounted to thous. EUR 743 (2020: thous. EUR 461), of which thous. EUR 644 (2020: thous. EUR 405) were related to auditing and other assurance services and thous. EUR 99 (2020: thous. EUR 56) were related to other services.

24 RESEARCH AND DEVELOPMENT EXPENSES

Research and development costs are recognized as expenses as incurred. Neither as of December 31, 2021 nor as of December 31, 2020 have any development costs been capitalized.

Research and development costs recognized as expenses in the income statement amounted to thous. EUR 4,580 in the financial year 2021 (2020: thous. EUR 2,777).

25 FINANCIAL INCOME

(in thousands of EUR)	2021	2020
Interest from bank deposits	3,230	1,592
Other financial income	89	120
Total financial income	3,319	1,712

26 FINANCIAL EXPENSES

(in thousands of EUR)	2021	2020
Interest expense related to financial liabilities	(17,533)	(4,786)
Interest expense on lease liabilities	(1,867)	(1,585)
Other financial expenses	(4,969)	(1,492)
Total financial expenses	(24,369)	(7,863)

The increase in interest expense on financial liabilities resulted from the issuance of Schuldschein loans and Namensschuldverschreibungen. Other financial expenses mainly comprise commitment fees for unused credit lines and commissions in connection with the financing of acquisitions.

27 OTHER FINANCIAL RESULT – NET

(in thousands of EUR)	2021	2020
Foreign currency exchange rate gains (losses) – net	(3,862)	(2,758)
Net interest cost from benefit obligation	(1,367)	(1,499)
Result from investments accounted for using the equity method	720	284
Dividend income	606	344
Other financial income	388	474
Other financial expenses	(501)	0
Other financial result – net	(4,016)	(3,155)

28 EARNINGS PER SHARE

Earnings per share are calculated in accordance with IAS 33 “Earnings per Share”. The standard requires the calculation and disclosure of two key figures: basic and diluted earnings per share. Basic earnings per share are calculated by dividing profit or loss attributable to the shareholders of the Company by the weighted average number of shares outstanding during the financial year. As there were no dilutive stock options neither as of December 31, 2021 nor as of December 31, 2020 it was not necessary to calculate the diluted earnings per share which thus correspond to the basic earnings per share.

Basic earnings per share are calculated by dividing net profit for the year attributable to ordinary shareholders of the parent company by the weighted average number of ordinary shares outstanding during the year.

	2021	2020
Profit attributable to ordinary shareholders of the parent company (in thousands of EUR)	189,174	161,188
Weighted average number of ordinary shares	20,000,000	20,000,000
Basic earnings per share attributable to ordinary shareholders of the parent company (in EUR)	9.46	8.06

As in the previous year, the number of shares issued as of December 31, 2021 amounted to, 20,000,000 shares.

29 COMMITMENTS AND CONTINGENT LIABILITIES

Commitments from legal proceedings and similar claims

The Group is subject to various claims and legal proceedings that have arisen in the ordinary course of business. Based on all the facts available to the Management, the Group believes that the ultimate resolution of these claims and legal proceedings will be unlikely to have a material adverse effect on its financial position or the results of its operations, although no assurance can be given with respect to the outcome of such claims or litigations.

Commitments from environmental matters

The Group is also subject to various environmental legislations and regulations in the countries in which it operates. Expenditures for environmental matters which relate to existing conditions caused by past operations and have no significant future benefit are expensed as incurred. If an expense is probable and the respective amount can be reliably estimated, the Group recognizes provisions for environmental risks and post-closure obligations (see note 15).

Other contingent liabilities

As of December 31, 2021 purchase obligations for fixed assets regarding planned capital expenditures maturing within one year amounted to thous. EUR 136,440 (December 31, 2020: thous. EUR 169,987). This development is mainly due to planned Group-wide investment programs focusing on expansion and renewal.

30 DISCLOSURES ON TRANSACTIONS WITH RELATED PARTIES

Raw materials for the production of cartonboard amounting to thous. EUR 5,497 were purchased from other related companies in 2021 (2020: thous. EUR 5,919). As of December 31, 2021, trade liabilities with other related companies amounted to thous. EUR 606 (December 31, 2020: thous. EUR 810).

In 2021, sales from transactions with associated companies amounted to thous. EUR 423 (2020: thous. EUR 949). As of December 31, 2021, trade and other receivables with associated companies amounted to thous. EUR 45 (December 31, 2020: thous. EUR 312).

Raw materials amounting to thous. EUR 4,206 were purchased from joint ventures in 2021 (2020: thous. EUR 1,048). As of December 31, 2021, trade liabilities with joint ventures amounted to thous. EUR 826 (December 31, 2020: thous. EUR 0).

Transactions with these companies are carried out on an arm's length basis.

Key management personnel of the Group (active Management Board and Supervisory Board members of Mayr-Melnhof Karton AG) and their close relatives are considered as related parties. For information regarding management remuneration please refer to note 22.

Expenses for consulting services rendered by two members of the Supervisory Board amounted to thous. EUR 143 (2020: thous. EUR 120). As of December 31, 2021 liabilities of thous. EUR 30 (December 31, 2020: thous. EUR 41) were recognized in this context. Standard market rates were charged for these consulting services.

For information about contributions to the pension benefit plan in Great Britain please refer to note 15.

31 NOTES ON THE CONSOLIDATED CASH FLOW STATEMENTS

Cash and cash equivalents

Cash and cash equivalents comprise cash, checks, and short-term demand deposits at financial institutions with expiration dates within three months. Cash and cash equivalents denominated in foreign currencies are translated into Euro using the exchange rates at the balance sheet date. For the purpose of the statement of cash flows, the above defined cash and cash equivalents comprise the following:

(in thousands of EUR)	Dec. 31, 2021	Dec. 31, 2020
Fixed deposits	52,279	38,857
Unrestricted bank deposits and cash	306,474	107,330
Other restricted bank deposits	793	54
Cash and cash equivalents	359,546	146,241

Cash flow from operating activities is derived from the consolidated financial statements using the indirect method, while cash flows from investing and financing activities are calculated directly on the basis of cash inflows and outflows.

Cash flow from operating activities decreased from thous. EUR 318,184 to thous. EUR 269,820. This change is due to a lower cash-effective result. A decrease in working capital in the previous year contrasted with an increase in the current year.

In 2021, other adjustments in net cash from profit result in particular from the changes in non-current provisions and from effects of exchange rate changes.

Cash flow from investing activities changed from thous. EUR -142,860 to thous. EUR -891,401. This change mainly results from the payment of the purchase prices for the acquisition of the Kwidzyn mill in the amount of thous. EUR 676,475 and Kotkamills in the amount of thous. EUR 203,097, which were offset by payments received from the sale of the mills Eerbeek and Baiersbronn in the amount of thous. EUR 152,113. In the financial year 2021, the payments for the acquisition of property, plant and equipment, and intangible assets increased in line with the intensified investment program from thous. EUR 152,772 in the previous year to thous. EUR 248,430.

Cash flow from financing activities changed from thous. EUR -150,803 to thous. EUR 836,889, which is mainly due to the issuance of Schuldschein loans and Namensschuldverschreibungen.

The following table shows a reconciliation of financial liabilities from cash and non-cash changes:

(in thousands of EUR)	Non-current interest- bearing financial liabilities	Current interest-bearing financial liabilities	Total
Balance at Jan. 1, 2021	215,511	52,915	268,426
Issuances of financial liabilities	1,125,000	100,114	1,225,114
Repayments of financial liabilities	(167,711)	(143,291)	(311,002)
Total cash changes	957,289	(43,177)	914,112
Changes in consolidated companies	202,432	32,394	234,826
Effect of exchange rates	156	321	477
Other non-cash changes	(26,314)	31,550	5,236
Total non-cash changes	176,274	64,265	240,539
Balance at Dec. 31, 2021	1,349,074	74,003	1,423,077

Other non-cash changes mainly include additions to lease liabilities which are set off by the acquisition of assets in the same amount. Furthermore, this position includes reclassifications from non-current to current financial liabilities.

(in thousands of EUR)	Non-current interest- bearing financial liabilities	Current interest-bearing financial liabilities	Total
Balance at Jan. 1, 2020	232,540	112,843	345,383
Issuances of financial liabilities	514	128	642
Repayments of financial liabilities	0	(78,256)	(78,256)
Total cash changes	514	(78,128)	(77,614)
Effect of exchange rates	(576)	(331)	(907)
Other non-cash changes	(16,967)	18,531	1,564
Total non-cash changes	(17,543)	18,200	657
Balance at Dec. 31, 2020	215,511	52,915	268,426

32 SIGNIFICANT SUBSEQUENT EVENTS AND FURTHER INFORMATION

The MM Group closely monitors the developments in Russia and Ukraine as well as the international measures and possible impacts on the Group. MM cumulatively generates approx. 9 % of the Group's EBITDA in Russia and Ukraine. In Russia, packaging products for the local demand of daily consumer goods are produced at two sites, St. Petersburg and Pskov. A downtime has to be expected. MM has stopped all cartonboard deliveries to Russia. In Ukraine, where MM produces packaging at the Cherkassy site in the center of the country, operations are currently suspended.

33 TABLE OF AFFILIATED AND ASSOCIATED COMPANIES

2021					2020				
Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation	Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation
Mayr-Melnhof Karton Aktiengesellschaft, Vienna (AUT)	EUR	80,000	-	FC ⁽¹⁾	Mayr-Melnhof Karton Aktiengesellschaft, Vienna (AUT)	EUR	80,000	-	FC ⁽¹⁾
MM Service GmbH, Vienna (AUT)	EUR	35	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Service GmbH, Vienna (AUT)	EUR	35	100.00 %	FC ⁽¹⁾
MM BOARD & PAPER					MM KARTON				
-	-	-	-	-	Baiersbronn Frischfaser Karton GmbH, Baiersbronn (DEU)	EUR	2,050	100.00 %	FC ⁽¹⁾
CP (CartPrint) International Trading AG, Worb (CHE)	CHF	100	100.00 %	FC ⁽¹⁾	CP (CartPrint) International Trading AG, Worb (CHE)	CHF	100	100.00 %	FC ⁽¹⁾
free-com solutions GmbH, Vienna (AUT)	EUR	35	51.00 %	FC ⁽¹⁾	free-com solutions GmbH, Vienna (AUT)	EUR	35	51.00 %	FC ⁽¹⁾
-	-	-	-	-	Industriewater Eerbeek B.V., Eerbeek (NLD)	EUR	143	37.50 %	NE ⁽²⁾
Lokalbahn Payerbach-Hirschwang Gesellschaft m. b. H., Reichenau/Rax (AUT)	EUR	190	100.00 %	FC ⁽¹⁾	Lokalbahn Payerbach-Hirschwang Gesellschaft m. b. H., Reichenau/Rax (AUT)	EUR	190	100.00 %	FC ⁽¹⁾
MM BOARD & PAPER GmbH, Vienna (AUT)	EUR	5,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Cartonboard International GmbH, Vienna (AUT)	EUR	5,000	100.00 %	FC ⁽¹⁾
-	-	-	-	-	Mayr-Melnhof Eerbeek B. V., Eerbeek (NLD)	EUR	7,300	100.00 %	FC ⁽¹⁾
MM FollaCell AS, Follafooss (NOR)	NOK	10,000	100.00 %	FC ⁽¹⁾	MM Karton FollaCell AS, Follafooss (NOR)	NOK	10,000	100.00 %	FC ⁽¹⁾
MM Frohnleiten GmbH, Frohnleiten (AUT)	EUR	7,500	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Karton Gesellschaft m. b. H., Frohnleiten (AUT)	EUR	7,500	100.00 %	FC ⁽¹⁾
MM Gernsbach GmbH, Gernsbach (DEU)	EUR	9,205	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Gernsbach GmbH, Gernsbach (DEU)	EUR	9,205	100.00 %	FC ⁽¹⁾
MM Kolicevo d. o. o., Domzale (SVN)	EUR	12,828	100.00 %	FC ⁽¹⁾	Kolicevo Karton Proizvodnja kartona, d. o. o., Domzale (SVN)	EUR	12,828	100.00 %	FC ⁽¹⁾
MM Kotkamills Absorbex Oy, Kotka (FIN)	EUR	2	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Kotkamills Boards Oy, Kotka (FIN)	EUR	10,200	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Kotkamills Oy, Kotka (FIN)	EUR	80	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Kotkamills Wood Oy, Kotka (FIN)	EUR	2	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Kwidzyn Sp. z o. o., Kwidzyn (POL)	PLN	90,000	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Neuss GmbH, Baiersbronn (DEU)	EUR	7,500	100.00 %	FC ⁽¹⁾	FS-Karton GmbH, Baiersbronn (DEU)	EUR	7,500	100.00 %	FC ⁽¹⁾
Tor-Pal Sp. z o. o., Kwidzyn (POL)	PLN	384	100.00 %	FC ⁽¹⁾	-	-	-	-	-
-	-	-	-	-	Stort Doonweg B.V., Eerbeek (NLD)	EUR	18	50.00 %	NE ⁽²⁾

2021					2020				
Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation	Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation
Trading companies & sales offices of MM Board & Paper					Trading companies & sales offices of MM Karton				
Austria Cartón S.A., Barcelona (ESP)	EUR	60	75.00 %	FC ⁽¹⁾	Austria Cartón S.A., Barcelona (ESP)	EUR	60	75.00 %	FC ⁽¹⁾
MM B&P Hungary Kft., Budaörs (HUN)	HUF	20	100.00 %	FC ⁽¹⁾	-	-	-	-	-
Keminer Remmers Spiehs Kartonhandels GmbH, Gernsbach (DEU)	EUR	1,280	100.00 %	FC ⁽¹⁾	Keminer Remmers Spiehs Kartonhandels GmbH, Gernsbach (DEU)	EUR	1,280	100.00 %	FC ⁽¹⁾
Mayr-Melnhof Mediterra SARL, Tunis (TUN)	TND	80	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Mediterra SARL, Tunis (TUN)	TND	80	100.00 %	FC ⁽¹⁾
Mayr-Melnhof & Wilfried Heinzel Tehran Co., Tehran (IRN)	IRR	100,000	36.00 %	NE ⁽²⁾	Mayr-Melnhof & Wilfried Heinzel Tehran Co., Tehran (IRN)	IRR	100,000	36.00 %	NE ⁽²⁾
MM Board Benelux B.V., Amstelveen (NLD)	EUR	91	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Benelux B.V., Amstelveen (NLD)	EUR	91	100.00 %	FC ⁽¹⁾
-	-	-	-	-	MM Guang Zhou Yue Ran Paper Co., Ltd. i.l., Guangzhou (CHN)	CNY	1,500	100.00 %	NC ⁽⁴⁾
MM Board Bulgaria EOOD, Sofia (BGR)	BGN	5	100.00 %	FC ⁽¹⁾	MM Karton Bulgaria EOOD, Sofia (BGR)	BGN	5	100.00 %	FC ⁽¹⁾
MM Board Czech s.r.o., Prague (CZE)	CZK	820	100.00 %	FC ⁽¹⁾	MM Karton Praha s.r.o., Prague (CZE)	CZK	820	100.00 %	FC ⁽¹⁾
-	-	-	-	-	MM Karton Turkey Ticaret Limited Sirketi i.l., Istanbul (TUR)	TRY	10	100.00 %	FC ⁽¹⁾
MM Board France SARL, Paris (FRA)	EUR	8	100.00 %	FC ⁽¹⁾	Mayr-Melnhof France SARL, Paris (FRA)	EUR	8	100.00 %	FC ⁽¹⁾
MM Board Germany GmbH, Neuss (DEU)	EUR	26	100.00 %	FC ⁽¹⁾	MM Kartonvertrieb GmbH, Neuss (DEU)	EUR	26	100.00 %	FC ⁽¹⁾
MM Board Italy SRL, Milan (ITA)	EUR	51	75.00 %	FC ⁽¹⁾	Mayr-Melnhof Italia S. R. L., Milan (ITA)	EUR	51	75.00 %	FC ⁽¹⁾
MM Board Polska Sp.zo.o., Poznan (POL)	PLN	50	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Karton Polska Sp.zo.o., Poznan (POL)	PLN	50	100.00 %	FC ⁽¹⁾
MM Board SI d.o.o., Domzale (SVN)	EUR	30	100.00 %	FC ⁽¹⁾	MM Prodaja Kartona, trgovina s kartonom d. o. o., Domzale (SVN)	EUR	30	100.00 %	FC ⁽¹⁾
MM Board UK Limited, Theale-Reading (GBR)	GBP	1,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Cartonboard UK Limited, Theale-Reading (GBR)	GBP	1,000	100.00 %	FC ⁽¹⁾
MM Board & Paper Sales GmbH, Vienna (AUT)	EUR	35	100.00 %	FC ⁽¹⁾	-	-	-	-	-
MM Karton Russia LLC, Moscow (RUS)	RUB	14,290	100.00 %	FC ⁽¹⁾	MM Karton Russia LLC, Moscow (RUS)	RUB	14,290	100.00 %	FC ⁽¹⁾
MM Shared Services Sp.zo.o., Warsaw (POL)	PLN	5.662	100.00 %	FC ⁽¹⁾	-	-	-	-	-
Varsity Packaging Limited, Theale-Reading (GBR)	GBP	300	100.00 %	FC ⁽¹⁾	Varsity Packaging Limited, Theale-Reading (GBR)	GBP	300	100.00 %	FC ⁽¹⁾

2021					2020				
Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation	Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation
MM PACKAGING					MM PACKAGING				
Al-Ekbal Printing & Packaging Co. i. l., Amman (JOR)	JOD	3,500	86.94 %	FC ⁽¹⁾	Al-Ekbal Printing & Packaging Co. i. l., Amman (JOR)	JOD	3,500	86.94 %	FC ⁽¹⁾
Beaucrest Limited, Hong Kong (HKG)	HKD	1	100.00 %	NC ⁽⁴⁾	Beaucrest Limited, Hong Kong (HKG)	HKD	1	100.00 %	NC ⁽⁴⁾
C. P. Schmidt Verpackungs-Werk Beteiligungsgesellschaft mbH, Kaiserslautern (DEU)	EUR	180	100.00 %	FC ⁽¹⁾	C. P. Schmidt Verpackungs-Werk Beteiligungsgesellschaft mbH, Kaiserslautern (DEU)	EUR	180	100.00 %	FC ⁽¹⁾
Danubia International, Kiev (UKR)	UAH	1	100.00 %	NC ⁽⁴⁾	Danubia International, Kiev (UKR)	UAH	1	100.00 %	NC ⁽⁴⁾
Gundlach GmbH, Bielefeld (DEU)	EUR	52	100.00 %	FC ⁽¹⁾	Gundlach GmbH, Bielefeld (DEU)	EUR	52	100.00 %	FC ⁽¹⁾
Mayr-Melnhof Packaging Iberica SL, Valencia (ESP)	EUR	7,500	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging Iberica SL, Valencia (ESP)	EUR	7,500	100.00 %	FC ⁽¹⁾
Mayr-Melnhof Packaging International GmbH /Jordan PSC, Amman (JOR)	JOD	5,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging International GmbH /Jordan PSC, Amman (JOR)	JOD	5,000	100.00 %	FC ⁽¹⁾
Mayr-Melnhof Packaging Marinetti Limitada, Santiago de Chile (CHL)	CLP	5,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging Marinetti Limitada, Santiago de Chile (CHL)	CLP	5,000	100.00 %	FC ⁽¹⁾
Mayr-Melnhof Printing and Packaging Tehran Company, Private Joint Stock, Tehran (IRN)	IRR	514,800,000	99.56 %	FC ⁽¹⁾	Mayr-Melnhof Printing and Packaging Tehran Company, Private Joint Stock, Tehran (IRN)	IRR	514,800,000	99.56 %	FC ⁽¹⁾
MM C. P. Schmidt GmbH, Kaiserslautern (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾	C. P. Schmidt GmbH, Kaiserslautern (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾
MM Graphia Bielefeld GmbH, Bielefeld (DEU)	EUR	526	100.00 %	FC ⁽¹⁾	MM Graphia Bielefeld GmbH, Bielefeld (DEU)	EUR	526	100.00 %	FC ⁽¹⁾
MM Graphia GmbH, Bielefeld (DEU)	EUR	25	100.00 %	FC ⁽¹⁾	MM Graphia GmbH, Bielefeld (DEU)	EUR	25	100.00 %	FC ⁽¹⁾
MM Graphia Izmir Karton sanayi ve ticaret anonim sirketi, Izmir (TUR)	TRY	24,613	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Graphia Izmir Karton sanayi ve ticaret anonim sirketi, Izmir (TUR)	TRY	24,613	100.00 %	FC ⁽¹⁾
MM Graphia Trier GmbH, Trier (DEU)	EUR	3,500	100.00 %	FC ⁽¹⁾	MM Graphia Trier GmbH, Trier (DEU)	EUR	3,500	100.00 %	FC ⁽¹⁾
MM Gravure Trier GmbH, Trier (DEU)	EUR	7,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Gravure GmbH, Trier (DEU)	EUR	7,000	100.00 %	FC ⁽¹⁾
MM Innovaprint GmbH, Bielefeld (DEU)	EUR	500	100.00 %	FC ⁽¹⁾	MM Graphia Innovaprint GmbH, Bielefeld (DEU)	EUR	500	100.00 %	FC ⁽¹⁾
MM Neupack GmbH, Reichenau/Rax (AUT)	EUR	1,820	100.00 %	FC ⁽¹⁾	Neupack Gesellschaft m. b. H., Reichenau/Rax (AUT)	EUR	1,820	100.00 %	FC ⁽¹⁾
MM Packaging Behrens GmbH, Alfeld (Leine) (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾	MM Packaging Behrens GmbH, Alfeld (Leine) (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾
MM Packaging Beteiligungs- und Verwaltungs GmbH, Bielefeld (DEU)	EUR	500	100.00 %	FC ⁽¹⁾	MM Packaging Beteiligungs- und Verwaltungs GmbH, Bielefeld (DEU)	EUR	500	100.00 %	FC ⁽¹⁾
MM Packaging Caesar GmbH, Traben-Trarbach (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾	MM Packaging Caesar GmbH, Traben-Trarbach (DEU)	EUR	3,000	100.00 %	FC ⁽¹⁾

2021					2020				
Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation	Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation
MM Packaging Colombia S.A.S., Santiago de Cali (COL)	COP	84,000,000	100.00 %	FC ⁽¹⁾	MM Packaging Colombia S.A.S., Santiago de Cali (COL)	COP	84,000,000	100.00 %	FC ⁽¹⁾
MM Packaging Deutschland GmbH, Bielefeld (DEU)	EUR	26	100.00 %	FC ⁽¹⁾	MM Packaging GmbH, Bielefeld (DEU)	EUR	26	100.00 %	FC ⁽¹⁾
MM PACKAGING GmbH, Vienna (AUT)	EUR	5,000	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging International GmbH, Vienna (AUT)	EUR	5,000	100.00 %	FC ⁽¹⁾
MM PACKAGING France S.A.S., Monéteau (FRA)	EUR	7,289	100.00 %	FC ⁽¹⁾	MM PACKAGING France S.A.S., Monéteau (FRA)	EUR	7,289	100.00 %	FC ⁽¹⁾
MM Packaging Polska Sp.z o.o., Bydgoszcz (POL)	PLN	71,500	100.00 %	FC ⁽¹⁾	MM Packaging Polska Sp.z o.o., Bydgoszcz (POL)	PLN	71,500	100.00 %	FC ⁽¹⁾
MM Packaging Romania S.R.L., Blejoi (ROU)	RON	5,504	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging Romania S.R.L., Blejoi (ROU)	RON	5,504	100.00 %	FC ⁽¹⁾
MM Packaging Schilling GmbH, Heilbronn (DEU)	EUR	2,500	100.00 %	FC ⁽¹⁾	MM Packaging Schilling GmbH, Heilbronn (DEU)	EUR	2,500	100.00 %	FC ⁽¹⁾
MM Packaging UK Limited, Deeside (GBR)	GBP	9,700	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging UK Limited, Deeside (GBR)	GBP	9,700	100.00 %	FC ⁽¹⁾
MM Packaging Ukraine LLC, Cherkassy (UKR)	UAH	56,896	100.00 %	FC ⁽¹⁾	MM Packaging Ukraine LLC, Cherkassy (UKR)	UAH	56,896	100.00 %	FC ⁽¹⁾
MM Packaging Vidon Limited Liability Company, Ho Chi Minh City (VNM)	VND	280,000,000	100.00 %	FC ⁽¹⁾	MM Packaging Vidon Limited Liability Company, Ho Chi Minh City (VNM)	VND	280,000,000	100.00 %	FC ⁽¹⁾
MM Polygrafoformlenie Packaging LLC, St. Petersburg (RUS)	RUB	565,851	100.00 %	FC ⁽¹⁾	MM Polygrafoformlenie Packaging LLC, St. Petersburg (RUS)	RUB	565,851	100.00 %	FC ⁽¹⁾
MM Polygrafoformlenie Rotogravure LLC, St. Petersburg (RUS)	RUB	33,000	100.00 %	FC ⁽¹⁾	MM Polygrafoformlenie Rotogravure LLC, St. Petersburg (RUS)	RUB	33,000	100.00 %	FC ⁽¹⁾
MM Premium Vienna GmbH, Vienna (AUT)	EUR	3,050	100.00 %	FC ⁽¹⁾	Mayr-Melnhof Packaging Austria GmbH, Vienna (AUT)	EUR	3,050	100.00 %	FC ⁽¹⁾
MMP Neupack Polska Sp.z o.o., Bydgoszcz (POL)	PLN	28,700	100.00 %	FC ⁽¹⁾	MMP Neupack Polska Sp.z o.o., Bydgoszcz (POL)	PLN	28,700	100.00 %	FC ⁽¹⁾
MMP Packetis SAS, Chazelles (FRA)	EUR	1,677	100.00 %	FC ⁽¹⁾	MMP Packetis SAS, Chazelles (FRA)	EUR	1,677	100.00 %	FC ⁽¹⁾
MMP Premium Polska Sp.z o.o., Bydgoszcz (POL)	PLN	26,000	100.00 %	FC ⁽¹⁾	MMP Premium Polska Sp.z o.o., Bydgoszcz (POL)	PLN	26,000	100.00 %	FC ⁽¹⁾
MMP Premium Printing Center GmbH, Trier (DEU)	EUR	500	100.00 %	FC ⁽¹⁾	MMP Premium Printing Center GmbH, Trier (DEU)	EUR	500	100.00 %	FC ⁽¹⁾
MMP Premium SAS, Ancenis (FRA)	EUR	6,686	100.00 %	FC ⁽¹⁾	MMP Premium SAS, Ancenis (FRA)	EUR	6,686	100.00 %	FC ⁽¹⁾
MPC Besitgesellschaft mbH, Traun (AUT)	EUR	3,700	100.00 %	FC ⁽¹⁾	MPC Besitgesellschaft mbH, Traun (AUT)	EUR	3,700	100.00 %	FC ⁽¹⁾
OOO TANN Nevskiy, Pskov (RUS)	RUB	230,000	100.00 %	FC ⁽¹⁾	OOO TANN Nevskiy, Pskov (RUS)	RUB	230,000	100.00 %	FC ⁽¹⁾
PacProject GmbH, Hamburg (DEU)	EUR	26	100.00 %	FC ⁽¹⁾	PacProject GmbH, Hamburg (DEU)	EUR	26	100.00 %	FC ⁽¹⁾
Private Joint Stock Company "Graphia Ukraina", Cherkassy (UKR)	UAH	5,880	94.78 %	FC ⁽¹⁾	Private Joint Stock Company "Graphia Ukraina", Cherkassy (UKR)	UAH	5,880	94.78 %	FC ⁽¹⁾
R + S Stanzformen GmbH, Niederdorfelden (DEU)	EUR	260	100.00 %	FC ⁽¹⁾	R + S Stanzformen GmbH, Niederdorfelden (DEU)	EUR	260	100.00 %	FC ⁽¹⁾

2021					2020				
Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation	Company name	Currency	Nominal capital in thousand currency units	Shareholding in %	Type of consolidation
Société Tunisienne des Emballages Modernes, Tunis (TUN)	TND	9,640	45.00 %	EC ³⁾	Société Tunisienne des Emballages Modernes, Tunis (TUN)	TND	9,640	45.00 %	EC ³⁾
Superpak Ambalaj sanayi ve ticaret anonim sirketi, Izmir (TUR)	TRY	116,331	100.00 %	FC ¹⁾	Superpak Ambalaj sanayi ve ticaret anonim sirketi, Izmir (TUR)	TRY	116,331	100.00 %	FC ¹⁾
TANN ARGENTINA S.A., Buenos Aires (ARG)	ARS	12	100.00 %	NC ⁴⁾	TANN ARGENTINA S.A., Buenos Aires (ARG)	ARS	12	100.00 %	NC ⁴⁾
Tann Beteiligungs GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾	Tann Beteiligungs GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾
TANN Colombiana S.A.S. i.l., La Ceja/Medellin (COL)	COP	351,000	100.00 %	FC ¹⁾	TANN Colombiana S.A.S., La Ceja/Medellin (COL)	COP	351,000	100.00 %	FC ¹⁾
TANN GERMANY GmbH, Glinde (DEU)	EUR	512	100.00 %	FC ¹⁾	TANN GERMANY GmbH, Glinde (DEU)	EUR	512	100.00 %	FC ¹⁾
TANN Holding GmbH, Traun (AUT)	EUR	70	100.00 %	FC ¹⁾	TANN Holding GmbH, Traun (AUT)	EUR	70	100.00 %	FC ¹⁾
TANN Invest GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾	TANN Invest GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾
TANN Longyou Ltd., Longyou (Zhejiang) (CHN)	CNY	97,245	95.69 %	FC ¹⁾	TANN Longyou Ltd., Longyou (Zhejiang) (CHN)	CNY	97,245	95.69 %	FC ¹⁾
TANN PAPER Limited, Woodstock (New Brunswick) (CAN)	CAD	600	100.00 %	FC ¹⁾	TANN PAPER Limited, Woodstock (New Brunswick) (CAN)	CAD	600	100.00 %	FC ¹⁾
TANN Philippines, Inc., Santo Tomas (Batangas) (PHL)	PHP	470,000	100.00 %	FC ¹⁾	TANN Philippines, Inc., Santo Tomas (Batangas) (PHL)	PHP	470,000	100.00 %	FC ¹⁾
TANN Service GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾	TANN Service GmbH, Traun (AUT)	EUR	35	100.00 %	FC ¹⁾
TANN Shanghai Co., Ltd., Shanghai (CHN)	CNY	31,522	51.00 %	FC ¹⁾	TANN Shanghai Co., Ltd., Shanghai (CHN)	CNY	31,522	51.00 %	FC ¹⁾
TANNPAPIER GmbH, Traun (AUT)	EUR	1,000	100.00 %	FC ¹⁾	TANNPAPIER GmbH, Traun (AUT)	EUR	1,000	100.00 %	FC ¹⁾
TBG Development Philippines, Inc., Makati City (Metro Manila) (PHL)	PHP	53,320	100.00 %	FC ¹⁾	TBG Development Philippines, Inc., Makati City (Metro Manila) (PHL)	PHP	53,320	100.00 %	FC ¹⁾
VTV Verpackungstechnische Verfahren GmbH, Kaiserslautern (DEU)	EUR	200	100.00 %	FC ¹⁾	VTV Verpackungstechnische Verfahren GmbH, Kaiserslautern (DEU)	EUR	200	100.00 %	FC ¹⁾
Zhejiang TF Special Papers Co., Ltd., Quzhou (CHN)	CNY	50,000	40.00 %	EC ³⁾	Zhejiang TF Special Papers Co., Ltd., Quzhou (CHN)	CNY	50,000	40.00 %	EC ³⁾

The voting rights are equal to the ownership interests. The parent company does not hold any preferred interests in the subsidiary.

In the course of a rebranding of the Group, there were changes in the company's names, which were taken into account until the adoption of these consolidated financial statements by the Supervisory Board.

¹⁾ FC ... fully consolidated company

²⁾ NE ... joint venture or associated company, but not consolidated at equity due to immateriality

³⁾ EC ... consolidated at equity

⁴⁾ NC ... not consolidated due to immateriality

34 BOARD MEMBERS

During the financial year 2021, the Board Members were as follows:

Management Board

Peter Oswald (Chairman)

Andreas Blaschke (Member of the Management Board)

Franz Hiesinger (Member of the Management Board)

Supervisory Board

Rainer Zellner (Chairman)

Johannes Goess-Saurau (1st Deputy Chairman)

Nikolaus Ankershofen (2nd Deputy Chairman)

Alexander Leeb (Member of the Supervisory Board)

Georg Mayr-Melnhof (Member of the Supervisory Board)

Ferdinand Mayr-Melnhof-Saurau (Member of the Supervisory Board)

Klaus Rabel (Member of the Supervisory Board)

Franz Rappold (Member of the Supervisory Board)

Andreas Hemmer (Employee Representative)

Gerhard Novotny (Employee Representative)

Vienna, March 14, 2022

The Management Board

Peter Oswald m. p.

Andreas Blaschke m. p.

Franz Hiesinger m. p.

Auditor's Report

Report on the Consolidated Financial Statements

Audit Opinion

We have audited the consolidated financial statements of Mayr-Melnhof Karton Aktiengesellschaft, Vienna, and its subsidiaries (the Group), which comprise the consolidated balance sheets as at December 31, 2021, the consolidated income statements, the consolidated comprehensive income statements, the consolidated statement of changes in equity and the consolidated cash flow statements for the financial year then ended, and the notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements comply with legal requirements and give a true and fair view of the financial position of the Group as at December 31, 2021, and of its financial performance and cash flows for the financial year then ended in accordance with International Financial Reporting Standards as adopted by the EU (IFRSs) and the additional regulations of section 245 a Austrian Commercial Code.

Basis for Opinion

We conducted our audit in accordance with Regulation (EU) No. 537/2014 (hereinafter EU Regulation) and Austrian Generally Accepted Standards on Auditing. Those standards require the application of the International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements" section of our report. We are independent of the Group in accordance with Austrian Generally Accepted Accounting Principles and professional requirements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained until the date of the auditor's report is sufficient and appropriate to provide a basis for our opinion by this date.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the financial year. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have structured key audit matters as follows:

- Description
- Audit approach and key observations
- Reference to related disclosures

1. Business combinations – identification and valuation of assets and liabilities acquired in the course of the acquisition of Kotkamills Group Oyj (“Kotkamills”) and International Paper (Poland) Holding Sp. z o. o. (“Kwidzyn”)

Description

On August 2, 2021, the divisional holding company Mayr-Melnhof Cartonboard International GmbH (now MM BOARD & PAPER GmbH), Vienna, acquired all shares in Kotkamills Group Oyj, Kotka, Finland, including its subsidiaries (“Kotkamills”) by purchase and sale agreement. The consideration transferred at the acquisition date amounted to thous. EUR 203,097. Taking into account the acquired net assets in the amount of thous. EUR 76,004, this resulted in a goodwill in the amount of thous. EUR 127,093.

On August 6, 2021, the divisional holding company Mayr-Melnhof Cartonboard International GmbH (now MM BOARD & PAPER GmbH), Vienna, acquired all shares in International Paper (Poland) Holding Sp. z o. o., Kwidzyn, Poland, including its subsidiaries (“Kwidzyn”) by purchase and sale agreement. The consideration transferred at the acquisition date amounted to thous. EUR 676,475. Taking into account the acquired net assets in the amount of thous. EUR 366,295, this resulted in a goodwill in the amount of thous. EUR 310,180.

In accordance with IFRS 3, the identifiable assets acquired and liabilities assumed were recognized at fair value at the acquisition date, respectively. The identification and valuation of the net assets acquired is complex and requires a series of discretionary decisions and assumptions. In particular, the valuation of intangible assets, buildings and machinery acquired is based to a considerable extent on asset specific assumptions requiring the Management Board to make discretionary decisions and estimates. To determine the fair values of the identifiable assets and liabilities, the Management Board consulted external independent experts for both cases. Both purchase price allocations have not been finalized yet.

For the consolidated financial statements, there is the risk that the assets acquired and liabilities assumed in the course of the acquisitions have been identified inaccurately or have not been valued adequately due to the size and complexity of the business combinations. Moreover, there is the risk that the disclosures required in the notes to the consolidated financial statements pursuant to IFRS 3 are incomplete and incorrect.

Audit approach and key observations

In order to understand the business combinations, we read the purchase and sale agreements, including the supplementary agreements, entered into between the selling parties and Mayr-Melnhof Cartonboard International GmbH (now MM BOARD & PAPER GmbH), Vienna. In accordance with the relevant regulations of IFRS 3 “Business Combinations”, we have evaluated the provisions agreed in these agreements with regard to the recognition in the consolidated balance sheet and the disclosures in the notes to the consolidated financial statements as at December 31, 2021.

We critically assessed the expertise, skills and objectivity of the engaged experts. Together with our valuation experts, we evaluated whether the significant assumptions and input parameters are appropriate (in particular the assumptions with regard to the growth rate, the discount rate used, the assumptions on the quality of land and buildings relevant to the valuation, the assumptions on the quality and replacement cost of acquired machinery as well as the assumptions on the estimated churn rate of the identified customer bases) and whether the assets and liabilities identified in the course of the purchase price allocation are complete and valued adequately. We checked whether the valuation methods applied are in accordance with the valuation principles of IFRS 3 in conjunction with the relevant regulations of IFRS 13.

Finally, we evaluated whether the disclosures on the business combination Kotka and Kwidzyn in the notes to the consolidated financial statements as at December 31, 2021 are complete and adequate.

The approach serving as a basis for the identification and valuation of the net assets acquired is adequate and complies with the accounting principles that are to be applied. The significant assumptions made by the Management Board and the input parameters applied are reasonable. The provisional presentation pursuant to IFRS 3 paragraph 45 of the business combination in the notes to the consolidated financial statements as at December 31, 2021 complies with the requirements of IFRS 3. The Management Board disclosed the fact that the purchase price allocations have not been finalized yet; the provisional results of the purchase price allocations take into account all material information on relevant facts and circumstances at the acquisition date. Based on current information, no material retrospective adjustments to the purchase price allocations are expected.

Reference to related disclosures

Related disclosures with regard to this key audit matter are to be found in the notes to the consolidated financial statements as at December 31, 2021 under note 5 – “Changes in the consolidated companies and other significant events” in section 5.1 – “Changes in the consolidated companies in 2021”, under note 7 “Financial instruments disclosures” in section 7.5 – “Capital management” as well as under note 31 “Notes on the consolidated cash flow statements”.

2. Impairment of assets – Recoverability of property, plant and equipment and the carrying amounts of the cash generating units

Description

The consolidated financial statements of Mayr-Melnhof Karton Aktiengesellschaft, Vienna, include property, plant and equipment in the amount of thous. EUR 1,490,031 as at December 31, 2021. In case of any indications in this regard pursuant to IAS 36, the Management Board evaluates whether property, plant and equipment or the carrying amounts of a cash generating unit may be impaired.

An impairment loss is recognized to the extent that the carrying amount of the asset, the group of assets or the cash generating unit exceeds the recoverable amount. The recoverable amount of an asset, a group of assets or a cash generating unit is the higher of the value in use and the fair value less cost of disposal. When evaluating whether there are any indications for impairment, external and internal sources of information are to be taken into account. The Group determines the value in use by means of a discounted cash flow method (DCF method). In addition to forecasts of future cash flows (Free Cash Flows) before tax, particularly the capitalization rate (WACC) is also to be classified as such that it requires significant discretionary decisions. As already slight changes in the capitalization rate may have a significant impact on the recoverable amount, there are major estimation uncertainties with regard to the determination of the value in use and thus the recoverable amount of property, plant and equipment, the group of assets or the carrying amount of the cash generating units. In case there are any indications for a potential need for impairment and the value in use is below the carrying amount of the asset, a group of assets or a cash generating unit, management determines the fair value less cost of disposal of the asset, the group of assets or the cash generating unit together with external independent experts, allocating a calculated impairment at the level of the cash generating unit to the assets pertaining to it up to a maximum of their respective fair value less cost of disposal. No impairment was recognized in the financial year 2021.

Valuation of the recoverable amount is complex, requires relevant expertise and depends on significant assumptions and discretionary decisions to a considerable extent. For the consolidated financial statements, there is the risk that the valuation assumptions serving as a basis for the impairment test – in case the recoverable amounts of the assets, the group of assets or the cash generating unit are not determined appropriately – may result in an unidentified impairment not recognized in the consolidated balance sheet.

Audit approach and key observations

We examined the indications for a possible impairment observed by the Management Board and checked whether there were any indications that the carrying amounts of property, plant and equipment and cash generating units identified in this process are at risk and may be impaired.

Moreover, we evaluated whether all relevant internal and external sources of information were taken into account by management.

We partially involved our valuation experts when examining the appropriateness of the significant assumptions and input parameters as well as the valuation of the values in use and, where relevant, the fair values less cost of disposal. In doing so, we particularly ascertained the appropriateness of the assumptions made with regard to the planned development of future cash flows before tax. The future expected cash flows were derived from the budget for 2022 adopted by the Management Board and approved by the Supervisory Board. We assessed the capitalization rates applied and how they were derived, both with regard to the individual assumptions and parameters based on available market data and considering a critical overall evaluation in comparison with similar companies in the packaging industry. We checked the valuation models used in determining the values in use for mathematical accuracy and consistency with the valuation principles of the relevant IFRS regulations.

Finally, we evaluated whether the disclosures in the notes to the consolidated financial statements on the recoverability of property, plant and equipment and the cash generating units are complete and adequate. The carrying amounts of property, plant and equipment and the cash generating units that were identified by management for impairment testing are complete and adequate. The significant assumptions and discretionary decisions made in this context are plausible and within a reasonable range. The disclosures in the notes to the consolidated financial statements as at December 31, 2021 with regard to the recoverability of property, plant and equipment and the carrying amounts of the cash generating units are complete and proper.

Reference to related disclosures

Related disclosures with regard to this key audit matter are to be found in the notes to the consolidated financial statements as at December 31, 2021 under note 6 – “Development of fixed assets” in section 6.1 – “Property, plant and equipment including leases”, section 6.2 “Intangible assets including goodwill” and in section 6.3 – “Recoverability of non-current assets”.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the management report for the Group and our auditor’s report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Audit Committee for the Consolidated Financial Statements

Management is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU (IFRSs) and the additional regulations of section 245 a Austrian Commercial Code, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the EU Regulation and with Austrian Generally Accepted Standards on Auditing, which require the application of ISAs, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the EU Regulation and with Austrian Generally Accepted Standards on Auditing, which require the application of ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit.

In addition, the following applies:

We identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

We conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

We evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with all relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

Comments on the Management Report for the Group

Pursuant to Austrian Generally Accepted Accounting Principles, the management report for the Group is to be audited as to whether it is consistent with the consolidated financial statements and as to whether the management report for the Group was prepared in accordance with the applicable legal regulations.

Management is responsible for the preparation of the management report for the Group in accordance with Austrian Generally Accepted Accounting Principles.

We conducted our audit in accordance with Austrian standards on auditing for the audit of the management report for the Group.

Opinion

In our opinion, the management report for the Group was prepared in accordance with the applicable legal regulations, comprising the details in accordance with section 243 a Austrian Commercial Code, and is consistent with the consolidated financial statements.

Statement

Based on the findings during the audit of the consolidated financial statements and due to the obtained understanding concerning the Group and its circumstances no material misstatements in the management report for the Group came to our attention.

Additional Information in Accordance with Article 10 of the EU Regulation

We were elected as statutory auditor at the Ordinary Shareholders' Meeting dated April 28, 2021. We were appointed by the Supervisory Board on August 27, 2021. We have audited the Company since the financial year 2019.

We confirm that the audit opinion in the "Report on the Consolidated Financial Statements" section is consistent with the additional report to the Audit Committee referred to in Article 11 of the EU Regulation.

We declare that no prohibited non-audit services (Article 5 para. 1 of the EU Regulation) were provided by us and that we remained independent of the audited company in conducting the audit.

Responsible Engagement Partner

Responsible for the proper performance of the engagement is Frédéric Vilain, Austrian Certified Public Accountant.

Vienna, March 14, 2022

PwC Wirtschaftsprüfung GmbH

Frédéric Vilain m. p.
Austrian Certified Public Accountant

This report is a translation of the original report in German, which is solely valid. Publication and sharing with third parties of the consolidated financial statements together with our auditor's report is only allowed if the consolidated financial statements and the management report for the Group are identical with the German audited version. This auditor's report is only applicable to the German and complete consolidated financial statements with the management report for the Group. For deviating versions, the provisions of section 281 para. 2 of the Austrian Commercial Code (UGB) apply.

We draw attention to the fact that the English translation of this auditor's report according to section 274 of the Austrian Commercial Code (UGB) is presented for the convenience of the reader only and that the German wording is the only legally binding version.

Statement of the Management Board

according to Section 124 of the Austrian Stock Exchange Act

We confirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Group as required by the applicable accounting standards and that the Group management report gives a true and fair view of the development and performance of the business and the position of the Group together with a description of the principal risks and uncertainties the Group faces.

Vienna, March 14, 2022

The Management Board

Peter Oswald m. p.
Chairman of the Management Board

Andreas Blaschke m. p.
Member of the
Management Board

Franz Hiesinger m. p.
Member of the
Management Board

Development in the 4th Quarter 2021

Quarterly Overview

Mayr-Melnhof Group (IFRS, unaudited)

(consolidated, in millions of EUR)	1 st Quarter 2021	2 nd Quarter 2021	3 rd Quarter 2021	4 th Quarter 2021	4 th Quarter 2020	+/-
Sales	641.3	648.3	817.5	962.6	624.9	+ 54.0 %
EBITDA	92.7	62.8	127.5	138.0	91.8	+ 50.3 %
Operating profit	61.2	30.9	85.1	92.4	62.1	+ 48.8 %
Operating margin (%)	9.5 %	4.8 %	10.4 %	9.6 %	9.9 %	
Profit before tax	58.6	24.3	79.5	82.1	61.5	+ 33.5 %
Income tax expense	(14.7)	(6.0)	(13.3)	(19.8)	(15.6)	
Profit for the period	43.9	18.3	66.2	62.3	45.9	+ 35.7 %
Net profit margin (%)	6.8 %	2.8 %	8.1 %	6.5 %	7.4 %	
Earnings per share (in EUR)	2.18	0.89	3.30	3.09	2.28	
Cash flow from operating activities	77.8	34.5	53.5	104.0	91.0	

The 4th quarter 2021 was characterized by continuous strong demand in both divisions. Consolidated sales of EUR 962.6 million were mainly acquisition-related above last year's period (4th quarter 2020: EUR 624.9 million).

The Group's operating profit increased to EUR 92.4 million (4th quarter 2020: EUR 62.1 million), while the operating margin at 9.6 % was slightly below previous year's level (4th quarter 2020: 9.9 %). Profit before tax amounted to EUR 82.1 million (4th quarter 2020: EUR 61.5 million), profit for the period to EUR 62.3 million (4th quarter 2020: EUR 45.9 million).

MM Board & Paper recorded a capacity utilization of 97 % after 96 % in the 4th quarter of the previous year. Due to acquisitions, the operating profit of the division reached EUR 33.4 million after EUR 18.3 million. The 4th quarter was again characterized by a significant rise in costs, particularly for energy, which could not be compensated for by the price increases implemented so far. The operating margin therefore amounted to 5.9 % (4th quarter 2020: 7.2 %).

With a solid volume development, the operating profit of MM Packaging at EUR 59.0 million was above the previous year's figure, in particular due to a better product mix and the adjustment of the restructuring provision (4th quarter 2020: EUR 43.8 million). The operating margin amounted to 13.7 % (4th quarter 2020: 11.0 %).

Glossary

Definition of Financial Indicators

EBITDA (Earnings before interest, income taxes, depreciation and amortization)

Operating profit plus depreciation, amortization and impairment of property, plant and equipment, and intangible assets.

EBITDA margin

EBITDA divided by sales.

Employees

Employees at the end of the year, including apprentices and part-time employees on a pro-rata basis.

Total equity and non-current liabilities to PPE

The sum of total equity and non-current liabilities divided by property, plant and equipment.

Equity ratio

Total equity divided by total assets.

Market capitalization

Number of shares outstanding multiplied with the closing share price as of the balance sheet date.

Net debt/Net liquidity

The sum of current and non-current interest-bearing financial liabilities including lease liabilities according to IFRS 16 less cash and cash equivalents.

In case the sum of cash and cash equivalents exceeds financial liabilities, there is net liquidity.

Net debt/EBITDA

Net debt/net liquidity divided by EBITDA.

Net profit margin

Profit for the year divided by sales.

Operating margin

Operating profit divided by sales.

Property, plant and equipment to total assets

Property, plant and equipment divided by total assets.

Return on assets (ROA)

The sum of profit for the year excluding interest expense divided by average total assets.

Return on capital employed (ROCE)

Operating profit divided by the sum of average total equity, average current and non-current interest-bearing financial liabilities including lease liabilities according to IFRS 16 less average cash and cash equivalents.

Return on equity (ROE)

Profit for the year divided by average total equity.

Return on investment (ROI)

The sum of profit for the year excluding interest expenses divided by the sum of average total equity plus average current and non-current interest-bearing financial liabilities including lease liabilities according to IFRS 16

Working Capital

Total current assets less total current liabilities (excluding revolving bank credits).

Group Key Indicators

consolidated (in millions of EUR)	2017	2018	2019	2020	2021
Development of sales					
Total sales	2,751.9	2,788.1	2,976.9	2,941.6	3,524.5
less intersegment sales between the divisions	(104.7)	(108.7)	(111.8)	(116.6)	(133.0)
less intersegment sales in the divisions	(310.4)	(341.7)	(320.7)	(296.6)	(321.8)
Consolidated sales	2,336.8	2,337.7	2,544.4	2,528.4	3,069.7
Earnings data					
Net value added	659.2	670.5	756.1	756.5	805.7
EBITDA	314.7 ³⁾	324.4 ³⁾	389.6	398.9	421.0
Operating profit	215.0	217.1	255.3	231.4	269.6
Profit before tax	205.5	217.9	251.1	222.1	244.5
Profit for the year	155.0	164.2	190.2	162.2	190.7
Cash flow from operating activities	217.2	250.1	331.4	318.2	269.8
Capital expenditures/depreciation					
Capital expenditures (CAPEX)	159.1	124.4	151.0	157.6	257.8
Depreciation and amortization ¹⁾	99.7	107.3	134.3	167.5	151.4
Employees	9,856	9,445	10,014	9,938	12,492
Profitability indicators					
Return on equity	12.0 %	12.1 %	13.1 %	10.6 %	11.9 %
Return on assets	8.3 %	8.5 %	9.0 %	7.1 %	6.7 %
Net profit margin	6.6 %	7.0 %	7.5 %	6.4 %	6.2 %
EBITDA margin	13.5 %	13.9 %	15.3 %	15.8 %	13.7 %
Operating margin	9.2 %	9.3 %	10.0 %	9.2 %	8.8 %
Return on capital employed	16.6 % ³⁾	16.2 % ³⁾	15.4 % ³⁾	13.7 %	12.8 %
Return on investment	10.9 %	11.0 %	11.7 %	9.4 %	8.8 %
Balance sheet indicators					
Equity ratio	65.5 %	67.0 %	62.3 %	64.5 %	41.4 %
Property, plant and equipment to total assets	42.7 %	41.3 %	42.7 %	41.5 %	37.1 %
Total equity and non-current liabilities to property, plant and equipment	1.9	2.0	1.9	2.0	2.2
Working capital	644.3	698.8	523.9	584.4	809.3
Financial indicators					
Net debt (-)/Net liquidity (+)	(11.8)	49.4	(218.6)	(122.2)	(1,063.5)
Net debt/EBITDA	0.0	(0.2)	0.6	0.3	2.1 ⁴⁾
Share performance indicators					
Market capitalization ²⁾	2,450	2,200	2,392	3,300	3,532
Earnings per share (in EUR)	7.73	8.18	9.49	8.06	9.46
Dividend per share (in EUR)	3.10	3.20	3.20	3.20	3.50 ⁵⁾

¹⁾ incl. impairment of property, plant and equipment and intangible assets

²⁾ per ultimo

³⁾ adjusted according to definition (see Glossary)

⁴⁾ EBITDA including acquired mills MM Kotkamills and MM Kwidzyn for the full financial year 2021; excluding the sold sites at Eerbeek and Baiersbronn

⁵⁾ proposed for 2021

The key indicators from the financial year 2019 onwards are not fully comparable with the previous years' figures due to the initial application of IFRS 16.

Financial Calendar 2022

April 17, 2022	Record date "Ordinary Shareholders' Meeting"
April 26, 2022	Results for the 1 st quarter of 2022
April 27, 2022	28 th Ordinary Shareholders' Meeting – Vienna
May 3, 2022	Ex-dividend day
May 4, 2022	Record date "Dividends"
May 11, 2022	Dividend payment date
August 11, 2022	Results for the 1 st half-year of 2022
November 3, 2022	Results for the first three quarters of 2022

The English version of this annual report is a translation of the original German text. In case of doubt, the German version takes precedence.

The annual reports and interim reports can be requested from the Company and are also available on the Internet.

The financial statements of Mayr-Melnhof Karton AG prepared in accordance with Austrian Financial Reporting Standards were audited together with the management report by PwC Wirtschaftsprüfung GmbH, Vienna, and were approved without qualification. The financial statements have been submitted to the registrar of companies at the Vienna Commercial Court under registration number 81906 a and will be published in the "Amtsblatt zur Wiener Zeitung" (Official Federal Gazette) as well as on the website of the Company.

We have prepared this report and reviewed the figures with the greatest possible care. Nevertheless, rounding, typographical and printing errors cannot be excluded. The aggregation of rounded amounts and percentages may result in rounding differences due to the use of automated computational aids. This report also contains forward-looking estimates and statements based on the information currently available to us. Please note that a wide variety of factors could cause actual circumstances – and hence actual results – to deviate from the expectations contained in this report.

The determination of key indicators which cannot be reconciled directly from the annual report can be found on our website under the section "For Investors/Key Indicators".

Terms referring to people include both men and women.

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