



2018

Non-financial Report

CORPORATE RESPONSIBILITY

SUSTAINABILITY MANAGEMENT IN THE MM GROUP	2
STAKEHOLDERS	5
MATERIALITY ANALYSIS	6
SUSTAINABILITY TOPICS	8
Material and product responsibility	8
1. Renewable raw materials and recyclability	
2. Ecological criteria in procurement	
3. Product safety	
Environmental management	17
1. Energy consumption and emissions in production	
2. Water consumption in production	
3. Waste in production	
Employees	24
1. Employee education and training	
2. Employee safety and health	
3. Working conditions/environment	
Society	30
1. Compliance	
CHAPTERS FROM THE ANNUAL REPORT	33
Foreword	34
Locations	35
Divisions	37
CONTEXT OF NON-FINANCIAL TOPICS WITH BUSINESS DEVELOPMENT	41
NON-FINANCIAL INDICATORS	42
DISCLOSURES ON THE NON-FINANCIAL REPORT	44
GRI CONTENT INDEX	45

Sustainability management in the MM Group

Foreword

This detailed report in our combined annual and non-financial report describes non-financial topics on which the business of the MM Group has a major impact or which are of particular interest for our stakeholders and how we deal with them. In doing so, we fulfil our statutory obligation to prepare a consolidated non-financial report according to Article 267 a of the Austrian Commercial Code, and we report in detail how we deal with matters of economic, social, and ecological interest.

The topics described below were determined in the course of a materiality analysis in the Company. Relevant performance indicators were identified following the GRI Standards, and the appropriate internal experts were involved. They also provided assistance in taking into account the interests of our stakeholders. The definition and collection of non-financial indicators were analyzed throughout the Group and are intended to be further developed for future reports in order to be able to provide additional information. Besides the information provided here, the sections "Foreword", "Locations", and "Divisions" in other parts of the Annual Report also form part of the non-financial report.

Vienna, February 28, 2019

The Management Board

Wilhelm Hörmanseder m. p.

Andreas Blaschke m. p.

Franz Hiesinger m. p.

Franz Rappold m. p.

What we stand for

Responsible use of resources

We process primarily renewable raw materials and deploy state-of-the-art high-performance technologies in order to produce high-quality cartonboard and folding carton products in a resource-friendly way. These materials can be completely recycled after use. Sustainability and the implementation of a cyclical economy have thus always been an inherent part of the Mayr-Melnhof Group's business operations. Thereby, we combine a great sense of responsibility with long-term competitiveness.

Best possible standards

As an international group of companies with production sites in 18 countries and as the market leader in Europe, we have set ourselves the goal of sustainably establishing the best possible standards in all business areas throughout the Group.

Thus, we apply a challenging performance benchmark among individual locations to ensure that "best practice" takes root throughout the Group. It is our ambition to improve them further through continuous investment in technical progress.

Corporate values – our guiding principle

Responsibility, performance, and passion are the practiced core values of the MM Group which guide our actions throughout the Group in a corporate culture characterized by economic efficiency, transparency, and trust. Our business development is characterized by a long-term nature under a constant emphasis of profitability and solidity.

The highest degree of integrity is at the core of our principles of conduct, a sustainable protection of the environment is an inherent part of our business model. Besides adhering to the principles of honorable business people in our business activities, we also acknowledge our long-term responsibility towards society.

MM Group Code of Conduct

The principles of conduct of the Mayr-Melnhof Group are summarized in our Code of Conduct. They include the universal principles of the United Nations Global Compact and constitute guidelines for the responsible actions of our employees in order to conform to the ethical guiding principles from the areas of legal compliance, human rights, and labor standards throughout the Group.

Continuous communication and training courses are intended to increase detailed knowledge of this topic and provide orientation for its implementation.

Responsible persons

The ultimate responsibility for non-financial matters lies with the Management Board and the Supervisory Board, operational decisions for the relevant matters being taken by the respective persons in charge.

In the Group, the central function “Sustainability Management” has been set up, reporting directly to the Management Board and ensuring that sustainability management is implemented and operated on behalf of and in the interests of the Management Board. This central function was commissioned to conduct the materiality analysis, data collection, and reporting. The respective managers of the specialist departments exercise their managerial duties, with each employee making his or her own contribution. Sustainability management therefore does not take place in an isolated way, but as an integral element of the organization and its processes.

Stakeholders

The MM Group is aware of its responsibility towards a large number of stakeholder groups and acts accordingly in a purposeful manner.

Individual stakeholders of the MM Group were identified in the course of an analysis along the value added chain by involving internal experts from various business areas as follows:

Stakeholders of the MM Group

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

Stakeholder dialog

The dialog with these stakeholders takes place in a variety of ways. Information may be obtained via a number of different channels (such as website or newsletter). MM is, however, also available for a personal exchange at any time (e.g. in the form of customer meetings, supplier discussions, trade fairs) and, additionally, regularly conducts customer surveys. Shareholders and capital market participants are in regular contact with the Investor Relations department. Employee performance reviews are generally carried out once a year. Company representatives are members of European (e.g. CEPI, ECMA) and national interest groups (e.g. VDP, Austropapier).

Materiality analysis

A materiality analysis was conducted already in the financial year 2017. As a result, we analyzed MM's value added chain with regard to potential risks for the environment, society, and the economy. Thereby the impacts of MM's business activity on these topics were evaluated in terms of their significance. Responsible persons from all relevant specialist areas were involved in this process. As a second dimension of the materiality analysis, the relevance of the non-financial issues for MM's various stakeholder groups was prioritized, with internal experts performing the assessment as representatives of these groups. In addition, an industry analysis confirmed the relevance of the identified topics in the general context of sustainability and industry-specific characteristics. At an internal workshop with 14 departmental managers and technical experts held in 2018, we conducted a more detailed analysis of topics that had been identified as relevant in 2017. This provided a better understanding of the impacts on non-financial issues and their potential significance for business development.

The analysis and prioritization were performed separately for the two divisions of the MM Group and were then combined to obtain a weighted outcome for the Group.

The following key topics for MM resulted from the two dimensions of impacts and stakeholder interests:

Key topic	NaDiVeG ¹⁾ matters	GRF ²⁾ topic	See chapter
Renewable raw materials and recyclability	Environmental matters	301	Material and product responsibility
Ecological criteria in procurement	Environmental matters	308	Material and product responsibility
Packaging safety	Social matters	416	Material and product responsibility
Energy consumption and emissions in cartonboard production	Environmental matters	302, 305	Environmental management
Transport emissions	Environmental matters	305	Environmental management
Water consumption in cartonboard production	Environmental matters	303	Environmental management
Waste from production	Environmental matters	306	Environmental management
Employees' education and training	Employee matters	404	Employees
Employees' safety and health	Employee matters	403	Employees
Socially acceptable working conditions for employees	Employee matters, respect for human rights	102, 408, 409	Employees, society
Compliance with regulations and requirements	Social matters	419	Society
Anti-corruption and anti-competitive behavior	Fight against corruption and bribery	205, 206	Society

¹⁾ Sustainability and Diversity Improvement Act

²⁾ Global Reporting Initiative

The further development of the materiality analysis resulted in a slight shift in the list of key topics. While the effects relating to local employment and income effects were no longer classified as significant, the topics of “ecological criteria in procurement” and “transport emissions” have gained relevance. Ecological criteria in procurement had already been discussed in previous years. The significance of the topic of transport emissions needs to be analyzed in greater detail and will be addressed in future.

Sustainability topics

MATERIAL AND PRODUCT RESPONSIBILITY

1 — RENEWABLE RAW MATERIALS AND RECYCLABILITY

As industry leader, our aim is to comply with high standards also in view of the sustainable and responsible use of resources.

The MM Group defines cartonboard as an “ecologically intelligent packaging material” for many reasons as it has low environmental impact and combines additional significant advantages.

Cartonboard is

- renewable due to the use of the organically regenerative raw material wood: certifications for fibers from responsibly managed forests are considered standard in the cartonboard industry.
- climate-friendly, as forests constitute an important carbon reservoir. Cartonboard has extremely low CO₂ values within the value added chain.
- recyclable and can thus be reused several times. Used cartonboard packages have the highest recycling rate of all packaging materials and form the basis for the production of an environmentally friendly packaging material – recycled fiber-based cartonboard. A cellulose fiber can be recycled five to seven times.
- compostable and represents a valuable source of energy at the end of its life cycle, all in accordance with EU Directive 94/62/EG (referring to packaging and packaging waste).

The MM Group thus focuses on a product made from organic, renewable, and recyclable fibers. A difference is generally made between reprocessed fibers in the form of recovered paper and virgin fibers in the form of pulp or groundwood pulp.

In their production process, MM’s cartonboard mills use 74 % of recycled fibers and around 26 % of virgin fibers from responsibly managed and controlled forests.

MM Packaging produces cartonboard packaging using a state-of-the-art machinery pool in a broad range of sizes, shapes, designs, and finishing techniques. The main focus of the packaging production is placed on the highest quality together with cost-efficient and environmentally friendly material use.

Use of materials by MMK and MMP

<p>MMK</p>	<p>Recycling paper</p> <p>The use of recovered fibers as part of a cascaded utilization of the renewable raw material wood is of great ecological benefit: The cycle is closed, increasing the life cycle of wood within the entire value added chain by many times. More than 60 years ago, the Mayr-Melnhof Group recognized the economic and ecological advantage of “recovered paper” as a raw material and back then focused on the industrial production of recycled fiber-based cartonboard. Today, recycling has become indispensable and is at the core of our economic activity. The paper and cartonboard industry differentiates between more than 60 grades of recovered paper.</p> <p>Virgin fibers</p> <p>Around one quarter of the fibers used by MM Karton in cartonboard production is derived from virgin fibers (groundwood pulp and pulp).</p> <p>Chemicals</p> <p>Functional and process chemicals are required for the production of cartonboard. Functional chemicals include primarily inorganic pigments (calcium carbonate, kaolin), binding agents, starch, and sizing agents that aim at improving the visual, processing-related, and functional characteristics of cartonboard. Process chemicals, such as retention agents, dispersion agents, and defoaming agents, are necessary for the cartonboard production process.</p> <p>Packaging</p> <p>Our cartonboard products are shipped using functional transport packaging to protect them from damage or quality degradation caused by external influences. We always consider the relevant requirements of the means of transport and route and ensure an optimum and resource-efficient use of packaging materials, in particular of pallets and foils.</p>
<p>MMP</p>	<p>Print substrate (cartonboard and paper)</p> <p>The print substrate is the main input factor in the packaging production and has a decisive impact on print quality. It must have good printability properties and good operating performance in printing and processing machines as well as in the customers’ packaging units.</p> <p>MMP uses mainly the following types of print substrates:</p> <ul style="list-style-type: none"> ▪ Coated cartonboard allows for brilliant color effects and thus an excellent printed image and a high gloss effect. ▪ Uncoated cartonboard is matt with a high-quality front made from pulp and is good for printing. ▪ Corrugated cartonboard is a glued composite material with a corrugated paper web (corrugated medium) with at least one flat web of a different paper (liner). Liners can be, for example, Kraft liners, test liners, white top liners (white-coated liners).

MMP	<ul style="list-style-type: none"> ▪ Paper is used for various packaging solutions or leaflets. Coated and uncoated papers made from virgin fibers are primarily used. <p>Printing inks</p> <p>MMP deploys a limited number of rigorously tested and certified ink systems with precisely specified pigments. Mixing equipment in our own plants allows us to satisfy even the special color requirements of our customers.</p> <p>Varnishes</p> <p>The value of printing can be significantly increased by applying a layer of varnish. Spot varnishing can be used to highlight certain pictorial elements (e.g. product images) through matt/gloss contrasts resulting in special color effects.</p> <p>Foils for hot- and cold-foil embossing</p> <p>Embossing is one of the most challenging and effective finishing methods. The use of different types of embossing foils (high-gloss embossing foil, metalized embossing foil, holographic embossing foil, etc.) allows for a large number of different effects to be realized with foil embossing.</p> <p>Glue</p> <p>The quality of folding carton bonding depends on the adhesive used, the nature of the front and back of the cartonboard, and the process-related conditions in the folding carton gluing machine. We use primarily water-based dispersion adhesives.</p> <p>Printing and cutting dies (plates/cylinders)</p> <p>Different methods of printing require different printing forms whose costs and production times have an influence on the suitability of a printing method. Focus is placed on the use of printing plates for offset printing. The production of printing cylinders for gravure printing is complex; they are thus particularly suitable for high-quality requirements with large print runs. The printing machines are required to transfer the ink as precisely as possible from the form to the print substrate with a consistent transfer quality throughout the whole print run.</p> <p>Packaging</p> <p>Packaging at MM Packaging is used according to the principle of “as much as necessary, as little as possible” and also depends on customer requirements. Priority is given to sustainably manufactured materials. MM Packaging takes great care to ensure that packaging materials can be reused in the recycling process. Common materials include outer transport packaging made from corrugated board, pallets, and foils.</p>
------------	--

a — Risks and impacts

The most important resources for manufacturing cartonboard are fibers, chemicals, water, and energy. In contrast, the focus of folding carton production lies on the materials used (cartonboard, ink, varnishes, finishing materials, glue).

As raw materials, both divisions of the MM Group process a high proportion of renewable materials, i.e. fibers. Non-renewable raw materials play a subordinate role. This is also reflected in the volumes used, which are presented on page 42. While MM Karton, as a leading manufacturer of coated recycled fiber-based cartonboard, processes almost three quarters of recycled fibers in its cartonboard mills, the use of print substrates (cartonboard and paper) made from recycled and virgin fibers is balanced at MM Packaging.

The recyclability of our products saves natural resources. The raw material of recovered paper is available in sufficient quantities for our production sites. Around 60 million tons of paper are collected and reprocessed in Europe every year. MM Karton processes around 1.1 million tons thereof.

Stock preparation, i.e. breaking down individual fibers before application on the cartonboard machine, is possible for recycled fibers with high energy-efficiency. In addition to the energy-saving aspect of the use of recovered paper, other ecological benefits include the protection and conservation of natural resources.

One potential risk for MMK and MMP consists in the discharge of chemicals in the course of production. This risk is minimized by complying with the relevant statutory regulations and by additional specific safety measures, such as chemical storage areas equipped with retention basins, staff training, and meticulously planned incident management.

The main purchasing categories correspond to the materials discussed above, which are primarily obtained from European suppliers.

b — Management approach

Recovered paper is subject to strict quality standards. The different grades are precisely defined in the EN643 standard. MM Karton obtains its raw materials exclusively from certified sources. The qualities used are subject to strict quality inspections of the quality management system implemented at MM Karton. Our procurement organization has been instructed to ensure the optimum verification of origin and quality as well as the highest level of supply reliability.

Fibers are the most important material in the production of cartonboard. Cartonboard mills therefore work continuously on projects aimed at optimizing fiber use and application. Improvements in extracting recycled fibers are achieved primarily through progress in stock preparation. Constant monitoring ensures optimum use in day-to-day production.

All the chemicals used in cartonboard production conform to the 36th Recommendation (Paper and Board for Food Contact) of the Federal Institute for Risk Assessment (Federal Ministry of Food and Agriculture – Federal Republic of Germany) – BfR XXXVI and comply with the provisions of the REACH Regulation.

In the area of chemicals management, we pursue the goal of minimizing the harmful effects of the use of chemicals to humans and the environment.

For food packages, only low-migration inks and varnishes that comply with all relevant legal regulations are used in the folding carton production at MMP. In Europe, these include Regulations (EC) No. 1935/2004 and No. 2023/2006, for example. Furthermore, the inks and varnishes are produced in accordance with the EuPIA Guideline on Printing Inks and comply with Swiss Ordinance 817.023.21. We attach great importance to implementing these high European standards at all sites throughout the Group. Food-contact inks and mineral-oil-free inks conforming to the EuPIA recommendation are also used for other packages and are more environmentally friendly in the recycling cycle and beyond.

The glue used for food packages has to fulfil high demands in terms of processability, strength of the adhesive seam, and safety for use with food, and is continuously optimized. We use only adhesives and glues which comply with Regulations (EC) No. 1935/2004 and No. 2023/2006 and which are produced in accordance with the FEICA guidance.

c — Measures and development

MM Karton achieves optimization in the use of fibers and chemicals in particular through the continuous development of products, formulations, and processes. In 2018, we continued to focus on improving the use of recovered fibers in a division-wide project and reduced the use of pulp and white grades of recovered paper in recycled fiber-based cartonboard. Improvements in fiber consumption involved both product-related and production-related adjustments (e.g. production in the Neuss mill in three instead of the previous four layers) as well as the reduction of waste and reject material. Moreover, we also focused on optimizing sources of supply. The main improvements in chemicals consumption were achieved through process modifications and the use of substitutes, e.g. the discontinuation of de-inking at the Eerbeek site and wastewater treatment in the Baiersbronn mill.

MM Packaging achieved improvements in its consumption of printing material through process optimization and the associated reduction in waste. The focus of chemicals management was placed on consumption and reuse.

2 — ECOLOGICAL CRITERIA IN PROCUREMENT

Besides the use of renewable and recycled raw materials, ecological criteria in procurement are also a key topic for the Mayr-Melnhof Group. The focus is placed on independent verification of raw materials procurement and proven compliance of the company's working methods with international environmental and social standards that support long-term sustainable development. In addition, care is generally taken wherever possible to use sources of supply located near our plants.

a — Risks and impacts

The potential risk of encroachment on local communities and ecosystems, e.g. through illegal logging, is counteracted by chain-of-custody certification according to FSC® and PEFC™ standards for all cartonboard mills.

b — Management approach

According to the principle of dealing responsibly with resources and using designated sustainable raw materials in production a Chain-of-Custody standard is pursued.

Certification in the area of Chain-of-Custody:

- FSC®
- PEFC™

FSC® and PEFC™

The successful completion of chain-of-custody certification for all seven MM cartonboard mills according to the PEFC™ and FSC® standards (license FSC-C003336) in 2009 demonstrates that all the virgin fibers used in cartonboard production come from responsibly managed forests and/or from controlled sources and are inspected by independent third parties on a regular basis.

Moreover, MM Karton has committed itself to excluding the following origin for wood (in accordance with the currently valid FSC® "Controlled Wood Standard"):

- Illegally harvested wood
- Wood from areas where traditional and basic civil rights are violated
- Wood from forests whose special rights of protection are endangered by forest management
- Wood gained from the transformation of natural forests into plantations or for non-forestry use
- Wood from forests planted with genetically modified tree species

The CoC standard is implemented differently by MM Karton and MM Packaging.

MMK mills work with a so-called “credit system” which records all purchased fibers and their certification status. There is no physical separation of fibers in the mill itself. They are stored and processed together. The quantity of cartonboard with FSC® or PEFC™ certification that can be sold depends on the volume of certified and creditable fibers purchased. The shares of FSC®- and PEFC™-certified and controlled virgin fiber use are presented on page 42.

In MM Packaging plants, FSC®- and PEFC™-certified cartonboard is stored and processed strictly separately from non-certified cartonboard. Which type of cartonboard is used in folding carton production depends on our customers’ wishes and the respective scope of application.

In addition, other applicable industry standards such as ISO 14001, EMAS, and ISO 50001 also address the evaluation of ecological criteria in procurement within the MM Group and go beyond the purchase of fibers and cover all relevant input factors including technical equipment and machinery.

We expect our business partners to always comply with all legal regulations and customary industry standards within the supply chain, and we encourage them to introduce and implement similar principles of responsibility.

c — Measures and development

FSC®- or PEFC™-certified cartonboard is increasingly used in individual plants of the MM Packaging division owing to customer demand.

3 — PRODUCT SAFETY

The safety of food packages is a central topic for the MM Group. This means that, firstly, products of the MM Group are themselves free from any harmful substances and, secondly, outer migration-proof. Accordingly, no transfer takes place from inks and varnishes printed onto cartonboard, nor from any other materials with which cartonboard may come into contact, in quantities that might endanger human health.

a — Risks and impacts

Possible risks of product contamination, a potential harm for consumers’ health, and possible violations of relevant regulations, legislation, and standards are minimized by applying high quality management standards and carrying out regular internal and external inspections.

b — Management approach

Certifications provide important evidence for customers and consumers of MM Karton and MM Packaging that our products are sustainable, socially acceptable, and do not pose any risk to health. Moreover, they serve as a proof of legal compliance in the area of product safety.

At the same time, regular inspections of MM products to ensure conformity with certification criteria guarantee rigorous quality assurance that is also externally visible.

Certifications in the area of product quality and food safety have been obtained in particular in accordance with:

- ISO 9001
- BRC Packaging
- FSSC 22000 (ISO 22000)
- EN 15593
- ECMA GMP

A detailed overview of certified MM locations can be found on our divisional websites at <http://www.mm-karton.com/en/company/mills> and <http://www.mm-packaging.com/en/locations>.

ISO 9001

The Mayr-Melnhof Group was one of the first companies in the cartonboard industry to be certified according to the ISO 9001 quality management system which currently covers all production sites of the cartonboard division as well as more than 90 % of the packaging sites.

In addition to the internal benefits of a quality management system, such as efficient workflows and processes, defined implementation rules, and, above all, continuous further development, customer satisfaction is our highest priority. Our primary goal is to guarantee our customers consistent product quality and application-oriented product solutions while ensuring maximum security of supply.

BRC Packaging and FSSC 22000

The British Retail Consortium (BRC) Packaging standard is a global standard for packages and packaging materials that focuses on monitoring food hygiene and product safety. This standard, along with the global FSSC 22000 standard for food safety management systems (food safety system certification), which also covers the requirements of ISO 22000, are hygiene management systems recognized by the Global Food Safety Initiative (GFSI). With their certification according to BRC Packaging and FSSC 22000, our sites prove their competence in the areas of risk management, hygiene, product safety, and quality systems, and thus comply with our customers' requirements regarding food safety.

Certified hygiene management in accordance with EN 15593

The requirements of the certified hygiene management in accordance with EN 15593 apply in particular to cartonboard packaging products used in the fields of food and pharmaceuticals. Here, it is important to meet the high demands placed on the hygienic cleanliness of products and thus on production itself. Visible proof of compliance is the certification of our relevant sites according to the EN 15593 hygiene management system standard. It covers sensitive and important parameters, such as personal hygiene, foreign-object and glass checking, cleaning cycles, pest management, and microbiology. All MM cartonboard producing sites and around 60 % of MM's packaging plants are certified according to one or more of these international hygiene management standards.

ECMA GMP

Supplying customers and consumers with safe food packages made from cartonboard is a priority in the folding carton industry. The ECMA GMP guideline was developed as an initiative of the ECMA (European Carton Makers Association). All European packaging sites comply with the requirements of this guideline.

c — Measures and development

An ongoing internal and external analysis of cartonboard products and a continuous evaluation with regard to compliance with the relevant rules and regulations also played a central role in MM's measures in 2018. Comprehensive employee training in product safety and food contact in order to safeguard expertise and competence in state-of-the-art technology were consistently pursued. At MM Karton, special attention was paid to the introduction of new products such as FOODCART™ and the use of fluorine-free barriers in 2018. At MM Packaging, particular focus was placed on improving existing certifications regarding food safety (BRC, FSSC, ISO 22000, ECMA GMP) and meeting special customer requirements.

In 2018, five cartonboard mills switched to the new version of the ISO 9001/14001 standards for quality and environmental management. Two cartonboard mills and the FollaCell fiber mill had already successfully implemented this standard. Certification and recertification in the packaging division involved particularly ISO 9001.

ENVIRONMENTAL MANAGEMENT

1 — ENERGY CONSUMPTION AND EMISSIONS IN PRODUCTION

The most important environmental impacts of the business operation of the MM Group is due to its energy and water consumption. While MM Karton requires proportionally higher volumes of energy, the consumption at MM Packaging is significantly lower.

Natural gas provides over 80 % of the primary energy needs in MMK mills. Each mill has its own power station in which natural gas is used to generate steam for the demands of cartonboard production and to produce electricity from the generated high-pressure steam via a turbine. In addition, electricity is also purchased from energy supply companies. Other sources of energy in the individual mills include hydroelectric power, light heating oil, diesel, and liquefied gas.

Furthermore, in the Hirschwang mill, leftover materials from production (reject materials and fiber residues) are used in a thermal process to generate energy for the production of steam. The Frohnleiten mill also uses biogas from anaerobic wastewater treatment. Increasing efficient self-supply of power is MM Karton's long-term goal. Figures of the absolute and specific energy consumption in cartonboard production can be seen on page 43.

The production of MM Karton which already works very energy efficiently today, is additionally supplied with power from renewable energy sources.

Resource-efficient operations not only pay off for us but also for our environment. Responsible energy consumption management has therefore always been of high priority. Care is taken throughout the Group to ensure that the best-possible standards are integrated, and existing facilities are upgraded systematically.

a — Risks and impacts

Exhaust air emissions that result from cartonboard production are mainly caused in energy production by burning natural gas. Emissions of CO₂, NO_x, and CO are constantly monitored and observed according to legal provisions. In contrast, direct exhaust air produced by cartonboard machines consists primarily of steam. MM Karton constantly undertakes new measures to further reduce exhaust air emissions in line with the latest technological standards.

Energy use at MM Packaging is far lower than at MM Karton, accounting for less than 10 % of Group-wide energy consumption. Nevertheless, programs aimed at raising the energy efficiency especially of machinery and lighting are also implemented in the packaging division. Waste heat from the machinery pool is used to pre-heat other premises, for example.

Low carbon footprint

Wood and cartonboard play a significant role in climate protection. Trees absorb CO₂ while growing. Wood fibers from the forests that are processed into cartonboard store carbon in the finished product – the cartonboard product. Moreover, the recycling of folding cartons also keeps the carbon stored, preventing it from returning into the atmosphere. Cartonboard and folding carton thus play a role in the expansion of forests and in the protection of the environment.

In the light of climate protection, a disclosure of the carbon footprint is a way of helping consumers to compare and assess the environmental impact of the production process through to the finished product.

In accordance with the agreement of the European paper, cartonboard and packaging producers, MM Karton, along with other manufacturers, applies the calculation method of the NCASI framework (National Council for Air and Stream Improvement) which was defined by the CEPI (Confederation of European Paper Industries) and is scientifically sound and independently audited.

Pro Carton, the European association of the cartonboard and folding carton industry, has published the latest average CO₂ footprint of folding carton production in Europe, in intervals of three to five years: due to a reduction by an additional 3 % between 2011 and 2014, the carbon footprint is now at 885 kg of fossil CO₂ equivalents per processed ton of folding carton and is largely offset by the storage of -730 kg of biogenic CO₂. This is the result of continuous improvement measures in the entire production process – from the use of raw materials and energy to waste reduction. The official Pro Carton method of calculating the carbon footprint for the production of folding cartons starts with the raw materials (cradle) and ends at the folding carton producer's exit gate.

b — Management approach

Existing environmental management systems within the MM Group have been set up in such a way that changing requirements can be incorporated and adapted to easily and as quickly as possible.

Each year, environmental objectives are defined at all the levels concerned and for each relevant area. In order to achieve these objectives, a program is initiated containing the aspired objectives, specific measures, the people responsible for accomplishment, a time frame, and the funds required for the achievement. The environmental officer reports to the management on environmental performance and further planned measures as part of the management review.

Internal and external audits (especially regarding certifications and re-certifications) and an appraisal by the management based on the management review are performed in order to guarantee those environmental standards already achieved, to satisfy new requirements, and to monitor the effectiveness of the environmental management system. In addition, the MM Group follows the precautionary principle in its activities by taking account of anticipated developments and forecasts for all objectives and measures.

The aim of energy management consists in sustainably reducing the energy consumption of our factories, raising efficiency and obtaining an ever increasing share from renewable sources. Certifications are also of great importance for our energy management and thereby help us to identify Group-wide energy-saving potentials.

Environment- and energy-management-specific certification comprises in particular the following standards:

- ISO 14001
- EMAS
- ISO 50001

ISO 14001

The systematic incorporation of environmental protection into management considerations already started back in 1996 with the certification of the cartonboard mill in Frohnleiten according to the globally applicable standard for environmental management systems, ISO 14001. Since then, regular internal and external audits have safeguarded the high environmental standard and supported us in meeting new requirements.

EMAS

Since 1996, the cartonboard sites in Frohnleiten and Hirschwang have participated voluntarily in the EC's ecological auditing regulation. The "Eco-Management and Audit Scheme" (EMAS) is a common system for environmental management and environmental auditing. Participation supports the information policy of the Mayr-Melnhof Group in presenting its corporate culture characterized by responsible action. Together with the ISO 14001 certification, EMAS forms the basis of the continuous safeguarding of an integrated environmental management system at MM. Today, the sites at Frohnleiten, Hirschwang, Eerbeek, and the fiber mill FollaCell are certified according to ISO 14001, with Frohnleiten and Hirschwang additionally being certified according to EMAS. The cartonboard mills that are not directly certified have internal environmental protection systems for continuous improvement and use synergies from the certified sites. 22 locations in the packaging division are certified according to ISO 14001 and/or EMAS.

ISO 50001

The MM Group always strives to increase energy efficiency and reduce specific costs. For this reason, production facilities – especially in the energy-intensive cartonboard division – are being increasingly aligned with the provisions of ISO 50001. Five sites in the cartonboard division and six packaging sites are currently certified according to this standard.

Systematic energy management using a set of key performance indicators (KPIs) is consequently continued and optimized and has already resulted in a significant reduction in energy costs, greenhouse gas emissions, and other emissions in the past. The success of projects implemented in this context is also documented in detail, enabling everyone to clearly see their influence on energy saving.

Emission certificates (“carbon leakage” classification for MM Karton)

The following applies based on current knowledge: the volume allocation of CO₂ certificates to the seven cartonboard mills located within the European Union and the FollaCell fiber mill since 2013 up to and including 2020 will be largely free of charge. Accordingly, a sufficient number of CO₂ certificates is available for the sites until the end of 2020. However, an examination of the allocation process for the subsequent years (2021 et seq) by the EU is to be anticipated. This revision is to be expected only by the end of 2019. The political goal of the European Union was, until now, a reduction in CO₂ emissions by approximately 20 % by 2020 compared to the reference year 1990. In this context, free allocations of CO₂ have been reduced since 2013. CO₂ emissions are determined based on a comprehensive monitoring concept adapted to each location in accordance with Regulation (EU) No. 601/2012. Figures on the absolute and specific direct CO₂ emissions in MM Karton’s production can be found on page 43.

c — Measures and development

Projects of MM Karton in 2018 focused in particular on improving the efficiency in energy generation through technological optimization of existing facilities and by investing in replacements. Furthermore, the use of biogas was extended. The most important project was the commissioning of a new gas and steam power station at the Frohnleiten site in Austria as replacement for the existing plant in order to reduce NO_x emissions and increase efficiency.

In the “e.ffiiciency” initiative all measures aimed at improving energy efficiency per ton of cartonboard have been coordinated for around a decade. Based on the significant reduction in specific energy consumption already achieved, we aim to continuously exploit new savings potentials. These projects involve all areas of cartonboard production, from material preparation and operation of the cartonboard machine to equipment and our own power stations and wastewater purification systems.

Measures undertaken at MM Packaging in 2018 aimed in particular at improving the air conditioning systems and thermal isolation. The conversion to LED lighting was systematically continued. Furthermore, the energy efficiency at various plants was increased by modifying to existing systems.

Energy consumption optimization with regard to transportation services is pursued in particular through improvements in the use of truck capacities, an increased efficiency in intra-company logistics, and the possible option of using rail transport to a higher extent.

2 — WATER CONSUMPTION IN PRODUCTION

Water is an essential operating resource in the cartonboard production process. In contrast, there is almost no water consumption during cartonboard processing in production. Consequently, there are higher waste water volumes in the cartonboard division than in the packaging division.

a — Risks and impacts

Water is used in large quantities during cartonboard manufacturing over the entire course of production – from stock preparation of recovered paper through processing fibers to being used as coolant and for the production of steam in power generation.

In this connection, it is important to clearly differentiate between water use and water consumption. One part of the water is only used temporarily in production (e.g. as cooling water) before being treated and returned. The risk of water shortage in dry regions due to production is therefore low. Only a small part of the water used is not actually returned, but remains either in the product as residual moisture or evaporates. A residual moisture content in cartonboard is mandatory for further processing.

b — Management approach

MM Karton's aim is a sustainable reduction in the use of water by continuously optimizing production processes. Specific water consumption is kept very low and is further reduced through recirculation switching and increases in efficiency.

At MM Karton, the extracted ground and surface water is generally used a number of times, first as cooling water and then as process water in several stages. Excessive water is initially cleaned mechanically and then treated in a multi-step biological wastewater purification process before being discharged again – overuse or contamination do not take place.

The water used repeatedly in the production process is cleaned and treated in state-of-the-art wastewater purification plants before it leaves the mills.

Wastewater volumes are continuously recorded and evaluated by specially trained Company-internal staff and in regular external inspections. Compliance with the relevant statutory regulations is verified by the respective national or regional authorities.

For information regarding certification in environmental management, please refer to page 19.

c — Measures and development

In 2018, MM Karton undertook additional measures to reduce the consumption of fresh water in production. In particular, the technology used in its water treatment plants was modernized or upgraded. MM Packaging also focused on projects aimed at reducing the consumption of fresh water and on relevant monitoring.

3 — WASTE IN PRODUCTION

The topics of reducing waste and optimizing the use of materials are of central importance within the MM Group to maintain cost leadership and make an important contribution to the conservation of resources. Projects with this focus were also continued in 2018 and focused in particular on measures to further reduce waste and improvements in separation and recycling.

a — Risks and impacts

The largest share of waste at MM Karton in terms of volume in recycling mills is the residual waste from the processing of recovered paper, the so-called reject. Together with the sludge and household-waste-like commercial waste, they are either used in a thermal recovery process within the mills or handed over to authorized disposal firms. Hazardous waste, such as used oil, chemicals, contaminated liquids, wastewater contaminated by chemicals, workshop waste, and batteries, are handed over to licensed waste disposal companies for disposal in compliance with statutory regulations.

At MM Packaging, the largest share of waste in folding carton production also is by far represented by non-hazardous materials that are introduced into the recycling cycle. The most important category of waste by volume is cartonboard scrap from the die cutting process. It is largely reused within the MM Group or in other companies and processed into new cartonboard.

Solvent, ink and varnish residues, used oils, humidifying water, and wastewater from the printing machines are regarded as hazardous waste that makes up only a small fraction of the total waste volume and which is handed over to authorized waste disposal firms in compliance with statutory regulations.

After use, products of the MM Group are generally disposed of by end customers or consumers. The environmental impact of the packaging waste caused by this are low, as the materials used are environmentally friendly (recyclable and compostable cartonboard, mineral-oil-free inks). Furthermore, the waste volume and its associated impact on the environment are reduced by MM's business model – reuse of recovered paper.

b — Management approach

The guiding principle for waste disposal is “prevention before recycling before disposal”. Waste management at our sites is performed according to a waste management plan that is implemented by the respective waste management officer. Waste disposal itself is performed by authorized waste collectors, recyclers, and disposal firms in accordance with the respective statutory provisions, depending on the type of waste. We aim to combine economic and ecological benefits, in particular by constantly minimizing the amount of residual materials. Continuous recording and analysis of wastewater values is performed by specially trained, company-internal staff and by regular external inspections. Compliance with the relevant statutory regulations is verified by the respective national and regional authorities.

For information regarding certification in environmental management, please refer to page 19.

c — Measures and development

In 2018, measures aimed at reducing waste in the cartonboard division primarily involved improvements in fiber recovery, process changes, and optimized approaches to selecting regional sources of fiber supply. In the packaging division, focus was placed on reducing residual waste (e.g. foils) and minimizing hazardous waste (e.g. solvent and ink residues) through avoidance or substitution. The current monitoring of waste was constantly pursued in both divisions, and safety measures in waste collection were extended.

EMPLOYEES

1 — EMPLOYEE EDUCATION AND TRAINING

At the end of 2018, the Mayr-Melnhof Group employed a total of 9,445 people in 24 countries. They are at the basis of our Company's success. Therefore, great care is taken to ensure that qualified specialists and managers are available to the Group in the long term in order to secure the leading position and a continued course of growth.

Against the backdrop of demographic change and an increasing shortage of qualified experts, the positioning of the Mayr-Melnhof Group as an attractive employer is of great importance. Personnel development is a core element with the aim of ensuring general conditions in which employees at all levels can fully develop their abilities over the long term and, with growing skills, take on increasingly more responsible tasks. We actively promote career paths and international deployment within the Company in order to retain knowledge and talents within the Company over the long term and enable our employees to grow together with MM.

For this purpose, numerous programs have been firmly established within the Group which systematically accompany employees along their career paths in the Mayr-Melnhof Group. When defining programs, particular emphasis is placed on designing them to offer challenging tasks and contents and provide an active contribution to the Company.

a — Risks and impacts

Through numerous education and advanced training programs the MM Group encourages the promotion of professional and personal qualification of the employees and thus actively contributes to increasing and ensuring the employability.

b — Management approach

The focus of our Human Resources Management lies on strategic personnel planning, recruitment, and employee development, education, and advanced training as well as the systematic management of knowledge within the Group. The "Corporate Human Resources" function manages the program centrally, its implementation however being performed locally at the individual sites. Individual program components are continuously evaluated and adjusted to current requirements in terms of content, methods, and digitalization.

Active personnel marketing

Already prior to an employment, we offer a wide range of options of being introduced to the Group and getting in touch with us. Continuous collaboration with schools, universities, and colleges as well as our regular participation in career fairs allow us to position the MM Group as an attractive employer and to get into contact with young people at an early stage.

Systematic support from the start

With our “Young Professionals” program, we offer ambitious young job starters at the beginning of their careers a holistic, inter-company course of training going far beyond a conventional apprenticeship. After a careful selection process, we encourage our junior staff to acquire high professional skills and to develop their personality-related soft skills as well as foreign language skills in order to prove themselves in an international environment. The guiding principle is “the apprentice as an opportunity for our Company and our Company as an opportunity for the apprentice”. MM bears the Austrian quality seal “Top Company for Apprenticeships” and was awarded as “Great Place to Start” by Great Place to Work®.

With the support of mentors, the “Young Professionals ++” program leads to the targeted transfer of technical and managerial responsibility a few years after completion of an apprenticeship.

In the “Ranger” program, we prepare “High Potentials” for future key positions and assign each of them responsible tasks from the very beginning. The development plan involves three different areas of responsibility at three different locations over the course of three years. We accompany “Rangers” on their paths to future management functions by providing exchange with experienced managers and specific opportunities for training and gaining experience. Special professional qualification, high motivation, language skills, and international mobility are fundamental requirements for participating in the program. In addition to their individual tasks, “Rangers” work together on a project of topical relevance within the Group every year.

The “Explorer” program offers young university graduates with a few years of professional experience attractive career paths in Key Account Management, Controlling, or Engineering (production, automation). Personal mentoring and technical upskilling provide support in an exciting hands-on position.

MM-Academy – Fit for the Future

The “MM-Academy” is the central institution for education and advanced training for our employees at all levels within the MM Group. Besides teaching specialist knowledge and language skills, training focuses on communicating social and managerial skills as well as the “MM Apprentice Academy”. The key criterion for every course is the creation of added value for our Company. In our “Leadership Journey”, we teach employees in managerial positions the latest management tools and promote an international exchange in accordance with our corporate values: performance, responsibility, and passion. The “MM-Academy” trains several thousand employees in class-based and online courses each year, whereby e-learning offerings are increasing.

“Methusalems” program

In the “Methusalems” program, we tie the long-standing experience and expert knowledge of senior employees within selected projects to the Group. The aim is to successfully combine time-proven practice with innovation and to fundamentally safeguard complex projects. The exchange of ideas between young and old is a valued regular element of our personnel development programs.

c — Measures and development

In 2018, we further completed our extensive toolset in the digitalization of recruitment, which now includes active sourcing, mobile recruiting, remote interviews, modern candidate management, and online assessment.

In the area of employer branding, the career section on the Group's website was relaunched, on the one hand, and attendance at selected career and industry events continued, on the other hand. We actively collaborated with engineering and economics students in projects and case studies. In this context, we are pleased to announce a new collaboration with the St. Pölten University of Applied Sciences in the bachelor degree program Smart Engineering.

In 2018, we provided basic and advanced training to around 4,000 participants in job-specific subjects in the "MM Academy", which included an increasing range of e-learning courses (e.g. compliance, foreign languages, personal qualification). At the end of 2018, around 152 apprentices (December 31, 2017: 186) were in training within the Group, with a focus on industrial and technical professions.

The year's focus area of our "Ranger" program was on the future-oriented topic of knowledge transfer by creating a management toolbox. TraineeNet's award for both our "Explorer" and "Ranger" management programs as "genuine and fair trainee programs" emphasizes the practical relevance that we have been pursuing over the long term.

2 — EMPLOYEE SAFETY AND HEALTH

Due to the fact that we are a manufacturing business, the MM Group places great emphasis on safety. In corporate health management, we take a large number of measures with the aim of maintaining our employees' health and productivity at a high level throughout their entire working lives.

a — Risks and impacts

A possible adverse effect of working in shift operations, working with chemicals, and the risk of occupational injuries and psychological stress may have an impact on employees and, as a consequence, the health care system. The risk is minimized through active measures aimed at promoting employees' health. Besides largely stable employment, the extensive development of knowledge and expertise has a positive effect on our employees.

b — Management approach

Our health management policy aims at preserving the health and vitality of our employees at a high level throughout their entire working lives. Prevention and screenings are given the highest priority. The program especially focuses on continuous care provided by company doctors, constant health and occupational safety training courses and preventive check-ups.

Responsibility for health management lies at the local level in the factories with the respective general managers and their safety officers, as they best know the needs within their facilities and how to comply with country-specific regulations.

Individual safety and health standards in the workplace are observed. Continuous measures, such as a regular evaluation and trainings, are geared to continuously improving health and safety in the workplace.

Our goals in the area of occupational safety include a continued reduction in the rate of accidents, the promotion of safety awareness through continuous training courses and regular information of our employees, as well as the insistence on safety-assured services from our suppliers based on safety certifications. The management follows the guiding principle that all employees leave their workplace in a healthy state.

c — Measures and development

Measures relating to safety and health management mainly involved reevaluating specific workloads, improving the working environment, and optimizing occupational safety, accident prevention, and reporting discipline (near accidents). Training in the area of safety and health were continuously provided at the Group's sites. Resilience and resource mobilization training courses teaching employees how to deal with stress and strain were also provided with success in 2018.

3 — WORKING CONDITIONS/ENVIRONMENT

Our goal is to guarantee general conditions in which our employees can contribute to the Company's success over the long term. At the end of 2018, 9,445 people were employed in the Mayr-Melnhof Group, of which around 90 % were located in Europe and 10 % in Latin America, the Middle East, and Asia. Their cultural diversity and differing ranges of experience are an enrichment for our international business activity.

The MM Group is aware of the importance of human rights from a value-based as well as from an economic perspective and commits itself to respecting and upholding human rights and to actively preventing human rights violations.

Employees of the Group

	Dec. 31, 2018		Dec. 31, 2017	
Western Europe (excl. Austria)	4,326	45.8 %	4,476	45.4 %
Austria	1,498	15.9 %	1,499	15.2 %
Eastern Europe	2,645	28.0 %	2,759	28.0 %
Asia and MENA	509	5.4 %	561	5.7 %
Latin America	467	4.9 %	561	5.7 %
Total	9,445	100.0 %	9,856	100.0 %

a — Risks and impacts

Even if a large part of MM facilities are located in European countries, the MM Group may be exposed to risks regarding human rights in countries outside Europe. In some of these countries, there is, for example, a risk of forced labor, child labor, and the violation of labor standards and equal opportunities. Those risks are, however, deemed to be low for the industry, and strict compliance with standards is a way of actively counteracting such risks.

A potential risk for our employees arises in connection with shift work in production operations, which may result in health restrictions (see chapter on employee safety and health).

b — Management approach

We observe the applicable regulations concerning working time in all Group companies. We acknowledge the entitlement of our employees to appropriate remuneration, and we comply with the statutory provisions of the relevant countries.

As in most industrial companies, production operations in the MM Group run in shifts. This means that appropriate compensatory measures are offered to the employees.

A high level of personal identification with the success of the Company is firmly rooted within our corporate culture. For this reason, performance-related forms of remuneration have had a long tradition throughout the Group to ensure that individuals with high performance are able to get their share of the Company's success.

We respect our employees' right of freedom of association. We strive for a long-term constructive dialog with the employees' representatives, both at a local level and in regional federations of companies.

The MM Group undertakes to comply with human rights within its sphere of influence and rejects any form of forced labor in its organization and among its business partners. The risks of human rights violations are limited through the application of the Code of Conduct and regular internal and external audits.

We also reject child labor, irrespective of local legislation, throughout our Company and in the companies of our business partners. Throughout the Group we are guided by the international standards (ILO Conventions C 138 and C 182) and keep records that show that all members of our workforce are of the minimum age required by law.

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. In addition, there are performance- and contribution-based severance obligations and obligations as part of statutory pre-retirement schemes.

The Code of Conduct covers the fundamental needs of our employees. This standard applies to all employees around the world. The Code of Conduct of the Mayr-Melnhof Group reflects our basic principles with regard to complying with laws, child labor, human rights, working hours and remuneration, health and safety, drugs and alcohol, and the development of employees. Local management is responsible for ensuring compliance with it.

c — Measures and development

Continuous communication (e. g. intranet, internet, folder) and training courses are intended to increase detailed knowledge in this context and to provide orientation for its implementation.

SOCIETY

1 — COMPLIANCE

The MM Karton division generates 84 % of its sales in Europe and 16 % in countries outside Europe. Cartonboard mills are located in Germany, Austria, the Netherlands, and Slovenia. The MM Packaging division has 37 production sites in 15 countries on three continents. 89 % of sales are generated in European countries. MMP's production outside Europe takes place in Columbia, Chile, Vietnam, Jordan, and Iran.

We comply with all the relevant laws and regulations of the countries we operate in and observe their social standards. Some of the important regulations, guidelines, standards, and certifications relating to sustainability are cited in previous sections.

Topics as compliance with human rights and the fight against corruption and bribery are becoming increasingly relevant.

We always act in the best interest of the Mayr-Melnhof Group and strictly separate the interests of the Company from private interests. We aim at avoiding even the mere appearance of a conflict of interests. We take decisions based on reasonable economic aspects in line with laws and standards. In our business relations, we always act properly in line with the respective regulations against corruption, bribery, fraud, and money laundering. We undertake not to accept gifts or financial benefits and not to enter into any participation that might result in a conflict of interests. Furthermore, no bribes or any other form of unlawful payments or benefits may be accepted, offered, or paid.

We fully commit ourselves to fair competition with our competitors, business partners, and other market participants. At the same time, we undertake to comply with the laws on the restriction of competition that apply in the countries where the Mayr-Melnhof Group does business.

a — Risks and impacts

Potential risks resulting from the MM Group's business activities are cases of corruption, anti-competitive behavior, and possible non-compliance with standards, laws, rules of conduct, and, possibly, voluntary declarations of commitment and human rights violations.

The risk of human rights violations or corruption is classified as very low in European countries due to statutory provisions. We also assume that the business operations of the MM Group are not the target of fraudulent actions, especially as the products manufactured are of low fungibility.

b — Management approach

Compliance comprising all the actions and measures aimed at observing laws, codes of conduct, and other standards, is a key task of the Management Board in the Mayr-Melnhof Group and is accompanied by a compliance program subject to continuous further development.

The compliance risk arising from a potential failure to adhere to standards, laws, rules of conduct, and, possibly, voluntary declarations of commitment is countered in particular by protective measures in systems, regular and systematic compliance monitoring, the principle of dual control, and guidelines (such as the Code of Conduct). Furthermore, we have set up the function of an independent Compliance Officer who is responsible for compliance training as well as internal and external reporting.

We deal with the risk area of “Legal Compliance” which covers all actions and measures geared towards ensuring compliance with legal regulations and contractual provisions through the position of a Legal Manager, the use of a central legal compliance system, and, where necessary, by consulting external experts.

Protection against active fraud is provided for in particular by organizational structures and their application in the respective systems. The Management Board is, for example, obliged to report on the fight against corruption to the Supervisory Board once a year.

Guideline: accepting gifts, granting benefits

Employees of the Mayr-Melnhof Group may not demand, accept, offer, or grant any direct or indirect unwarranted benefits in the course of their business activities. The sole exceptions are generally customary hospitality and occasional benefits of a verifiably low value. A strict standard must be generally applied in judging this. In any case of doubt, the Compliance Officer must be consulted, who will then issue a corresponding recommendation.

Guideline: Antitrust law

The Group's rejection of cartel violations is expressed in an antitrust compliance guideline that describes appropriate conduct in dealing with competitors.

Guideline: relationship with competitors, customers, associations

Agreements with competitors and coordinated practices that aim at or result in a restriction or prevention of competition are prohibited. As a principle, great care must be taken in dealing with competitors to ensure that no information that allows for any conclusions on current or future market behavior to be drawn is passed on, received, or exchanged.

No employee of the Mayr-Melnhof Group may in any way restrict customers in the free arrangement of their supply relationships and pricing.

Collaboration in associations and participation in their events only take place for legitimate reasons. Any arrangement with competitors or any exchange of information is in strict accordance with the applicable legislation.

Should employees of the Mayr-Melnhof Group find themselves in questionable circumstances from an anti-trust law perspective, it is imperative that any discussions are broken off immediately, the relevant locality is left immediately, and the Compliance Officer is informed.

Employees of the Mayr-Melnhof Group are responsible for protecting tangible and intangible assets of the Company within their fields of activity.

The area of capital market compliance is covered by a binding internal compliance policy applicable for all persons concerned in order to prevent insider dealings.

c — Measures and development

Measures in 2018 especially focused on the amendment of the internal compliance guideline in regard of compliance-relevant information in the Company as well as related communication. At the beginning of 2019, an internal information campaign about compliance with the Code of Conduct within the Group has been conducted.

Chapters from the Annual Report

Dear Shareholders,

I am pleased to report to you one more time in a row on the continuing success course of your Company in 2018. We again succeeded in concluding the year with a record result. This was underpinned by the initial economic-related robust demand in Europe and a strong performance of the MM Karton division due to better prices and lower direct costs. In contrast, at MM Packaging we have faced the challenge of passing on higher input prices to customers, in particular for cartonboard. The implementation was effected with a time lag, accompanied by consistent rationalization measures in the plants, thus pressure on margins could be absorbed.

I would like to take this opportunity to express my gratitude and high recognition to the entire MM team. Our employees once again have made a major contribution to the success of your Company with their performance, responsibility, and passion for our business. Their loyalty represents an important competitive advantage for the future.

I would also like to thank you, our shareholders, for the trust you have placed in us over so many years. In accordance with profit growth and our continuous dividend policy, it is with great pleasure and satisfaction to recommend to the 25th Ordinary Shareholders' Meeting another dividend increase. This will be the ninth time in succession in a steady upward development of profit and dividend distribution over 25 years of listing on the Stock Exchange.

The total shareholder return over this period of around 470 % underlines the long-term attractiveness of our business and the validity of MM's strategy in various and rapidly changing challenges. We have so far succeeded in sustainably maintaining market leadership in the core business on basis of cost, technology, and innovation leadership. Looking into the future, continuity and long-term orientation will therefore remain our direction, always with the focus on value orientation, use of state-of-the-art technologies, and sustainable development of our human resources.

Organic growth and appropriate acquisitions will further determine our future course with the goal of sustainably creating value added while keeping risk manageable. The latest acquisition also fits well into this concept, offering attractive potential through presence in new markets and cooperation with existing and new customers.

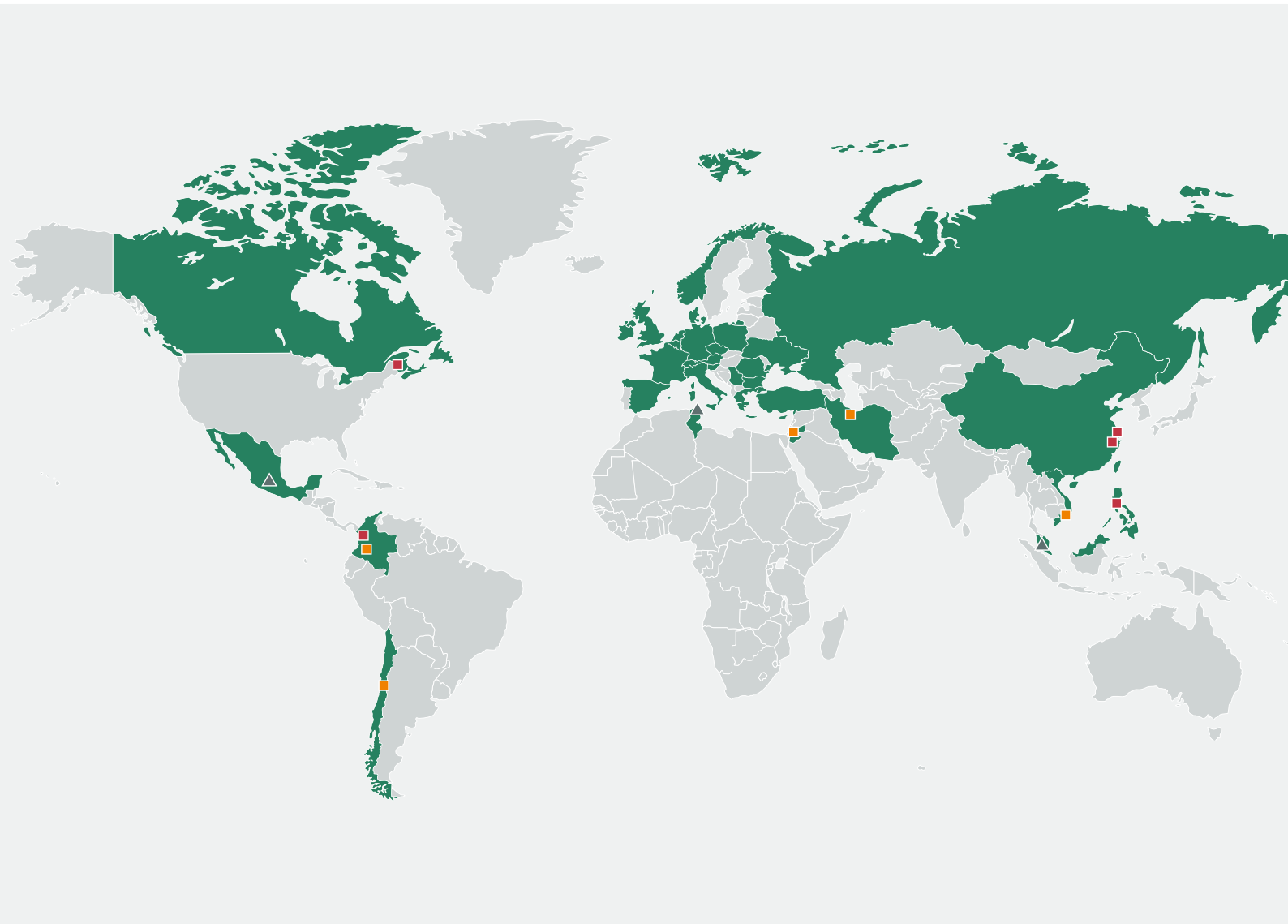
2019 has started well and your Company holds a solid position.

Accompany us further on!



Wilhelm Hörmanseder
Chairman of the Management Board
February 28, 2019

Global presence ...



100

Sales in more than 100 countries

52

Production sites

7

Cartonboard mills

45

Packaging sites¹⁾

¹⁾ incl. acquisition Tann-Group

... Focus on Europe



Products from our European cartonboard mills are sold worldwide. The business of individual packaging sites is in particular focused on the respective regional market due to the limited economic delivery radius.

MM Karton

Sustainable Board Solutions

Market leader in cartonboard MM Karton is the world's largest producer of coated recycled fiber-based cartonboard with a significant position in virgin fiber-based cartonboard. 80 % of the production capacity of more than 1.7 million tons are accounted for by recycled fiber-based cartonboard and around 20 % by virgin fiber-based cartonboard.

Sustainable business model The products of MM Karton are used primarily as raw materials for the production of cartonboard packaging for consumer staples. The sales focus lies on food packaging, packaging for household and hygiene products as well as pharmaceuticals. Demand thus correlates strongly with private consumption.

MM Karton's main customers are folding carton producers of the still highly fragmented European folding carton industry. With a share in deliveries of approx. 12 %, MM Packaging is the largest customer of MM Karton, purchasing as a profit center at market conditions.

Focused production in Europe – global sales MM Karton has focused production on seven targeted cartonboard mills in the main market Europe. Around 85 % of the sales share are attributable to this. Owing to the high level of specific finishing of cartonboard in individual formats and high logistical demands regarding short-term product delivery to customers and transportation costs, the European cartonboard market is primarily supplied from Europe. Trade between the continents plays a minor role, particularly for recycled fiber-based cartonboard. The concentration of the European cartonboard industry is far progressed, with the five largest suppliers accounting for more than three-quarters of the capacities.

Leading through cost leadership and innovation Reduction of unit costs and continuous technological progress in production and service determine the strategic orientation of MM Karton. With an increasing share of new and optimized products for existing and new applications, we want to grow further and increase value added.

Sustained investment in our mills is primarily aimed at lowering specific costs, especially for fibers and energy, as well as continuous development of our facilities.

Differentiation through digitalization and automation Our current digitalization and automation initiative enables us to create differentiation through significant advances in speed and quality, both in the dialog with our customers and operational performance.

MM Karton Key Indicators

Non-financial Report

(in millions of EUR)	2018	2017	+/-
Sales	1,062.2	1,048.7	+ 1.3 %
EBITDA	142.9	115.9	+ 23.3 %
Operating profit	96.4	73.5	+ 31.2 %
Cash earnings	115.6	100.3	+ 15.3 %
EBITDA margin	13.5 %	11.1 %	
Operating margin	9.1 %	7.0 %	
Cash earnings margin	10.9 %	9.6 %	
Return on capital employed	16.1 %	12.7 %	
Capital expenditures (CAPEX)	70.6	65.9	+ 7.1 %
Depreciation and amortization	45.3	42.4	+ 6.8 %
Employees	2,501	2,524	- 0.9 %

	2018	2017	+/-
Tonnage sold (in thousands of tons)	1,663	1,675	- 0.7 %
Tonnage produced (in thousands of tons)	1,664	1,685	- 1.2 %
Recycled fiber-based board	1,313	1,345	
Virgin fiber-based board	351	340	
Capacity utilization	97 %	98 %	

1,062.2

Division sales

in millions of EUR

9.1 %

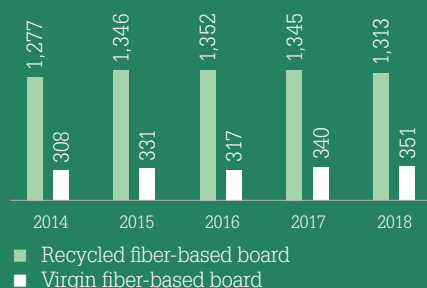
Operating margin

16.1 %

ROCE

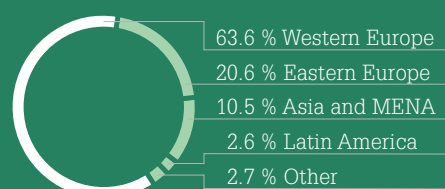
Return on capital employed

Tonnage produced by MM Karton



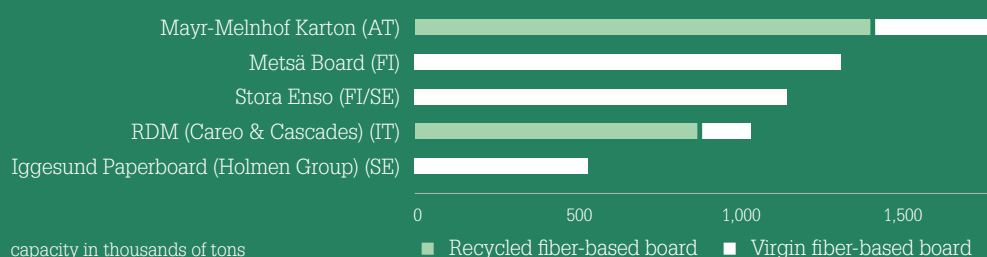
in thousands of tons

Sales by destination¹⁾



¹⁾ incl. interdivisional sales

Leading European producers of coated board



capacity in thousands of tons

Source: MM, excl. GK, LPB (Stora Enso) and CNK from USA

MM Packaging

Shaping the World of Cartons

Market leader in consumer packaging and printing – in Europe and beyond In 2018, MM Packaging processed around 766,000 tons of recycled and virgin fiber-based cartonboard and paper into more than 60 billion consumer goods packages. MM Packaging is thus not only the leading producer of folding cartons in Europe but also one of the largest worldwide. Folding carton is defined as regional product due to transport costs and service demands.

With an international network of 45 sites¹⁾ in 18 countries, MM Packaging offers a unique pan-European supply concept and additionally holds a leading position also in individual countries outside Europe with production in the Middle East, Latin America, and the Far East.

Volume business and specialized high-end business The main sales area of MM Packaging are cartonboard packages for consumer staples. Due to the broad technological base and market expertise, our business covers the volume market of fast-moving consumer goods (FMCG) as well as highly specialized printing and packaging services for markets such as cigarettes, pharmaceuticals, and personal care.

Highly efficient production – progressed automation MM Packaging has been focusing for a long time on industrial production for differentiation within the European folding carton industry which is largely structured by trade businesses. The exploitation of economies of scale due to location size and production plant networks along with the use of high-performance technology characterize our positioning. Increasing automation and digitalization are oriented towards MM Packaging's guiding principle – the creation of the "perfect factory" – with the aim of sustainably maintaining market leadership based on cost and technology leadership.

Expansion with strong customers – consistent acquisition course At around 79 %, the major part of MM Packaging's sales is accounted for by large international customers. Business with a high number of local customers constitutes another core area.

Accompanying strong customers along their expansion and supplying more globally has been a determining factor of MM Packaging's growth course for a long time. Thereby we focus on both, organic growth opportunities and acquisitions, with the aim of continuously expanding our position further at a high profit quality.

¹⁾ incl. acquisition Tann-Group

MM Packaging Key Indicators

Non-financial Report

(in millions of EUR)	2018	2017	+/-
Sales	1,384.2	1,392.7	- 0.6 %
EBITDA	189.2	198.4	- 4.6 %
Operating profit	120.7	141.5	- 14.7 %
Cash earnings	154.1	156.8	- 1.7 %
EBITDA margin	13.7 %	14.2 %	
Operating margin	8.7 %	10.2 %	
Cash earnings margin	11.1 %	11.3 %	
Return on capital employed	15.1 %	16.7 %	
Capital expenditures (CAPEX)	53.8	93.2	- 42.3 %
Depreciation and amortization	62.0	57.3	+ 8.2 %
Employees	6,944	7,332	- 5.3 %
	2018	2017	+/-
Tonnage processed (in thousands of tons)	766	767	- 0.1 %
Sheet equivalent (in millions)	2,270.7	2,289.9	- 0.8 %

1,384.2

Division sales

in millions of EUR

8.7 %

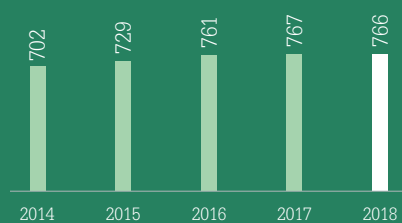
Operating margin

15.1 %

ROCE

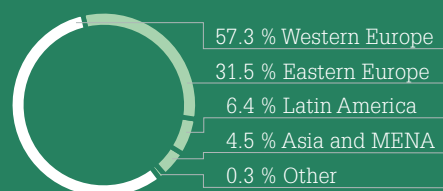
Return on capital employed

Tonnage processed by MM Packaging



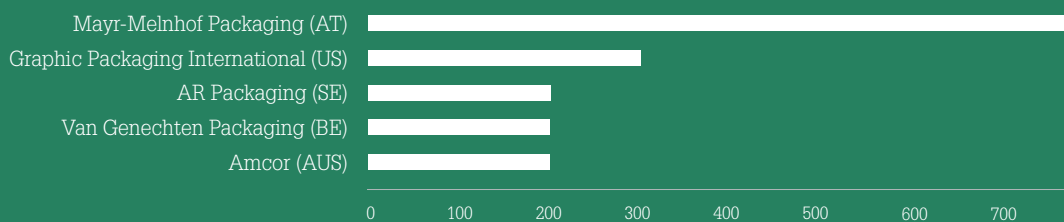
in thousands of tons

Sales by destination¹⁾



¹⁾ incl. interdivisional sales

Leading board converters in Europe



tonnage processed in thousands of tons

Source: MM

CONTEXT OF NON-FINANCIAL TOPICS WITH THE BUSINESS DEVELOPMENT

Taking a strategic approach to dealing with non-financial issues in the context of business development allows for a comprehensive risk and opportunity management.

For the MM Group, there is a range of factors in the areas of environment, human resources and society that drive costs, revenues, and sales volumes and impact or might impact current as well as future business success.

The human capital of our employees is a significant value driver. MM Group's multi-faceted education and advanced training programs and measures aimed at employee retention and recruitment contribute to the Group having a sufficient number of qualified employees to secure and develop its position.

One relevant sales driver is represented by the continuous positioning of our products in response to changing market and consumer preferences.

Costs relating to non-financial matters result from personnel, energy requirements, water consumption, or waste generation of the MM Group. Future cost drivers might arise in particular from regulatory changes, including an increase in the costs of CO₂ certificates, changing or stricter guidelines and regulations at both national and EU levels.

On the other hand, there are broad trends in society that might constitute potential opportunities for the MM Group's business model in the future. Advancing digitalization and automation will continue to raise efficiency in production processes, thus allowing for cost savings. Developments in the transport sector may contribute to fuel and personnel cost savings. The trend towards urbanization and smaller households as well as growing private consumption in emerging economies might contribute to increased sales volumes in the future, for example through a greater demand for smaller product units.

Compared to the previous year, business development of the Mayr-Melnhof Group in 2018 was characterized by a high level of continuity. The impacts of non-financial topics and the context of related key performance indicators (KPIs) with the annual financial statements showed no significant changes or noticeable issues. In an overall consideration of non-financial and financial aspects, we regard the measures undertaken as part of sustainability management to be effective in terms of minimizing risk and optimizing opportunity in the Group.

NON-FINANCIAL INDICATORS

Material local employment effects	Dec. 31, 2018	Dec. 31, 2017
<i>Number of employees per country</i>		
Germany	2,760	2,854
Austria	1,498	1,499
France	918	937
Poland	736	811
Turkey	575	612
Russia	495	492
Slovenia	392	389
Chile	270	336
Iran	245	263
Great Britain	220	232
Ukraine	226	229
Colombia	196	224
Romania	214	218
Netherlands	200	207
Spain	146	163
Vietnam	135	146
Jordan	127	139
Norway	65	61
Others	27	44

Renewable raw materials and recyclability¹⁾	2018	2017
<i>Cartonboard production²⁾</i>		
Renewable raw materials	1.6 million t	1.6 million t
Fiber use	1.5 million t	1.6 million t
Recycled fibers ³⁾	1.1 million t	1.2 million t
Virgin fibers ⁴⁾	0.4 million t	0.4 million t
- thereof from FSC®-certified sources	14 %	17 %
- thereof from PEFC™-certified sources	38 %	36 %
- thereof from controlled sources ⁵⁾	48 %	47 %
Non-renewable raw materials	0.3 million t	0.3 million t
<i>Packaging production</i>		
Renewable raw materials	0.8 million t	0.8 million t
Cartonboard and paper use	0.8 million t	0.8 million t
Recycled fiber-based cartonboard	0.3 million t	0.4 million t
Virgin fiber-based cartonboard	0.3 million t	0.4 million t
Non-renewable raw materials	0.0 million t	0.0 million t

¹⁾ including packaging materials

²⁾ excluding MM FollaCell AS

³⁾ excluding rejects

⁴⁾ groundwood pulp equivalent

⁵⁾ including FSC® Controlled Wood

Other environmental indicators	2018	2017
<i>Energy consumption</i>		
Energy consumption in cartonboard production ¹⁾	3.4 TWh	3.4 TWh
Specific energy consumption ¹⁾²⁾	1.9 MWh/t	1.9 MWh/t
Energy consumption in packaging production	0.3 TWh	0.3 TWh
Specific energy consumption ²⁾	0.4 MWh/t	0.4 MWh/t
<i>Emissions</i>		
Direct CO ₂ emissions in cartonboard production ¹⁾³⁾	0.5 million t	0.5 million t
Specific direct CO ₂ emissions ¹⁾²⁾³⁾	0.3 t/t	0.3 t/t
Direct CO ₂ emissions in packaging production	0.03 million t	
Specific direct CO ₂ emissions ²⁾	0.04 t/t	
<i>Water consumption</i>		
Water consumption in cartonboard production ¹⁾	22 million m ³	24 million m ³
Water consumption in packaging production	0.3 million m ³	0.3 million m ³
<i>Waste</i>		
Non-hazardous waste in production	0.3 million t	0.4 million t
Hazardous waste in production	4 thous. t	4 thous. t

¹⁾ including MM FollaCell AS

²⁾ based on net production

³⁾ emissions reported according to section 9 EZG 2011

Social indicators	2018	2017
<i>Employee safety and health</i>		
Occupational accidents resulting in death	0	0
<i>Employee education and training</i>		
Employees trained by MM-Academy	3,853	1,067
<i>Socially acceptable working conditions for employees</i>		
Cases of child labor	0	0
Cases of forced labor	0	0
<i>Anti-corruption and anti-competitive behavior</i>		
Production sites ¹⁾ in countries with a corruption index < 30 according to Transparency International Corruption Index 2017	2 of 45	4 of 45
Number of legal actions against corruption or anti-competitive behavior	0	0
<i>Violation of guidelines and requirements</i>		
No significant fines or sanctions due to non-compliance with laws and regulations in social and economic areas		
<i>Safety and packaging</i>		
Percentage of cartonboard grades for which impacts on customers' health and safety are verified	100 %	100 %
Number of production sites which are certified in the areas of food safety and/or hygiene (BRC, ISO 22000, EN 15593, ECMA GMP, HACCP)		
in cartonboard production (excl. MM FollaCell AS)	7 of 7	7 of 7
in packaging production	25 of 37	25 of 37

¹⁾ including MM FollaCell AS

ABOUT THE NON-FINANCIAL REPORT

The present non-financial report records Group-wide activities and indicators of the MM Group in accordance with the reporting scope and reporting period of the Annual Report 2018. The combined annual and non-financial reports will be published on an annual basis. The present report was prepared taking into account the GRI Standards ("Core" option) published by the Global Sustainability Standards Board (GSSB). The standards of the Global Reporting Initiative (GRI) are considered as internationally recognized framework for sustainability reporting. The GRI content index can be found on page 45. An external audit of the non-financial report was not intended.

In 2018, both sustainability management and non-financial reporting have been developed further. Therefore, data collection processes were adjusted in order to improve the quality of the non-financial data and make data collection more efficient. We want to pursue a continuous further development in this area also in the next years.

In order to better understand the impacts of our own business activity, we have deepened the materiality analysis and have analyzed the business relevance of material topics. Moreover, the context between non-financial topics and business development was enhanced.

Contact:

Stephan Sweerts-Sporck

Phone: +43 1 501 36 91180

Fax: +43 1 501 36 91195

e-mail: investor.relations@mm-karton.com

website: <https://www.mayr-melnhof.com>

GRI CONTENT INDEX

GRI Standard	Disclosure	Page
<i>GRI 102:</i> <i>General Disclosure</i>	102-1 Name of the organization	Front page, 1
	102-2 Activities, brands, products, and services	37-40
	102-3 Location of headquarters	Annual Report page 62, 199
	102-4 Location of operations	35-36
	102-5 Ownership and legal form	2
	102-6 Markets served	35-36
	102-7 Scale of the organization	28, Annual Report pages 3 and 37
	102-8 Information on employees and other workers	28, 42
	102-9 Supply chain	11, 13
	102-10 Significant changes to the organization and its supply chain	34
	102-11 Precautionary Principle or approach	18-19
	102-12 External initiatives	3, 13-16
	102-13 Membership of associations	5
	102-14 Statement from senior decision-maker	2
	102-16 Values, principles, standards, and norms of behavior	3
	102-18 Governance structure	4, Annual Report pages 39-41
	102-40 List of stakeholder groups	5
	102-41 Collective bargaining agreements	28-29
	102-42 Identifying and selecting stakeholders	5
	102-43 Approach to stakeholder engagement	5
	102-44 Key topics and concerns raised	6
	102-45 Entities included in the consolidated financial statements	Annual Report page 132, 200-203
	102-46 Defining report content and topic Boundaries	6
	102-47 List of material topics	6
	102-48 Restatement of information	n/a
	102-49 Changes in reporting	n/a
	102-50 Reporting period	2
	102-51 Date of most recent report	2
	102-52 Reporting cycle	44
	102-53 Contact point for questions regarding the report	44
	102-54 Claims of reporting in accordance with the GRI Standards	44
102-55 GRI content index	45-47	
102-56 External assurance	44	
Anti-Corruption		
<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 30-32
	103-2 The management approach and its components	31-32
	103-3 Evaluation of the management approach	31-32
<i>GRI 205:</i> <i>Anti-Corruption</i>	205-3 Confirmed incidents of corruption and actions taken	43

Anti-Competitive Behavior		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 30-32
	103-2 The management approach and its components	31-32
	103-3 Evaluation of the management approach	31-32
<i>GRI 206: Anti-Competitive Behavior</i>	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	43
Materials		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 8
	103-2 The management approach and its components	8, 11-12
	103-3 Evaluation of the management approach	11-12
<i>GRI 301: Materials</i>	301-1 Materials used by weight or volume	42
Energy		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 17
	103-2 The management approach and its components	18-20
	103-3 Evaluation of the management approach	19-20
<i>GRI 302: Energy</i>	302-1 Energy consumption within the organization	43
	302-3 Energy intensity	43
Water		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 21
	103-2 The management approach and its components	21
	103-3 Evaluation of the management approach	21
<i>GRI 303: Water</i>	303-1 Water withdrawal by source	43
Emissions		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 17
	103-2 The management approach and its components	18-20
	103-3 Evaluation of the management approach	19-20
<i>GRI 305: Emissions</i>	305-1 Direct (Scope 1) GHG emissions	43
	305-4 GHG emissions intensity	43
Effluents and Waste		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 22
	103-2 The management approach and its components	23
	103-3 Evaluation of the management approach	23
<i>GRI 306: Effluents and Waste</i>	306-2 Waste by type and disposal method	43
Supplier Environmental Assessment		
<i>GRI 103: Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 13
	103-2 The management approach and its components	13-14
	103-3 Evaluation of the management approach	13-14
<i>GRI 308: Supplier Environmental Assessment</i>	308-2 Negative environmental impacts in the supply chain and actions taken	43

Occupational Health and Safety

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 26
	103-2 The management approach and its components	27
	103-3 Evaluation of the management approach	27
<i>GRI 403:</i> <i>Occupational Health and Safety</i>	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	43

Training and Education

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 24
	103-2 The management approach and its components	24-25
	103-3 Evaluation of the management approach	24-25
<i>GRI 404:</i> <i>Training and Education</i>	404-2 Programs for upgrading employee skills and transition assistance programs	24-25, 29

Child Labor

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 28
	103-2 The management approach and its components	28-29
	103-3 Evaluation of the management approach	28-29
<i>GRI 408:</i> <i>Child Labor</i>	408-1 Operations and suppliers at significant risk for incidents of child labor	43

Forced or Compulsory Labor

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 28
	103-2 The management approach and its components	28-29
	103-3 Evaluation of the management approach	28-29
<i>GRI 409:</i> <i>Forced or Compulsory Labor</i>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	43

Customer Health and Safety

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 14
	103-2 The management approach and its components	15
	103-3 Evaluation of the management approach	15
<i>GRI 416:</i> <i>Customer Health and Safety</i>	416-1 Assessment of the health and safety impacts of product and service categories	43

Socioeconomic Compliance

<i>GRI 103:</i> <i>Management Approach</i>	103-1 Explanation of the material topic and its Boundary	6, 30-32
	103-2 The management approach and its components	31-32
	103-3 Evaluation of the management approach	31-33
<i>GRI 419:</i> <i>Socioeconomic Compliance</i>	419-1 Non-compliance with laws and regulations in the social and economic area	43