Annual Report 2017

engineering for
a better world

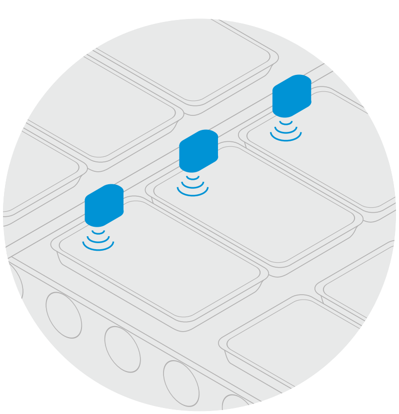
gea.com

IFRS Key Figures of GEA

(EUR million)	2017	2016	Change in %
Results of operations			
Order intake	4,750.8	4,673.6	1.7
Revenue	4,604.5	4,491.9	2.5
Operating EBITDA[1]	563.5	566.3	–0.5
as % of revenue	12.2	12.6	–
Operating EBIT[1]	477.8	485.0	–1.5
as % of revenue	10.4	10.8	–
EBIT	380.9	387.0	–1.6
Net assets			
Working capital intensity in % (average of the last 12 months)	15.9	14.5	–
Net liquidity (+)/Net debt (–)	5.6	782.6	–99.3
Financial position			
Operating cash flow driver margin[2]	8.4	9.5	–
ROCE in % (goodwill adjusted)[3]	15.6	16.9	–
Full-time equivalents (reporting date)	17,863	16,937	5.5
GEA shares			
Earnings per share (EUR)	1.31	1.48	–11.7

1) Before effects of purchase price allocations and adjustments (see page 219 f.)
2) Operating cash flow driver = operating EBITDA – capital expenditure + adjustment of capital expenditure in strategic projects – change in working capital (average of the last 12 months)
3) Capital employed excluding goodwill (EUR 796.8 million) from the acquisition of the former GEA AG by former Metallgesellschaft AG in 1999 (average of the last 12 months)

Contents



Cover Image

GEA OxyCheck is the world's first in-line measurement system that checks the oxygen content and seal integrity of every food product packaged in modified atmosphere. A unique sensor spot printed in fluorescent dye on the inside of the film changes the wavelength of the dye according to the amount of oxygen inside the package. In this way, GEA technology is helping to combat the wastage of food and packaging materials during the manufacturing process (see page 29).

GEA – "engineering for a better world"

GEA is one of the largest suppliers of process technology to the food industry and to a wide range of other industries. The international technology group focuses on process technology, components and sustainable energy solutions for sophisticated production processes in diverse end-user markets.

In 2017, GEA generated consolidated revenues of around EUR 4.6 billion. The food and beverages sector, which is a long-term growth industry, accounted for around 70 percent. As of December 31, 2017, the group employed nearly 18,000 people worldwide.

GEA is a market and technology leader in its business areas. The company is listed on the German MDAX stock index (G1A, WKN 660 200) and included in the STOXX® Europe 600 Index. In addition, the company is listed in selected MSCI Global Sustainability Indexes.

GEA 2017

Revenue
EUR **4,605** million

Order intake
EUR **4,751** million

Earnings per share
EUR **1.31**

Operating EBITDA-margin
12.2%

Operating EBITDA
EUR **564** million

Our applications

Customized solutions for demanding needs

Food

Designed to meet the strictest requirements for quality, efficiency, food safety and hygienic design, our solutions are adding value to the food industry around the world.

Dairy Processing

Turn to our industry-leading experience, expertise and technologies for processing milk and every type of milk-based product.

Dairy Farming

We are the experts when it comes to providing know-how and solutions that empower dairy farmers around the globe to successfully manage their futures.

Beverage

We are a leader in providing the technological expertise required to help beverage producers quench the global thirst.

Pharma

As experts in pharma processing and manufacturing, GEA has developed a deep understanding of the challenges you face, the hurdles you need to overcome and the goals you want to achieve.

Chemical

We supply the world-class precision engineering the industry needs to develop new products, control costs and protect the environment.

Marine

Our technology and global network for service and parts supports the shipping industry from fishing to freight, and tourist to tanker.

Leisure & Sport

We make the fastest ice for ice rinks and bobsled tracks all over the world.

Land-based Transportation

Our advanced compressor technology keeps public transportation cool and refrigerated freight fresh.

Utilities

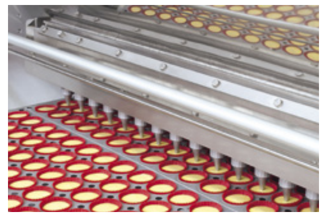
Our energy-efficient and sustainable technologies – including industrial refrigeration, gas compression, separation and emission reduction – span all industries served by GEA.

Our product groups

Infinite possibilities

Automation & Control Systems

From process automation and machine control to data capture systems, GEA can provide tailor-made solutions for process plants and complete production lines.



Bakery Lines

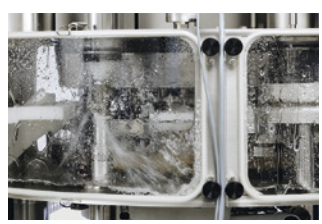
Our capability extends from single equipment components to integrated production lines for cakes, pies, cookies, crackers, layer cakes and snacks.

Beverage Plants

Our extensive range of beverage production systems includes product processing, UHT treatment, aseptic filling, blow molders and container handling for all kinds of beverages.

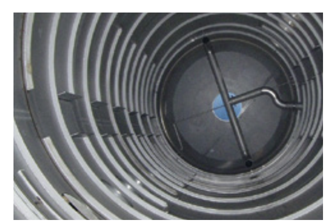
Brewery Plants

Uniquely qualified to build brewery plants, we are capable of providing solutions down to the smallest detail of the brewing process.



Cleaners & Sterilizers

We supply both manual and fully automated clean-in-place (CIP) and sterilize-in-place (SIP) solutions that ensure reliable process outcomes with minimal downtime.



Distillation & Fermentation Systems

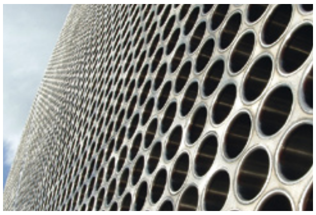
Our detailed knowledge of distillation and fermentation processes allows us to plan and deliver customized solutions to the industry.

Dryers & Particle Processing Plants

Our broad portfolio of drying technologies is applied in the production of a wide range of products – from bulk products to the most advanced powders within food, beverage and dairy products, chemicals and pharmaceuticals.

Emission Control Systems

Reducing emissions is in everybody's interest. We are a world leader in developing, designing and installing emissions reduction systems.



Evaporators & Crystallizers

We have extensive experience in designing evaporation and crystallization plants to concentrate liquids, remove by-products or impurities and produce pure, high quality crystals.

Extrusion & Milling Systems

We engineer and manufacture extrusion and milling technology for processing and packaging all kinds of fresh and dry pasta, cereal-based snacks and breakfast cereals.

Our product groups

Innovative solutions

Filling & Packaging Systems

We design systems to fill and package food & renewables, beverages, dairy products and pharmaceuticals.

Flow Components

To ensure a smooth production we offer a full range of valve, pump and cleaning technology.

Food Processing & Packaging

We supply a multifaceted product portfolio of secondary food processing and packaging equipment that covers everything from individual, standalone machines to completely integrated processing lines.

Homogenization Solutions & Systems

High-pressure homogenizers are used to micronize fluid particles to obtain stable and uniform emulsions. From the laboratory to industrial-scale production, GEA equipment covers a wide range of customer applications.

Liquid Food Plants

We offer specialized equipment and solutions for the production of many different liquid foodstuffs, including ketchup and mayonnaise, sauces, soups and dressings.

Liquid Processing Systems

Systems for liquid processing are a GEA core competency. Our mixing, blending, heat treatment and pasteurization equipment ensures optimum production safety and hygiene.

Membrane Filtration Systems

We are a world leader in custom designed, cross-flow membrane filtration. This is the technology of choice for many industrial processes involving the separation and concentration of liquids without applying heat.

Pharmaceutical Systems

As a global specialist in solid and liquid dose technology, our expertise covers batch and continuous granulation, drying, pelletizing and coating, contained materials handling, tablet compression, freeze drying, fermentation, separation, homogenization and cell disruption. We supply the pharmaceutical, nutraceutical and personal care sectors with components, equipment and entire plants to process solid, liquid, semi-solid, viscous, hazardous and hygroscopic products.

Our product groups

Customer-inspired

Product Handling Systems

The careful handling of our customers' products requires a complete range of standard and customized equipment to deal with products as diverse as powders, liquids, foodstuffs and tablets.

Refrigeration Solutions & Systems

Each industry we serve utilizes GEA's industrial refrigeration technologies. We provide sustainable solutions that reduce both your energy consumption and carbon footprint.

Separation Solutions & Systems

Our centrifuges combine high separating and clarifying efficiencies as well as high throughput capacities with maximum savings in terms of energy, water and disposal costs.

Systems for Milk Production & Livestock Farming

GEA's solutions for dairy farming provide complete integrated dairy systems with lifetime care for a high-value partnership.

Our portfolio includes automatic and conventional milking, automatic feeding, cooling, herd management, hygiene products, barn equipment as well as solutions that support professional manure management and the proper care of young livestock.

Vacuum Systems

Vacuum technology is used extensively in the chemical, pharmaceutical, food and oilrefining industries. Our process- integrated systems reduce both costs and environmental pollution.

Our services

GEA Service – For your continued success

Working with GEA means partnering with a dedicated team of service experts. Our focus is to build, maintain, and improve customer performance throughout the entire life cycle of the plant or farm and its equipment.

Beginning of Life Services – Getting you started

with seamless support for instant productivity and performance

Lifetime Services – Keeping it running

with the cost-efficient way of ensuring safety and reliability

Extended Life Services – Constantly improving

by sharing our knowledge to safeguard your investment

Consulting & Enhanced Operations – Together with you

by enduring commitment to you and your business

Jürg Oleas,
CEO of GEA Group Aktiengesellschaft

Dear Shareholders,

GEA's fiscal year just ended was characterized by a variety of different factors: While many customer industries met or even exceeded our expectations, there were two prominent developments that adversely affected our business: On the one hand, we were grappling with the sustained weakness in dairy processing, one of our important customer industries; on the other hand, we had to endure the strength of the euro that negatively impacted the company, in particular in the second half of the year. Thus, the negative impact from changes in exchange rates between the first and the second half of the year affected order intake and revenue by a mid-double-digit million-euro amount. Nonetheless, we generated a moderate growth in revenue, even though the latter was at the lower end of our guidance range. Accounting for the most pronounced revenue increase, the food sector showed a particularly positive development. Due to a lower level of revenue and negative currency effects in the second half of the year, operating EBITDA was just below our guidance that had been adjusted in the summer of 2017.

Based on the company's overall stable and sound business development, the Executive Board and the Supervisory Board will suggest that the Annual General Meeting resolve on distributing an increased dividend of EUR 0.85 per share. This would be equivalent to a dividend payout in the amount of EUR 153.4 million for the 2017 fiscal year.

Business potential

Our optimized group structure already sees GEA well positioned for the future. However, we have to acknowledge that the complete transformation of the company will take longer than originally planned. Moreover, we are yet to see the full impact of the initiatives already taken reflected in our corporate success. Nonetheless, we are staunch in our belief that the measures taken so far will show an even more positive impact in the future, in particular in the areas of purchasing and production. In addition, we will be resolute in pursuing further strategic initiatives, notably in relation to sales growth, service and our portfolio while taking further optimization measures.

A key objective of our group restructuring process was to get closer to the customer and strengthen our sales capabilities by establishing a Regions & Countries organization. Now, our customers may avail themselves of GEA points of contact in their respective countries; these points of contact provide one-stop access to our entire product and service portfolio with the possibility of enlisting the help of the respective teams of experts. To ensure the adequate management of this sales-focused Regions & Countries organization we enlarged our Executive Board by creating a dedicated portfolio that was entrusted to Martine Snels who has been in charge of Regions & Countries since October 2017.

This allows us to better focus on our customers while further optimizing our sales activities to make them even more powerful and effective. In Martine Snels we have found a new Executive Board member and top manager with many years of experience in GEA relevant customer industries. She looks back upon more than 20 years of operational and international experience. Until recently, she held a position on the Executive Board of one of our most important customers in the dairy processing sector before joining the company.

As a widely diversified technology group we engage in our own research activities, but frequently, it is the very explicit requirements voiced by our customers that give rise to groundbreaking innovations. Based on this combination, we were able to realize many demanding projects in the past fiscal year. This secures our position as a technology leader as well as future growth. Here, too, the new structure of our interdisciplinary research and development organization under a single management already shows a distinct positive impact.

An international comparison reveals that, today, GEA already finds itself excellently positioned. Our wide range of technologies and solutions allows us to compensate for weaknesses in individual markets, like the dairy processing sector, while continuing to be a highly profitable company. Compared with our peers, our operational units generate impressive margins that speak for themselves, both in the components and the project business. As a result, dear Shareholders, we have been able to constantly increase the dividends paid out to you over the years. Since 2011, the amount has more than doubled.

Sustainability

Once again, our sustainability report has been compiled in line with the Standards set by the Global Reporting Initiative (GRI). The positive response from our stakeholders, notably customers, employees and the capital market, encourage us to continue on our current path and disclose more detailed information on non-financial success factors. Furthermore, we had our performance indicators for occupational safety and health as well as emissions independently audited for the very first time.

Based on our core value proposition “Engineering for a better world“, we responsibly shape our own value creation processes while assisting our customers in their endeavors to engage in sustainable management and the protection of natural resources by providing more and more efficient products and process solutions. Together with our employees we live up to our responsibility by taking into account and continuously optimizing the economic, ecological and social impact of our actions. This is why we, the Executive Board, have made a group-wide, binding commitment to sustainability and social responsibility under the heading of “Sustainable value creation at GEA”.

Future-oriented capital allocation

Following the divestment of our heat exchangers business in 2014, we have had a high level of cash at our disposal. Since then, we have consistently used these funds for redeeming our debt, restructuring the group and making acquisitions for the purpose of strengthening our competitive position. Going forward, we want to further enhance the long-term value of your company by adding smaller and medium-sized acquisitions. Therefore, we always choose potential targets that optimally supplement our portfolio in strategic terms while allowing us to unlock new products and technologies. At the end of the day, this will be instrumental in GEA’s further development.

Furthermore, in view of our high level of net liquidity, we decided in early 2017 to repurchase some of our own shares in the amount of up to EUR 450 million over a period of one year for final cancellation. We completed this program as scheduled in early February.

Outlook

Global megatrends like population growth, a growing middle class and the ensuing rise in demand for high-quality food and beverages, as well as the trend towards more and more efficient and resource conserving production processes still remain valid and will leave their mark on the global economy. This will also impact GEA's performance in the long run. To harness these trends, we have fundamentally overhauled and realigned the structures and product portfolio of your group throughout the previous years. Needless to say, we are permanently verifying the necessity of additional adjustments and improvements to meet current challenges. This way, we are well positioned to exploit future opportunities.

Regardless of these developments, we will always have to deal with downturns in individual markets. Thus, we continue to expect subdued order intake in the important customer industries dairy processing and beverages in 2018. Nonetheless, we anticipate that these segments will turn into growth markets for GEA in the medium run. The other customer industries are expected to perform well or very well in the course of the year 2018. However, the segments revealing strong growth also include areas that have so far generated below-average margins compared with the rest of the group. Moreover, we expect that the strong euro will not only negatively impact the company due to adverse currency translation effects, but that it will predominantly entail currency-related competitive disadvantages.

For the 2018 fiscal year, we aim to grow revenue by between 5 and 6 percent thanks to the additional contribution from our two latest acquisitions. The operating EBITDA margin will probably be between 12.0 and 13.0 percent of revenue in the current business year. We expect the operating cash flow driver margin to come in at between 8.7 and 9.7 percent in 2018, a figure that does not reflect capital expenditure on strategic projects. This forecast is based on exchange rates that are unchanged relative to 2017 and assumes that there will be no slowdown in global economic growth. Further, the outlook presupposes an absence of serious slumps in demand from relevant customer industries or shifts between these industries that could negatively impact margins.

In conclusion, my fellow Executive Board members and I would like to express our special gratitude to all our employees, thanking them for their outstanding commitment and all the work they have done throughout this challenging year. These thanks also include the employee representative bodies at home and abroad that have made responsible and constructive contributions. The success of your group, dear Shareholders, reflects the performance of our almost 18,000 employees. Each and every one is instrumental in achieving the overall result. It is our employees and managers who make all the difference – they are the pillars of the future success and value increase of your company.

Your

Jürg Oleas
CEO

Dr. Helmut Perlet,
Chairman of the Supervisory Board
of GEA Group Aktiengesellschaft

Report of the Supervisory Board

During fiscal year 2017, the Supervisory Board performed the monitoring and advisory functions incumbent upon it by virtue of the law, the Articles of Association and the Rules of Procedure. In doing so, it regularly dealt with the progress and the prospects of the company as well as all specific material issues while continuously advising the Executive Board on matters relating to the management of the company.

For fulfilling its tasks, the Supervisory Board, on the one hand, relied on the discussions held during its meetings and the meetings of its Committees. On the other hand, the Executive Board – in compliance with its obligation to inform – kept the Supervisory Board and its Committees up to date through regular, timely and comprehensive written and/or oral reports on all relevant matters and measures relating to the company, its course of business, corporate planning and strategy as well as the progress of the group. The Supervisory Board was involved in all decisions of fundamental importance to the company and assisted the Executive Board in an advisory capacity. At Committee level and during the meetings of the full Supervisory Board, the members of the Supervisory Board were given sufficient opportunity to critically analyze and appraise the reports and motions for resolution submitted by the Executive Board and to table recommendations. The results obtained and the essential contributions made during the discussions held during Committee meetings were presented by the Chairmen of the Presiding and the Audit Committees at the respective following Supervisory Board meetings and, thus, assisted the full Board in forming an opinion. This way, the preparatory and in-depth work undertaken by the Committees was instrumental in enhancing the overall efficiency of the activities of the Supervisory Board.

Furthermore, the Chairmen of the Supervisory Board and the Audit Committee maintained regular contact with the Executive Board. Between the meetings, the Chairman of the Supervisory Board and the Chairman of the Executive Board regularly discussed issues relating to strategy, the state of play of the implementation of envisioned acquisitions, as well as matters relating to planning, business progress, risk exposure, risk management and compliance. Outside of meetings, the Chairman of the Audit Committee remained in contact with members of the Executive Board, in particular the Chief Financial Officer, to keep abreast of current developments relevant to the work of the Audit Committee and to discuss them, if necessary. In preliminary meetings with the Executive Board, the employee representatives regularly deliberated on the most important agenda items prior to the meetings of the full Supervisory Board.

On a regular basis, the Supervisory Board was provided with specific information on the order intake, revenue, earnings and employment situation of the group and its business areas. Detailed explanations on deviations of business performance from set plans and targets were given on the basis of supporting documents. Prior to and between the meetings, the Executive Board delivered written reports on significant events to the members of the Supervisory Board. Following deliberations at Committee level, the future prospects and the strategic orientation of the company and its business areas, as well as corporate planning were extensively discussed and agreed with the Supervisory Board.

After extensive scrutiny and deliberations as well as discussions at Committee level, as the case may be, the members of the Supervisory Board cast their votes on the reports and motions for resolution submitted by the Executive Board insofar as this was appropriate or required by law, the provisions of the Articles of Association or the Rules of Procedure. For reasons duly substantiated, in particular in matters of special urgency, resolutions were adopted by written procedure.

In the year under review, there were no conflicts of interest involving members of the Executive Board or the Supervisory Board that would have required immediate disclosure to the Supervisory Board and communication to the Annual General Meeting.

Focal points of Supervisory Board deliberations

In fiscal year 2017, the Supervisory Board held eight meetings. On these occasions, the Supervisory Board regularly discussed matters relating to the company's business progress, its financial position and share price performance. Apart from that, the following key issues came up for discussion.

The key items on the agenda of the conference call Supervisory Board meeting held on February 6, 2017, included early capital markets information as well as capital allocation.

Key issues addressed during the Supervisory Board meeting held on March 7, 2017, embraced the adoption of the annual financial statements and the approval of the consolidated financial statements for fiscal year 2016, including the appropriation of net earnings. Apart from that, the Supervisory Board dealt with the final determination and weighting of the Executive Board members' individual targets for fiscal year 2017, the enlargement of the Executive Board as well as the motions for resolution on individual agenda items that were to be submitted to the 2017 Annual General Meeting. In addition, the company's Chief Compliance Officer delivered a detailed report on the 2016 fiscal year just ended.

Among other things, the meeting of the Supervisory Board held on April 20, 2017, addressed the extension of Dr. Helmut Schmale's mandate and served the purpose of preparing the Annual General Meeting which took place immediately afterwards.

Key issues raised during the meeting held on June 22, 2017, included a report on current M&A projects, general matters relating to Executive Board succession planning, findings from the customer satisfaction survey as well as the examination of the efficiency of the activities performed by the Supervisory Board. Furthermore, at its meeting, the Supervisory Board resolved on a 20 percent target of women on the Executive Board that will be applicable until December 31, 2021. In addition, the Supervisory Board approved the revised versions of the Rules of Procedure of both the Audit Committee and the Supervisory Board.

During its conference call meetings held on July 11, 2017, and August 25, 2017, the Supervisory Board exclusively focused on the acquisition of the Italian Pavan Group. After completing their deliberations, the members of the Supervisory Board approved the acquisition of the Pavan Group on August 25, 2017.

On September 21, 2017, the Supervisory Board met at GEA's Process Engineering A/S site in Soeborg, Denmark. Prior to the actual Supervisory Board meeting, the members of the Supervisory Board engaged in talks with regional and country managers, further GEA managers as well as customer representatives. On these occasions, the Supervisory Board was informed about individual regions and countries, the service organization as well as project execution at GEA. During its meeting, the Supervisory Board continued its deliberations on Executive Board succession planning. Apart from that, the Supervisory Board received a progress report on the current developments within the framework of the "Global Manufacturing Footprint" project.

The meeting held on December 15, 2017, addressed the 2018 budget. Apart from that, the Supervisory Board dealt with the following topics: digitalization, measures designed to improve customer satisfaction, the OneGEA Finance project as well as corporate strategy. Furthermore, the Supervisory Board adopted the 2017 Declaration of Conformity in line with the German Corporate Governance Code as well as the revised version of the target composition of the Supervisory Board. Based on vertical and horizontal benchmarking, the Supervisory Board also verified the appropriateness of Executive Board remuneration. Further topics included the level of target achievement attained by the members of the Executive Board in 2017, as well as the Executive Board targets for the year 2018.

Work of the Committees

In the fiscal year just ended, the Presiding Committee met on five occasions. The committee focused on Executive Board matters including succession and remuneration topics, corporate governance as well as specific transactions requiring approval. Moreover, the Presiding Committee is also responsible for jointly deliberating on corporate strategy, capital investments and funding operations together with the Executive Board. Thus, specific emphasis was placed on investment reporting as regards the company's IT landscape, the OneGEA Finance project, the Global Manufacturing Footprint, M&A activities as well as digitalization initiatives.

The Audit Committee also held five meetings. In the presence of the auditor, the Chairman of the Executive Board as well as the Chief Financial Officer, it focused on the 2017 quarterly and half-yearly financial statements and the annual financial statements in conjunction with the consolidated financial statements for 2016. Furthermore, the Committee's key activities included monitoring the accounting process, the effectiveness of the internal control, risk management and audit systems, the audit of the annual financial accounts as well as compliance. On a regular basis, the Audit Committee was briefed on the risks and opportunities faced by the company. The auditors extensively elaborated on their audit activities and the audit process. In addition, the Audit Committee submitted its proposal for the appointment of an auditor to the Supervisory Board, dealt with the engagement of the auditor of the annual financial accounts, determined the audit process and the key audit areas including audit fees, ensured the required independence of the auditor and addressed the non-audit services provided by the latter.

During the year under review, no meetings of the Nomination Committee and the Mediation Committee were convened.

The Committee chairmen briefed the Supervisory Board on the activities undertaken by the Committees during the Supervisory Board meetings following the respective Committee meetings.

Disclosure of individual meeting attendance

Supervisory Board member	Supervisory Board and Committee meetings	Attendance	Attendance rate
Dr. Helmut Perlet (Chairman)	18	18	100%
Kurt-Jürgen Löw (Deputy Chairman)	13	13	100%
Ahmad Bastaki	13	12	92%
Prof. Dr. Werner Bauer	13	12	92%
Hartmut Eberlein	13	13	100%
Rainer Gröbel	13	13	100%
Michaela Hubert	13	12	92%
Eva-Maria Kerkemeier	8	5	63%
Michael Kämpfert	13	13	100%
Brigitte Krönchen	13	13	100%
Jean Spence	8	8	100%
Dr. Molly Zhang	8	8	100%

Supervisory Board members unable to attend meetings of the Supervisory Board or its committees were excused and usually cast their votes in writing.

Corporate Governance

The Supervisory Board is continuously monitoring the evolution of the standards set out by the Corporate Governance Code. At its meeting on December 15, 2017, it discussed the recommendations and suggestions of the German Corporate Governance Code as amended in February 2017. After concluding their respective deliberations, the Executive Board and the Supervisory Board issued an updated Declaration of Conformity in accordance with section 161 AktG (Aktiengesetz – German Stock Corporation Act) and made it permanently accessible to the general public on the company's website. On this occasion, the Supervisory Board also revised its target composition, adding a profile of skills and expertise. Further information on corporate governance can be found in the Corporate Governance Report (see page 58 ff.).

Annual financial statements and consolidated financial statements 2017

The 2017 annual financial statements of GEA Group Aktiengesellschaft, the consolidated financial statements prepared in accordance with IFRS and the combined management report were audited by KPMG AG Wirtschaftsprüfungsgesellschaft and received an unqualified audit opinion.

In the presence of the auditors, the combined management report, the annual financial statements of GEA Group Aktiengesellschaft, the proposal for the appropriation of net earnings as well as the consolidated financial statements and the audit reports for fiscal year 2017 were extensively discussed during the meeting of the Audit Committee on March 7, 2018, and on the occasion of the Supervisory Board meeting for balance sheet approval held on March 8, 2018. The auditors reported on the audit process and the key findings of their audit. They were also available to answer questions.

On the basis of the final result of the examination performed by the Audit Committee and after conducting its own scrutiny, the Supervisory Board agreed with the auditors' findings at its meeting on March 8, 2018, and found that there were no objections to be raised. The Supervisory Board approved the 2017 consolidated financial statements, the 2017 annual financial statements of GEA Group Aktiengesellschaft, as well as the combined management report. The annual financial statements of GEA Group Aktiengesellschaft are hereby adopted. The Supervisory Board considers the proposal for the appropriation of net earnings to be reasonable.

The examination of the company's non-financial success factors by the Supervisory Board in accordance with s. 171 para. 1 German Stock Corporation Act (Aktiengesetz – AktG) was supported by a limited assurance engagement of selected data on GEA's sustainability performance (key performance indicators on emissions, occupational health and safety) for the 2017 fiscal year that was conducted by KPMG. The Supervisory Board has verified the potential correctness of this engagement by undertaking their own review activities in the first year of application. In the coming years, the Supervisory Board will monitor implementation at GEA and ensure compliance with the evolving standard.

Changes in the composition of the Supervisory Board and the Executive Board

Dr. Helmut Schmale's appointment as the company's Chief Financial Officer due to expire on March 31, 2018, was renewed for another three-year term until and including March 31, 2021.

With effect from October 1, 2017, Martine Snels was appointed member of the Executive Board of GEA Group Aktiengesellschaft and put in charge of the company's Regions & Countries organization.

In the year under review, the Supervisory Board did not see any changes in personnel.

The Supervisory Board wishes to express its gratitude and appreciation to the senior management teams, employee representative bodies and, in particular, to all employees of GEA group for their personal commitment and dedication as well as their hard work throughout an exceptionally challenging fiscal year.

Düsseldorf, March 8, 2018

Dr. Helmut Perlet
Chairman of the Supervisory Board

Executive Board GEA Group Aktiengesellschaft

Steffen Bersch   Martine Snels   Jürg Oleas   Niels Erik Olsen   Dr. Helmut Schmale

Jürg Oleas, Chairman of the Executive Board

Jürg Oleas, a Swiss national born on December 8, 1957, in Quito, Ecuador was appointed Chairman of the Executive Board with effect from November 1, 2004. His period of office runs until December 31, 2019. He has been a member of the company's Executive Board since May 1, 2001, in which capacity he is also the Labor Relations Director. Communication, Marketing & Branding, Corporate Development, Internal Audit, Human Resources, and Legal & Compliance also fall under his remit.

Dr. Helmut Schmale, Chief Financial Officer

Born on November 9, 1956, in Gelsenkirchen, Germany, Dr. Helmut Schmale became Chief Financial Officer on April 22, 2009, after joining the Executive Board on April 1, 2009. Dr. Helmut Schmale is responsible for the areas of Finance, Investor Relations, Tax, Treasury & Corporate Finance, and the Shared Service Center, and his period of office runs until Wednesday, March 31, 2021.

Steffen Bersch, Member of the Executive Board

Steffen Bersch was born on June 12, 1969 in Wattenscheid, Germany and appointed to the Executive Board with effect from January 1, 2016. He is responsible for the Business Area Equipment. His period of office runs until December 31, 2018.

Niels Erik Olsen, Member of the Executive Board

Niels Erik Olsen, born on September 3, 1966 in Guldborgsund, Denmark has been a member of the Executive Board since January 1, 2016, where he is responsible for the Business Area Solutions. His period of office runs until December 31, 2018.

Martine Snels, Member of the Executive Board (since October 1, 2017)

Martine Snels was born on February 19, 1969 in Hoogstraten, Belgium. Since October 1, 2017, she has been a member of the Executive Board with responsibility for the company's regional and national organization. Her period of office runs until September 30, 2020.

Combined Group Management Report

Fundamental Information about the Group

Group business model

Combined management report of GEA Group Aktiengesellschaft and the GEA group

GEA Group Aktiengesellschaft is home to central management functions of the group. Profit and loss transfer agreements exist with key domestic subsidiaries. In addition, GEA Group Aktiengesellschaft performs central financial and liquidity management. Furthermore, it provides its subsidiaries especially with services from the Global Corporate Center and the Shared Service Center on the basis of service agreements.

Since the course of business, the economic position, and the opportunities and risks associated with the future development of GEA Group Aktiengesellschaft do not differ from the course of business, the economic position, and the opportunities and risks associated with the future development of the group, the management report of GEA Group Aktiengesellschaft has been combined with that of the group in accordance with section 315 (5) of the Handelsgesetzbuch (HGB – German Commercial Code). In contrast to the consolidated IFRS financial statements, the annual financial statements of GEA Group Aktiengesellschaft are based on the HGB, supplemented by the Aktiengesetz (AktG – German Stock Corporation Act). All the financial statements relate to the 2017 financial year (January 1 to December 31, 2017).

GEA reports also on non-financial performance factors in the 2017 Annual Report. The sustainability report follows the international Standards of the Global Reporting Initiative (GRI) and was submitted for the purpose of the GRI Materiality Disclosures Service. GRI has attested to the accuracy of the Materiality Disclosures item. The GRI Content Index can be found at the end of the Annual Report (see page 249 ff.). Since the 2016 Annual Report, GEA's Annual Reports have included an annual sustainability report.

Organization and structure

Global Corporate Center

The Global Corporate Center performs the essential management functions for the entire group. These comprise the group-wide management of strategy, human resources, legal, and tax matters, mergers & acquisitions, central financial management, internal auditing as well as marketing and communications.

The group

As an international technology group, GEA focuses on the development and production of process technology and components for sophisticated and efficient production methods in a variety of end markets. GEA is one of the largest suppliers of systems and components for the food processing industry and a wide range of other processing industries.

The group is a specialist in its respective core technologies and a leader in most of its sales markets worldwide. GEA consistently promotes an innovation-led culture in order to maintain its technological edge. The company considers profitability more important than volume and practices systematic portfolio management and cost control. Active risk management, stability through diversification, and a focus on the markets of the future are binding principles for all GEA business units.

The group's enduring success is founded on a number of major global trends:

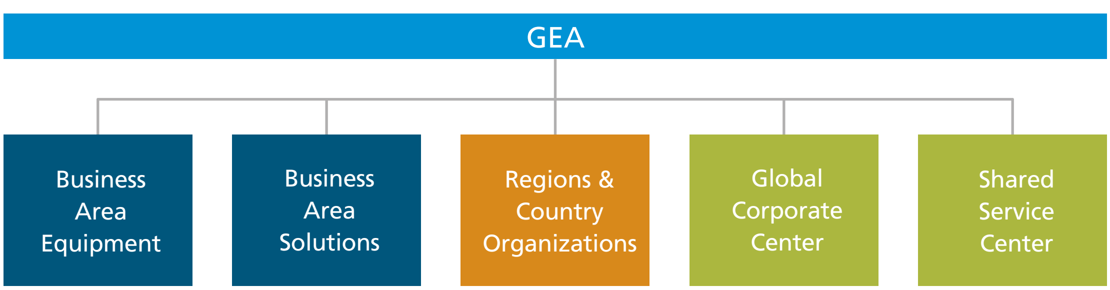
1. Continuous growth in the global population
2. Growing middle class
3. Growing demand for high-quality foods and beverages
4. Increasing demand for production methods that are efficient and conserve valuable resources.

Group structure

GEA bundles the development and manufacturing of products and the provision of process solutions and services in two operating segments, namely Business Area (BA) Equipment and Business Area Solutions. In the year under review, the Business Area Equipment was headed at Board level by Steffen Bersch, while Niels Erik Olsen was responsible for the Business Area Solutions.

This structure with two business areas of roughly equal size and strength promises operational synergies across technologies and applications, and helps achieve functional excellence by standardizing processes.

Since October 1, 2017, Executive Board member Martine Snels has been responsible for the company's regional and national organization, a role previously held by Jürg Oleas (see page 20).



Operating segments

Business Area Equipment

The Business Area Equipment brings together all activities ranging from largely standardized to customer-specific equipment offerings. The products are mainly manufactured as part of series production on a standardized and modular basis. Typical products of the business area include separators, valves, pumps, homogenizers, and refrigeration equipment such as compressors. The portfolio of equipment also includes process technology for food processing and packaging, for example extrusion and milling equipment. The product range also extends to dairy equipment, feeding systems, and slurry engineering.

Business Area Solutions
The Business Area Solutions brings together all group activities that largely consist of marketing customer-specific and modular solutions, and projects. This business area tailors its products and services to the specific application or customer requirements. The offering mainly comprises the design and development of process solutions for the food and beverages, pharma, and chemical industries.

In 2017, GEA took the decision to consolidate the service areas of its two Business Areas – Equipment and Solutions – into a single, centralized organization. The new service organization will facilitate better internal cooperation between the former Equipment and Solutions service teams and, by encouraging synergies, promote greater customer satisfaction.

Other companies
The "Other companies" area includes GEA Group Aktiengesellschaft and those companies with business activities that do not form part of the core business. The management report refers to this area only selectively.

Organizational units

Country organizations
Customer-centric sales and service activities are unified under the umbrella of a single country organization, with the countries grouped under newly created regions. GEA's customers now have a single national organization per country as the central point of contact offering the entire product portfolio and all services on a local basis.

Administration
A Global Corporate Center is the central port of call for all supporting management and administrative functions. An outsourced Shared Service Center with two locations takes care of the standardized administrative processes, thus reducing the workload for the operating units. The expenses of the Global Corporate Center and of the Shared Service Center are allocated to the business areas wherever possible.

Discontinued operations

Discontinued operations comprise the remaining risks from the sale of GEA Heat Exchangers, along with the ongoing process of winding-up past discontinued operations, including individual legal disputes arising from them.

Capital expenditure

GEA develops and engineers specialized components, largely on a make-to-order basis, and also designs process solutions for a broad range of customer industries. The focus is on the food and beverage sectors. With its global engineering and production network, the group is able to provide customers with solutions that are precisely tailored to their individual requirements. Customers also benefit from our flexible production concepts, which ensure fast throughput and low costs, and minimize the capital tied up.

Strategic projects (see page 219 f.) accounted for EUR 27.9 million of the total capital expenditure of EUR 118.5 million. Thus, capital expenditure before strategic projects amounted to EUR 90.6 million, i.e. approximately the previous year's level of EUR 91.0 million. Most of this outlay went on R&D and on new and replacement products (shares of 45 and 35 percent respectively). In the reporting year, efforts to expand our range of digital solutions for farmers in the context of 365FarmNet were a focal point of R&D expenditure in the Business Area Equipment. In addition, fully automated milking technology for the robot milker and the DairyProQ milking system was further enhanced. Both systems can now be sold on the American market. EUR 58.1 million of the capital expenditure (not including strategic projects) was attributable to the Business Area Equipment, and EUR 30.3 million to the Business Area Solutions.

Capital expenditure in tangible and intangible assets per type (without strategy projects)
(in %)

Capital expenditure in tangible and intangible assets by region (without strategy projects)
(in %)

Management system

Basis of information

Group reports are prepared with the aid of standard applications that are precisely tailored to the needs of GEA and subject to continuous enhancement. Standard reports prepared on the basis of unified data are used throughout the group to report net assets, financial position, and results of operations. These standard reports are supplemented by special analyses as well as analyses and reports related to specific businesses and strategic measures. Besides the budget itself, corporate planning covers a further two planning years.

Routine reporting procedures are supplemented by committee meetings that provide members of the group management with an opportunity to share information on strategic and operational issues. Meetings of the Executive Board of GEA Group Aktiengesellschaft and of the Extended Management Board (Global Leadership Team), which comprises the Executive Board members, the top management of the two Business Areas, the heads of the sales regions and representatives of the Global Corporate Center (GCC) and the Finance and Human Resources areas are held once a month. The Executive Board meetings concentrate on issues of relevance to the group as a whole, whereas decisions with a direct impact on the Business Areas and Regions are prepared in meetings of the Global Leadership Team (GLT), before passing to the Executive Board for approval. In addition, regular meetings are held with the individual Business Areas. These are attended by the competent Executive Board member along with the heads of the respective Business Area, and business partners of GCC Finance. Such meetings entail detailed discussions of the net assets, financial position, results of operations, and business development of the Business Area concerned. Separate meetings for each Business Area are also held to discuss earnings for the latest fiscal year and the business plan for the following years.

Key performance indicators

GEA's overriding goal is to secure a sustainable increase in enterprise value. Operational management is based on the key drivers that have an immediate influence on value creation, with growth, operating efficiency, and liquidity management the focus of attention (see page 120 f.). For this reason, the key performance indicators for GEA are revenue, operating profit, and operating cash flow driver margin. Acquisitions effected after the reporting date will not be taken into account in the forecast.

With respect to earnings, GEA will focus on the operating EBITDA margin as of 2018. GEA defines the expression "operating" as adjusted for effects resulting from the remeasurement of assets added due to acquisitions and for expenses for strategic projects (see page 219 f.). In the previous year, it used absolute operating EBITDA for operating management purposes. The company is adopting a relative indicator, first, to ensure greater continuity of the indicator when business volume fluctuates and, second, to allow more meaningful comparisons with other companies.

The operating cash flow driver margin is the balance of operating EBITDA, the change in average working capital, and capital expenditures for property, plant, and equipment, and intangible assets. From the 2017 financial year on, capital expenditure will additionally be adjusted for investments in strategic projects.

GEA is subject to currency translation effects, especially as regards the U.S. dollar and Chinese yuan. Global currency markets are expected to remain volatile in fiscal year 2018. In order to neutralize currency translation effects for operational management purposes, GEA will additionally report the key performance indicators revenue, operating EBITDA margin and operating cash flow driver margin as of 2018 at constant exchange rates compared with the previous year.

GEA also routinely gathers various other performance indicators in order to obtain a meaningful picture of the overall situation.

Revenue is analyzed by region, customer industry, application and product group on a monthly basis in order to identify market trends quickly. We also evaluate leading indicators such as the GEA Business Climate (GBC – see page 109), and order intake.

To enable a rapid response to developments, the Business Areas also return regular forecasts – for the quarters and the year as a whole – for the key performance indicators revenue and operating EBITDA. Beyond that, GEA makes estimates for other indicators, such as order intake, and publishes these together with the Business Areas' forecasts.

In order to create the requisite financial scope to achieve strategic growth and to focus the group even more closely on cash flow generation, the cash flow driver margin was introduced in 2012 and was also incorporated into the bonus system for senior management. Since 2014, this system has also been applied to a larger group of employees.

The return on capital employed (ROCE), calculated as the ratio of EBIT to capital employed, provides a further performance indicator for measuring the value added that is generated by the group's operating activities. It figures in both the group's regular reporting activities and the calculation of variable, performance-related elements of management remuneration. In order to anchor ROCE even more strongly at an operational level, the ROCE drivers EBIT and EBIT margin, working capital – the key driver of capital employed – and the ratio of working capital to revenue are monitored continuously. When calculating capital employed, effects arising from the acquisition of the former GEA AG by the former Metallgesellschaft AG in 1999 are not taken into account.

The difference between the expected ROCE and the weighted average cost of capital (WACC) is a key criterion for investment and portfolio decisions. The group calculates WACC on the basis of the following factors: the cost of equity, based on the return yielded by an alternative, risk-free investment plus a market risk premium and the beta factor, actual borrowing costs, and the rate used to discount pension obligations.

Management of capital employed

Resources are allocated within the group primarily on the basis of strategic and medium-term planning. This provides the framework for preparing key decisions on core technologies, sales markets, and other strategically important variables.

Acquisitions and expansion investments are assessed not only on the basis of key performance indicators showing potential returns, but also in terms of their importance for achieving the group's strategic goals. The key economic criterion for evaluating rationalization and expansion investments is the net present value. The payback period is also calculated as an additional benchmark for assessing the risk arising from changing economic conditions.

Working capital is another key element of capital employed. Working capital management begins before an order is accepted with the payment terms that are offered or negotiated.

Project- and activity-based management

In addition to general management with the aid of the key performance indicators described above, GEA has established individual assessment and approval procedures for customer and investment projects, utilizing specific thresholds for the different hierarchy levels. Customer projects are evaluated primarily on the basis of their expected margins (gross margin on a fully absorbed cost basis) and of their commercial and contractual risk profile, with a particular emphasis on cash flow. Project management is also backed up by extensive project control not only at operating unit level but also – depending on the size of the project involved – at Business Area or group level in the form of a separate reporting system for major projects. In many cases, the findings gained from this analysis yield suggestions for improving internal processes, which can be used in subsequent projects. At group level, the analysis focuses on deviations between the calculated and the expected or realized contract margin.

Remuneration system and financial performance management

Changes in the key value drivers are also reflected in the remuneration of employees not covered by collective agreements. Variable salary components dependent on company performance are determined on the basis of the cash flow driver margin and ROCE. In addition, performance-related remuneration depends on the achievement of personal goals, thereof at least one must be measurable in financial terms. A further remuneration component is based on GEA's share price performance in relation to the benchmark index, the STOXX® Europe TMI Industrial Engineering (TMI IE).

Procurement

The procurement volume of GEA's continuing operations amounted to around EUR 2.2 billion (previous year: EUR 2.2 billion) in 2017. It is the biggest single expense item in the income statement. In this context, stainless steel was the focus of raw material procurement. However, directly purchased stainless steel merely accounted for a relatively small proportion of the company's overall demand as GEA procures most of it in the form of processed products from the market or in connection with assembly services. On average, the prices of virtually all finished and semi-finished industrial products purchased by GEA went up in comparison to the previous year, just like commodity prices. Stainless steel prices increased in 2017, mainly driven by alloy surcharges.

GEA uses its own material group classification system to obtain information on the procurement volume as a whole. Apart from providing a detailed overview of suppliers as well as the regional breakdown of the purchase volume, the system serves as a basis for defining strategies applicable to the principal commodity groups. It is available to all GEA buyers.

Spanning all functional areas and regions, GEA's Procurement Council (GPC) is responsible for managing the procurement organization as a whole. Headed by a member of the Global Leadership Team, it comprises managers from the Business Area Equipment, Business Area Solutions and the country organizations. Attached to the GPC is a global Procurement Coordination Unit.

In the year under review, the purchasing organization launched the "Supply Chain Excellence Project", a multi-phase scheme scheduled to last until 2020 for the purpose of leveraging optimization and savings potentials in a structured manner. As a first step, 2017 witnessed the detailed scrutiny of eight product groups – partly on the basis of commercial criteria as regards purchasing, and with a view to technical parameters or structural changes in cooperation with product development and engineering. Apart from that, additional cost reduction and savings projects were conducted during the course of day-to-day operations.

The OneGEA organization provides the possibility of further driving standardization in terms of material specifications while increasingly relying on strategic suppliers. The year under review saw the implementation of a strategic policy ("Qualified and Preferred Suppliers Policy"). This way, the company seeks to ensure an informed strategic selection of suppliers with an optimal mix of risk and cost profile and establish more structured relationships with selected suppliers while significantly reducing the supplier base – by half – by the year 2020. Aggregating volume and enhancing cooperation with suppliers will allow GEA to lower handling, administrative and unforeseen expenses, and to set up an integrated platform for other initiatives, compliance and innovation.

As a rule, GEA's supply chain is structured as follows:

In 2017, the products of Business Area Equipment were manufactured at 35 different sites around the globe. In this context, GEA buys raw materials, semi-finished products, precursors and, notably, components that are not based on its own core technologies from external suppliers.

Business Area Solutions (26 production sites) develops, designs and supplies process solutions for a wide variety of different applications. Within the framework of the projects, GEA also purchases plant components not manufactured by the company from third parties, with construction site and assembly services, in particular, being outsourced to subcontractors. When it comes to structural steel engineering, steel is usually included in the services provided by subcontractors.

Today, seven production sites in China, Germany, India, Italy and the USA are capable of manufacturing several product lines (multi purpose sites), while placing certain demands on the supply chain and creating opportunities for the respective local suppliers. Moreover, dynamic business growth in the burgeoning economies and emerging markets will require an increasing level of local procurement.

Procurement relies on the "local for local" principle wherever possible. Aside from short response times, notably the reduction in financial expenses and ecological impacts due to fewer shipments, as well as the positive contribution made to the local economy by the production and project sites are of advantage. The regional supplier is identified on the basis of supplier distribution sites. For this reason, it is not always possible to provide accurate and unambiguous information about product origin, in particular due to the fact that some products are manufactured in one region only, but sold worldwide.

Region	2017 Local procurement as a percentage of total volume*	2016 Local procurement as a percentage of total volume*
Europe, Middle East & Africa	95	95
Asia Pacific	82	80
North and Latin America	90	89

*) Excluding intercompany procurement

Owing to the "local for local" principle, transport and logistics merely account for a small proportion of the overall procurement volume. Nonetheless, these activities are still insufficiently bundled due to the former organizational structure of the company. The objective is to centralize logistics management while seeking to harness efficiency-related and ecological benefits.

The number of suppliers is still relatively high. The hundred largest suppliers account for around one quarter of GEA's overall procurement volume with some 200 suppliers jointly making up a share of 36 percent of this volume. This means that GEA is not dependent on specific suppliers.

For information on supply chain compliance, see Sustainability Report, page 89 f.

Research and development

The primary objective pursued by a technology group like GEA is to offer bespoke customer solutions that provide outstanding product and process efficiency allowing the company to compete successfully on a global scale. Efficiency implies a minimum input of energy, the conservation of natural resources and a high level of recyclability, always in relation to optimized performance. As a consequence, GEA's innovative strength is key to its future success in business. Apart from engaging in in-house research and development (R&D), the company gets involved in projects and connects with customers and suppliers as well as research partners, the public sector, and for some time now also with selected start-ups.

GEA's R&D activities boil down to its core value proposition and corporate claim "Engineering for a better world". By coming up with more and more efficient products and process solutions, GEA makes a contribution to the responsible development of value creation processes, sustainable management and the protection of the natural environment.

For this reason, a string of R&D core issues address how efficient process technology contribute to value creation processes. This is GEA's way of dealing with the macroeconomic megatrends like a growing world population, urbanization and rising energy costs. After all, the respective implications become particularly evident in the food and pharmaceutical sectors served by GEA: Consumers make highest demands in terms of the safety, quality and durability of their products, a challenge that may only be met with the help of industrial process engineering.

For instance, GEA is working on the development of energy-efficient refrigeration systems that are absolutely essential to improve food safety and prevent waste. In the year under review, GEA came up with CALLIFREEZE, a freeze process control system for GEA spiral freezer range. It continuously measures the food product level of frozenness at the freezer discharge while adjusting freezing time, air temperature and fan speed to achieve the precise level of freezing by minimizing energy consumption. Together with GEA refrigeration systems, the freezers provide the currently best food safety and energy efficient solution when it comes to food sector applications. First results measured in a plant embracing seven GEA freezers have revealed a ten to fifteen percent increase in production capacity accompanied by a lower level of energy consumption.

Another innovation launched by GEA at the leading international Interpack trade fair held in Düsseldorf in the year under review also focuses on the key topic of food safety: GEA OxyCheck is the world's first in-line measurement system that checks the oxygen content and seal integrity of 100 percent of all modified atmosphere packaged food for each package released. What makes OxyCheck innovative is that each MAP pack (MAP = Modified Atmosphere Packaging) is subjected to a non-invasive inspection after being sealed on a GEA thermoformer without damaging it by inserting a needle, which used to be the standard procedure employed up until then. Costly spot checks are no longer required, both film and seal remain intact with no product or material being lost. Being a member of the "Save Food" initiative, this is GEA's contribution to reducing food loss and waste during production.

In cooperation with the Universities of Bologna and Parma as well as companies specialized in generating plasma, GEA started to develop systems designed for using plasma technology for the purpose of decontaminating surfaces and packaging intended for food applications in 2017. In nature, plasma can appear in various forms such as lightning or the aurora. Plasma can generate oxidant radicals that kill microorganisms. Scientific literature and initial preliminary tests conducted by GEA confirm that plasma may reduce the number of bacteria by 99.9 percent. Within the framework of this innovation project, GEA intends to enhance the chemical-free and dry decontamination technology for the benefit of filling lines. The project receives funding from the EU Horizon 2020 work program that promotes the development of a sustainable economy.

Another R&D focus is placed on creating additional value from spin-off products, for instance in the agricultural sector. The company aims at hygienically treating products that have frequently been disposed of up until now for the purpose of reintroducing them into the food and animal feed cycles as high-quality reusable materials. With this in mind, GEA has been working on the EU SABANA (Sustainable Algae Biorefinery for Agriculture and Aquaculture) project since 2016. In the context of this biorefinery project, universities, biotechnologists and mechanical engineering companies have been researching methods of binding nutrients from wastewater in algal biomass. During the course of the year 2017, the partners developed a microalgae cultivation plant that is to be established on a one-hectare site in Almería, Spain, in the first quarter of 2018. GEA will supply centrifuges for harvesting and concentrating the microalgae, homogenizers for cell disruption as well as a spray drier for this pilot plant. The algae farm will produce algae-based products like biofertilizers and biostimulants for agricultural purposes as well as feeding stuff components for aquaculture operations.

GEA's research priority relating to alternative raw materials in the food industry includes the "Insects for Proteins" project that won an award in GEA's annual Innovation Contest. In this context, GEA takes up the challenge of processing alternative sources of protein for feeding humans and animals – and in a sustainable manner at that. After all, according to the United Nations, the Earth will have to feed 9.7 billion people by the year 2050 – 30 percent more than today. Even now, the environmental impact of conventional protein production in agriculture and forestry is substantial. Thus, insects – in particular bugs and caterpillars – might provide a more sustainable solution when used as new sources of protein and fat. GEA offers basic technologies that may be adapted to this new market along virtually all stages of value creation. Currently, a dedicated working group explores the needs and circumstances of this exponentially growing market while coordinating activities with other industry and research partners.

Another project on the verge of completion is the DRIVE4EU project that involves GEA and a number of researchers who focus on Russian dandelion. The latter is regarded as a domestic alternative to tropical rubber trees that may be used for the purpose of rubber production and could be grown on previously uncultivated agricultural land within the European Union. GEA has assisted in developing plants and lines for processing the crop. The first bicycle tires produced on the basis of this method were presented at the Eurobike trade fair in Friedrichshafen in early 2017.

In April 2017, the "The Full PE Laminate" initiative was recognized as the most sustainable solution in the plastics industry on the occasion of the GPCA Plastics Conversion Conference (PlastiCon 2017) held in Abu Dhabi. Under this name, a consortium, which included GEA, presented a groundbreaking solution for manufacturing, processing and recycling flexible plastic packaging. It modified the hitherto merely partially recyclable materials in such a way that they could be fully integrated into the materials cycle – without any loss of performance in relation to materials handling or the packaging process. As a technology leader in the food processing and packaging industry, GEA pitched in by contributing its expertise in mechanical engineering. In cooperation with well-known industry partners, GEA continues to develop sustainable packaging solutions that embrace the entire plastics value chain ranging from materials development and production to recycling. In November 2017, GEA held the "Circular Packaging Event" to share knowledge and ideas in the Netherlands at GEA's site in Weert.

GEA's quest for technological leadership is underpinned by the fact that around 40 percent of its workforce are performing engineering or engineering-related activities. In 2017, more than 600 employees were assigned to the field of research and development. In fiscal year 2017, GEA filed applications for a total of 58 (previous year: 105) new patent families as a result of their endeavors.

In the 2017 fiscal year, adjusted expenditure on research and development amounted to EUR 90.3 million. This figure includes refunded expenses to the tune of EUR 12.8 million that are reported in the cost of sales. As a result, the R&D ratio totaled 2.0 percent of revenue as the previous year's level. Depreciation of capitalized development projects amounted to EUR 19.5 million in the year under review (previous year: EUR 19.0 million). Capitalized development expenses added up to EUR 32.1 million compared with EUR 29.7 million in the previous year. Compared with EUR 98.5 million in the year before, expenses for research and development accounted for a total of EUR 102.9 million.

Research and development (R&D) (EUR million)	2017	2016*	Change in %
Refunded expenses (contract costs)	25.1	30.3	–17.2
Non-refunded R&D expenses after adjustments	65.3	57.5	13.5
Total R&D expenses after adjustments	**90.3**	**87.8**	**2.9**
R&D ratio (as % of revenue)	**2.0**	**2.0**	**–**
Total R&D expenses	**102.9**	**98.5**	**4.5**
R&D ratio (as % of revenue)	**2.2**	**2.2**	**–**

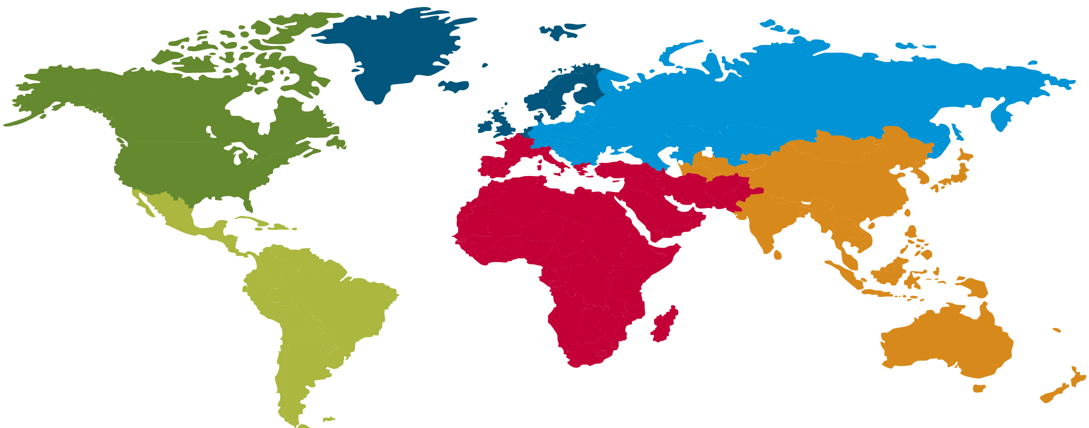
*) Reclassification of 6.7 EUR from non-refunded R&D expenses after adjustments into refunded expenses (contract costs)

Report on Economic Position

North America
1,763
845.5 million

North and Central Europe
2,927
582.6 million

DACH & Eastern Europe
6,398
944.1 million



Latin America
471
316.5 million

Western Europe, Middle East & Africa
3,401
888.6 million

Asia Pacific
2,904
1,027.1 million

= Full-time equivalents (reporting date)
= Revenue

GEA in fiscal year 2017

The forecast for 2017 is subject to there being no significant negative exchange rate effects; it further presupposes that there will be no significant slackening in demand from relevant customer industries or shifts between these industries which could negatively impact margins. The forecast also assumes that demand in GEA's sales markets would moderately surpass the 2016 level.

In its half-yearly financial report, GEA adjusted its forecast for the 2017 financial year as published in the 2016 Annual Report. The predicted moderate rise in revenue was confirmed.

Including additional costs for filling machines, the forecast for operating EBITDA was reduced from between EUR 620 – EUR 670 million to between EUR 573 – EUR 633 million. Not including these additional costs, the forecast for operating EBITDA was between EUR 600 – EUR 640 million.

GEA can reaffirm an operating cash flow driver margin before investments in strategic projects of between 8.5 and 9.5 percent of revenue. The adjustments to the outlook were necessary in the wake of an analysis of the drop in earnings in the second quarter. This decline was attributable largely to the Business Area Solutions, specifically to volume and mix effects and additional costs for filling machines.

The original forecasts published in the 2016 Annual Report did not include the acquisition of the Pavan group completed in the reporting year. Without this acquisition, growth in revenue would have been 2.2 percent. Adjusted for this acquisition, operating EBITDA amounted to EUR 563.9 million, or EUR 583.6 million when adjusted for the additional costs for filling machines. The corresponding operating cash flow driver margin was 8.4 percent of revenue.

As such, the original forecast published in the 2016 Annual Report was accurate in terms of revenue growth, but not in terms of the operating EBITDA target. GEA narrowly failed to reach the target corridor for the operating cash flow driver margin.

Financial year 2017	Growth rate	Operating EBITDA	Operating Cash flow driver margin
Outlook 2017*	moderate growth	EUR 620 – 670 million	8.5% – 9.5% of revenue
Actual 2017 (without acquisition Pavan)	2.2%	EUR 563.9 million	8.4%
Actual 2017 (excluding the acquisition of Pavan Group and, for operating EBITDA, before additional costs for filling machines)	2.2%	EUR 583.6 million	8.4%

*) At the time, the outlook was based on the assumption that there would be no further slowdown in global economic growth, no material exchange rate changes, no significant decline in demand in one of the relevant customer industries and/or no shifts in customer industries without taking into account the acquisitions made in 2017.

Macroeconomic environment

As a global technology company, GEA considers growth in gross domestic product (GDP) and hence the International Monetary Fund's (IMF) assessments in this regard to be key benchmarks for its own development. The forecasts ventured by the United Nations and the World Bank Group are other key indicators for this macroeconomic environment.

The IMF believes that global economic activity has continued to strengthen. According to its latest estimates, the global economy grew by 3.7 percent in 2017, 0.1 percentage points more than predicted in the autumn and as much as 0.5 percentage points more than in 2016. What is more, the economic experts believe that international trade has increased substantially in recent months. Buoyant investment activity (especially in the industrialized nations) and a rise in productive output in Asia also had a positive effect. The IMF upgraded its forecasts for the industrialized nations and the emerging markets, too. Thus, economic growth in 2017 for the industrialized nations was 2.3 percent and for the emerging markets 4.7 percent.

And in their most recent publications, both the United Nations (UN) and the World Bank Group reaffirmed their prediction of a global growth rate of around 3 percent for 2017. Although East and South Asia continue to be the most dynamic regions in the world, the United Nations believe that the industrialized nations are primarily accountable for the economic upswing. According to the UN, East and South Asia accounted for almost half of global growth, with China alone contributing around a third. The World Bank Group sees the global upturn as a result of the ongoing recovery of investments, production and trade. The UN reckons that the industrialized nations are set to grow by 2.2 percent in 2017, while the World Bank Group puts the figure at 2.3 percent; with regard to the emerging markets, the experts of both institutions agree that the growth rate will be 4.3 percent.

Significant changes

Acquisitions

On September 26, 2017, GEA acquired the Italian Pavan Group, a leading supplier of extrusion and milling technology for processing and packaging all kinds of fresh and dried pasta, pelleted snack products and breakfast cereals. With head offices in Galliera Veneta near Padua, the corporate group employees a staff of around 690 at several production sites in Italy and China. In the 2016 financial year, Pavan generated revenue of around EUR 155 million, with EBITDA of almost EUR 29 million. The acquisition was completed November 30, 2017 (see page 167 ff.).

And on November 14, 2017, GEA signed an agreement to take over Vipoll, a company that develops and engineers filling equipment for soft drinks, beer and dairy products. The acquisition will see GEA strengthen its market position as a full solution provider for the beverages industry and expand its portfolio of products for filling glass bottles, cans and PET bottles. Vipoll is based in Križevci pri Ljutomeru, Slovenia, and employs a staff of more than 100. In 2016, the company generated revenues of some EUR 20 million. The takeover was completed on January 3, 2018 (see page 224).

Management

On June 30, 2017, the Supervisory Board of GEA Group Aktiengesellschaft appointed Martine Snels to the GEA Executive Board. She has been in charge of GEA's regional and national organization since October 1, 2017. As such, GEA is now managed by a team of five Executive Board members (see page 20).

Share buyback program

In February 2017, the Executive Board of GEA with the approval of the Supervisory Board decided that treasury shares worth up to EUR 450 million would be repurchased on the stock exchange in the 12-month period starting March 2017 in order to retire them. By December 31, 2017, GEA had repurchased 11,468,732 shares with a total value of EUR 429.0 million. The program was concluded on February 6, 2018 (see page 224).

Course of business

The following explanation of GEA's course of business relates initially to its continuing operations, i.e. to its two operating Business Areas. The quarterly information contained in this management report is sourced from quarterly statements that were not reviewed by an auditor. All amounts have been rounded using standard rounding rules. Adding together individual amounts may therefore result in rounding differences in certain cases.

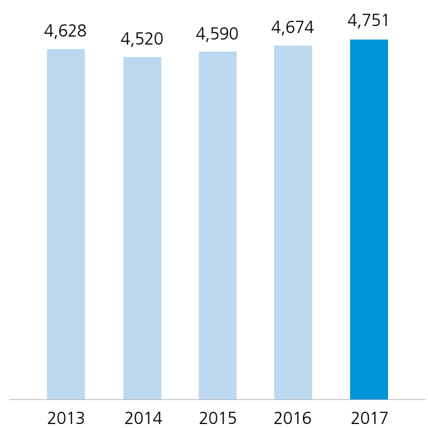
Order intake

The group's order intake (including acquisition) for the whole of 2017 amounted to EUR 4,750.8 million, 1.7 percent above the previous year's level and a new record for GEA – even without the order intake of the Pavan Group. As exchange rate fluctuations and acquisition effects canceled each other out (minus 0.7 and plus 0.7 percent respectively), adjusted growth for 2017 was also 1.7 percent. This increase resulted above all from order intake in the range up to EUR 5 million.

Order intake (EUR million)	2017	2016	Change in %	Adjusted growth in %
BA Equipment	2,491.5	2,346.8	6.2	6.7
BA Solutions	2,484.0	2,534.6	–2.0	–2.4
Total	**4,975.5**	**4,881.4**	**1.9**	**2.0**
Consolidation/others	–224.7	–207.8	–8.1	–
GEA	**4,750.8**	**4,673.6**	**1.7**	**1.7**

A marked reticent approach to investment was noted in the dairy processing customer industry and, to a lesser extent, in the beverages customer industry. This was more than compensated however by, notably, double-digit growth in dairy farming and growth in the food and pharma/chemical industries.

Order intake for the last 5 years
(EUR million)



The largest single orders with a volume in excess of EUR 30 million were closed by the Business Area Solutions in the form of a beverages project and a coffee project for customers in North America and Eastern Europe, the combined value thereof was more than EUR 70 million. In the previous year, GEA also posted two major orders with a total volume of almost EUR 120 million.

Order intake by applications GEA

	Change 2017 to 2016	Share of order intake
Dairy Farming	↑	14%
Dairy Processing	↓	18%
Food	↑	29%
Beverages	↘	10%
Food/Beverages	↗	**71%**
Pharma/Chemical	↑	15%
Other Industries	↘	14%
Others	↗	**29%**
GEA	↗	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Order backlog

Expressed in terms of the order intake for the fiscal year, the order backlog as of December 31, 2017 amounted to 5.9 months (previous year: 5.8 months). In line with the different types of business performed, the order backlog ranges from almost four months in the Business Area Equipment to around 8 months in the Business Area Solutions.

Order backlog (EUR million)	12/31/2017	12/31/2016	Change in %	Change (absolute)
BA Equipment	757.6	567.4	33.5	190.3
BA Solutions	1,654.9	1,742.5	–5.0	–87.6
Total	**2,412.6**	**2,309.9**	**4.4**	**102.7**
Consolidation/others	–61.9	–45.8	–35.0	–16.0
GEA	**2,350.7**	**2,264.0**	**3.8**	**86.6**

Revenue

In general, the same regional and sector-specific trends apply to revenue as to order intake, albeit with different time lags. However, revenue is less volatile than order intake.

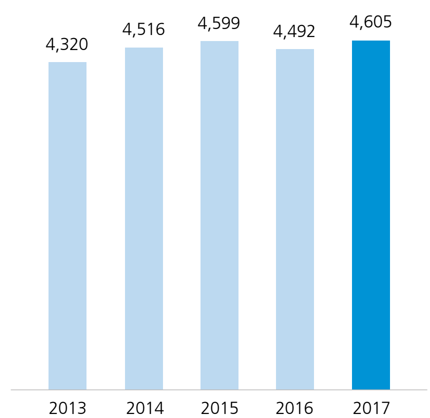
Revenue (EUR million)	2017	2016	Change in %	Adjusted growth in %
BA Equipment	2,371.0	2,262.2	4.8	4.9
BA Solutions	2,441.6	2,425.7	0.7	0.6
Total	**4,812.6**	**4,687.9**	**2.7**	**2.6**
Consolidation/others	–208.1	–196.0	–6.2	–
GEA	**4,604.5**	**4,491.9**	**2.5**	**2.5**

Adjusted for exchange rate fluctuations and acquisition effects (minus 0.6 and plus 0.7 percent respectively), revenue in 2017 was 2.5 percent above the figure for the previous year. At 30.9 percent, the share of revenue enjoyed by service business is on a par with the previous year. Adjusted growth in this business amounted to a gratifying 3.4 percent in the reporting period.

At 1.03, the book-to-bill ratio (the ratio of order intake to revenue) in 2017 was almost unchanged on the previous year's level of 1.04.

Revenue for the last 5 years

(EUR million)



Growth in revenue is mainly attributable to positive developments in the food, dairy farming, and dairy processing customer industries, with food recording even double-digit growth. In contrast, business volume declined in the other industries, as well as in the chemicals segment and the beverages customer industry.

Revenue by applications GEA

	Change 2017 to 2016	Share of revenue
Dairy Farming	↑	13%
Dairy Processing	↑	21%
Food	↑	28%
Beverages	↓	12%
Food/Beverages	↑	**73%**
Pharma/Chemical	↘	14%
Other Industries	↓	13%
Others	↓	**27%**
GEA	↗	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

While revenue fell in North and Central Europe in particular, the regions of Latin America, Western Europe, Middle East & Africa, and North America all posted robust organic growth. In Latin America, GEA even recorded double-digit growth, while organic revenue growth in Western Europe, Middle East & Africa was in the high, single-digit range.

Revenue by regions GEA

	Change 2017 to 2016	Share of revenue
Asia Pacific	↘	22%
DACH & Eastern Europe	↗	21%
Western Europe, Middle East & Africa	↑	19%
North and Central Europe	↓	13%
Latin America	↑	7%
North America	↑	18%
GEA	↗	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Business Area Equipment

On a constant exchange rate basis and adjusted for effects from the acquisition of the Pavan Group, revenue in the Business Area Equipment increased by 4.9 percent, a new record for revenue. The increase in revenue was primarily due to developments in the dairy processing, dairy farming and food customer industries.

Almost all the regions contributed to this positive showing, with the Business Area Equipment in Latin America recording double-digit growth, and North America and DACH & Eastern Europe posting high, single-digit organic growth rates. As before, the most important sales regions were DACH & Eastern Europe, along with North America and Asia Pacific.

Adjusted for exchange rates and acquisitions, the service business recorded growth of 5.6 percent in the reporting period, with its share of total revenue amounting to 39.0 percent (previous year: 39.1 percent).

Revenue by applications Business Area Equipment	Change 2017 to 2016	Share of revenue
Dairy Farming	↑	28%
Dairy Processing	↑	11%
Food	↑	31%
Beverages	↗	7%
Food/Beverages	↑	**76%**
Pharma/Chemical	↑	7%
Other Industries	↓	16%
Others	↓	**24%**
Business Area Equipment	↗	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Revenue by regions Business Area Equipment	Change 2017 to 2016	Share of revenue
Asia Pacific	↗	20%
DACH & Eastern Europe	↑	23%
Western Europe, Middle East & Africa	→	16%
North and Central Europe	↘	12%
Latin America	↑	7%
North America	↑	22%
Business Area Equipment	↗	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Business Area Solutions

Adjusted for exchange rate and acquisition effects, revenue in the Business Area Solutions was 0.6 percent above the value for the previous year. Although revenues in the pharma/chemical customer industry and in beverages fell, they rose significantly in food.

A decline in revenue was recorded chiefly in North and Central Europe. In contrast, the regions Western Europe, Middle East & Africa, and Latin America each posted highly gratifying organic growth of over 17 percent. The most important regions for this Business Area were Asia Pacific, along with Western Europe, Middle East & Africa, both contributing more than 20 percent to the overall figure for revenue.

Adjusted for exchange rates and acquisitions, the volume of service business was 2.0 percent above the level of the previous year, while its share of the Business Area's total revenue amounted to 22.4 percent (previous year: 22.3 percent).

Revenue by applications Business Area Solutions	Change 2017 to 2016	Share of revenue
Dairy Farming	–	0%
Dairy Processing	→	29%
Food	↑	25%
Beverages	↓	16%
Food/Beverages	↗	**70%**
Pharma/Chemical	↓	20%
Other Industries	↓	10%
Others	↓	**30%**
Business Area Solutions	→	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Revenue by regions Business Area Solutions	Change 2017 to 2016	Share of revenue
Asia Pacific	↘	25%
DACH & Eastern Europe	↘	19%
Western Europe, Middle East & Africa	↑	22%
North and Central Europe	↓	14%
Latin America	↑	7%
North America	→	14%
Business Area Solutions	→	**100%**

↑ > 5 percent ↗ 1 to 5 percent → 1 to –1 percent ↘ –1 to –5 percent ↓ < –5 percent

Results of operations, financial position and net assets

Results of operations

GEA is committed to its policy of consciously selecting orders on the basis of their price quality and contract terms. This is reflected in the multi-stage approval process for major customer projects.

In 2016, the definition of the concept of "operating result" as used by the management for controlling purposes was elaborated in the context of the guidelines on alternative performance measures published by the European Securities and Markets Authority (ESMA). Thus, as in previous years, the key indicators for the operating result were adjusted for items which, in the opinion of the management, do not reflect GEA's financial achievements in the period under review. This relates, on the one hand, to adjustments for purchase price allocation effects that were determined for all significant past acquisitions, and, on the other, to the adjustment of expenses for strategy projects (see page 219 f.). Accordingly, the 2017 figure for operating EBIT included adjustments totaling EUR 63.4 million, while the figure for operating EBITDA was adjusted to the tune of EUR 62.9 million in total.

At EUR 563.5 million, operating EBITDA was slightly below the prior-year figure. This corresponds to a margin of 12.2 percent. The result for 2017 includes additional costs for filling machines of EUR 19.7 million incurred by the Business Area Solutions. Without these additional costs, the operating EBITDA margin would have amounted to 12.7 percent.

Business Area Equipment

In fiscal year 2017, the Business Area Equipment again managed to better the good prior-year figure for operating EBITDA, establishing a new record of EUR 389.3 million. This improvement came on the back of increasing revenues. The operating EBITDA margin fell by almost 55 basis points to 16.4 percent. Margin growth was hampered, in particular, by the loss of a revenue item from the termination of a leasing contract that was included in the prior-year figure, as well as by adverse currency effects.

Business Area Solutions

On account of the additional costs for filling machines, a rise in administrative expenses and negative currency effects, the Business Area Solutions posted a decline in operating EBITDA of EUR 22.2 million compared with the previous year. Accordingly, the operating EBITDA margin fell by around 95 basis points. Without the additional costs for filling machines, the operating EBITDA margin would be 7.4 percent. It is assumed that there will be no further negative impacts from filling equipment in fiscal year 2018.

Other

The improvement in the figure carried under Consolidation/other is primarily due to income of EUR 14.8 million from the sale of superfluous real estate, and to lower provisions for bonus payments.

The following table shows operating EBITDA and the corresponding operating EBITDA margin per business area:

Operating EBITDA/operating EBITDA margin* (EUR million)	2017	2016	Change in %
BA Equipment	389.3	383.5	1.5
as % of revenue	16.4	17.0	–
BA Solutions	161.3	183.5	–12.1
as % of revenue	6.6	7.6	–
Total	**550.6**	**567.0**	**–2.9**
as % of revenue	**11.4**	**12.1**	**–**
Consolidation/others	13.0	–0.7	–
GEA	**563.5**	**566.3**	**–0.5**
as % of revenue	**12.2**	**12.6**	**–**

*) Before effects of purchase price allocations and adjustments (see page 219 f.)

The following table shows the reconciliation of EBITDA before purchase price allocation and adjustments (operating EBITDA) through EBITDA and EBIT to EBIT before purchase price allocation and adjustments (operating EBIT):

Reconciliation of operating EBITDA to operating EBIT (EUR million)	2017	2016	Change in %
Operating EBITDA*	**563.5**	**566.3**	**–0.5**
Realization of step-up amounts on inventories	–1.8	–0.6	–
Adjustments	–62.9	–65.1	–
EBITDA	**498.8**	**500.6**	**–0.4**
Depreciation of impairment losses on property, plant, and equipment, and investment property, and amortization of and impairment losses on intangible assets and goodwill, as reported in the statement of changes in non-current assets	–117.9	–113.4	–
Other impairment losses and reversals of impairment losses	–	–0.1	–
EBIT	**380.9**	**387.0**	**–1.6**
Depreciation and amortization on capitalization of purchase price allocation	30.8	33.3	–
Impairment losses and reversals on capitalization of purchase price allocation	0.8	–4.3	–
Realization of step-up amounts on inventories	1.8	0.6	–
Adjustments	63.4	68.3	–
Operating EBIT*	**477.8**	**485.0**	**–1.5**

*) Before effects of purchase price allocations and adjustments (see page 219 f.)

The following table shows operating EBIT and the corresponding operating EBIT margin per business area:

Operating EBIT/operating EBIT margin* (EUR million)	2017	2016	Change in %
BA Equipment	330.8	326.0	1.5
as % of revenue	14.0	14.4	–
BA Solutions	141.3	164.3	–14.0
as % of revenue	5.8	6.8	–
Total	**472.1**	**490.3**	**–3.7**
as % of revenue	**9.8**	**10.5**	**–**
Consolidation/others	5.7	–5.3	–
GEA	**477.8**	**485.0**	**–1.5**
as % of revenue	**10.4**	**10.8**	**–**

*) Before effects of purchase price allocations and adjustments (see page 219 f.)

The following table shows the key indicators affecting GEA's results of operations:

Key figures: Results of operations (EUR million)	2017	2016	Change in %
Revenue	4,604.5	4,491.9	2.5
Operating EBITDA*	563.5	566.3	–0.5
EBITDA	498.8	500.6	–0.4
Operating EBIT*	477.8	485.0	–1.5
EBIT	380.9	387.0	–1.6
Interest	22.2	36.8	–39.6
EBT	358.7	350.2	2.4
Income taxes	130.6	81.6	60.0
Profit after tax from continuing operations	228.1	268.6	–15.1
Profit/loss after tax from discontinued operations	15.2	16.0	–4.6
Profit for the period	243.3	284.6	–14.5

*) Before effects of purchase price allocations and adjustments (see page 219 f.)

Net interest income rose by EUR 14.6 million in 2017 compared with the previous year. This was primarily due to lower bank interest payments, as GEA Group Aktiengesellschaft managed to pay off its long-term loans in the year under review. Repayment of both the loan from the European Investment Bank and the borrower's note loan were pivotal in helping to lower bank interest payments in the reporting year. Furthermore, we succeeded in reducing interest expenses from discount unwinding on pension provisions.

Mainly as a result of the improvement in net interest income, EBT in full-year 2017 amounted to EUR 358.7 million, i.e. EUR 8.4 million above the same figure for the previous year. At 7.8 percent, the EBT margin was on a par with the previous year.

Income on discontinued operations amounting to EUR 15.2 million was primarily due to mitigated or eliminated risks and liabilities from the sale of GEA's Heat Exchangers Segment. This was offset by negative interest effects from the measurement of non-current liabilities relating to former mining activities. In the previous year too, income from discontinued operations was based on a new assessment of the risk arising from liabilities from the sale of GEA's Heat Exchangers Segment and the former chemicals division. Eliminated risks and a settlement reached with Lentjes were other positive contributions to earnings in 2016.

The income tax expense of EUR 130.6 million in fiscal year 2017 (previous year: EUR 81.6 million) comprised current tax expenses of EUR 64.3 million (previous year: EUR 57.8 million) and deferred taxes of EUR 66.3 million (previous year: EUR 23.8 million). The tax rate amounted to 36.4 percent in the reporting year (previous year: 23.3 percent). The marked rise in the tax rate was mainly due to the remeasurement of deferred taxes necessary following the cut in the US corporate income tax rate from 35 percent to 21 percent in the context of the US Tax Cuts and Jobs Act. This resulted in tax expenditure of EUR 44.7 million from the remeasurement of deferred tax assets and liabilities in connection with GEA's US subsidiaries.

Consolidated profit for the year amounted to EUR 243.3 million (previous year: EUR 284.6 million), almost all thereof was again attributable to GEA Group Aktiengesellschaft shareholders in 2017. Due to the share buyback program launched in March 2017, the average number of shares in circulation as of December 31, 2017 fell to 186,337,459 (previous year: 192,495,476). As a result, earnings per share amounted to EUR 1.31 compared with EUR 1.48 in the previous year.

In addition to holding company costs in the narrower sense, the results of operations of GEA Group Aktiengesellschaft are primarily driven by net investment income and net interest income. Further details are presented in the section entitled "Net assets, financial position, and results of operations of GEA Group Aktiengesellschaft" (see page 50 ff.).

The Executive Board and Supervisory Board propose to increase the dividend from EUR 0.80 to EUR 0.85 per share, thus maintaining a constant dividend volume of EUR 153.4 million compared with the prior-year payout of EUR 152.8 million. Due to the decline in the number of dividend-bearing shares in the wake of the share buyback program, the dividend volume was only slightly above the level of the previous year.

Financial position

GEA remains in a very strong financial position. However, liquidity management and centralized financial management remain of key significance due, among other factors, to the volatile market environment.

GEA's cash credit lines and their utilization were as follows at the reporting date:

GEA cash credit lines incl. discontinued operations (EUR million)	Maturity	12/31/2017 approved	12/31/2017 utilized
Bilateral credit lines including accured interests	until further notice	299	245
Syndicated credit line ("Club Deal")	August 2022	650	–
Total		**949**	**245**

The group's financial management encompasses liquidity management, group financing, and the management of interest rate and currency translation risks. As the group management company, GEA Group Aktiengesellschaft is responsible for GEA's central financial management, which aims to reduce financing costs as far as possible, to optimize interest rates for financial investments, to minimize counterparty credit risk, to leverage economies of scale, to hedge interest rate and exchange rate risk exposures as effectively as possible, and to ensure that loan covenants are complied with. The goal of GEA's financing strategy is not only to be able to meet its payment obligations whenever they fall due, but also to ensure that sufficient cash reserves are always available in the form of credit lines, in addition to maintaining a strategic cash position.

Cash flow from operating activities is the most important source of liquidity. Intragroup cash pooling aims to limit external cash investments and borrowings to as low a level as possible. To achieve this, GEA has established cash pooling groups in 17 countries that automatically balance the accounts of the participating group companies every day by crediting or debiting a target account at GEA Group Aktiengesellschaft. Any additional liquidity requirements are generally borrowed by group management, which also invests surplus liquidity. In a number of cases, however, liquidity peaks in individual countries cannot be reduced on a cross-border basis due to legal or tax-related reasons.

On December 31, 2017, net liquidity including discontinued operations amounted to EUR 5.6 million, this after a figure of EUR 782.6 million at the end of the previous year. This contraction in liquidity is due in particular to spending on company acquisitions, in addition to expenses of EUR 429.0 million arising from the share buyback program in operation since March 2017.

Overview of net liquidity incl. discontinued operations (EUR million)	12/31/2017	12/31/2016
Cash and cash equivalents	250.5	929.1
Liabilities to banks	244.9	146.5
Net liquidity (+)/Net debt (–)	**5.6**	**782.6**
Gearing (%)	–0.2	–26.1

Cash and cash equivalents fell to EUR 250.5 million as of December 31, 2017, compared with EUR 929.1 million as of the end of the previous year. While the loan from the European Investment Bank and the borrower's note loan were both repaid on time in July and September 2017 respectively, GEA also elected to make greater use of its short-term bilateral credit lines. As of December 31, 2017, total liabilities to banks amounted to EUR 244.9 million (the figure for the previous year included the borrower's note loan of EUR 146.5 million).

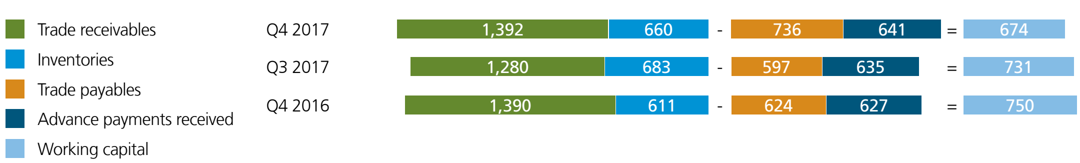
Detailed information on the maturity, currency, and interest rate structure of debt financing can be found in the notes to the consolidated financial statements (see pages 160 ff. and 197 ff.).

Guarantee lines – which are mainly for contract performance, advance payments, and warranties – of EUR 1,361.2 million (December 31, 2016: EUR 1,265.5 million) were available to GEA as of the reporting date, thereof EUR 524.2 million (December 31, 2016: EUR 475.2 million) have been utilized.

In addition to the assets recognized in its consolidated balance sheet, GEA also uses non-owned assets. These are mainly assets leased or rented under operating leases. GEA uses factoring programs as off-balance-sheet financing instruments. The obligations resulting from rental and leasing obligations are explained in section 8.2 of the notes to the consolidated financial statements (see page 215 f.).

Change in working capital (continued operations)

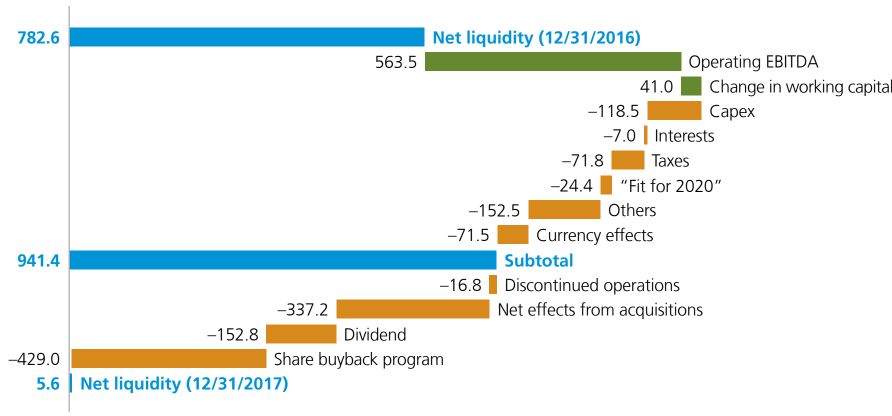
(EUR million)



Working capital from continuing operations was cut by EUR 76.2 million compared with the previous year, and this was largely due to the Business Area Equipment. Working capital contracted as a result mainly of a rise in trade payables and advance payments received, this contrasting with a build-up of inventories from the acquisition of the Pavan Group. The ratio of average working capital to revenue increased from 14.5 percent to 15.9 percent.

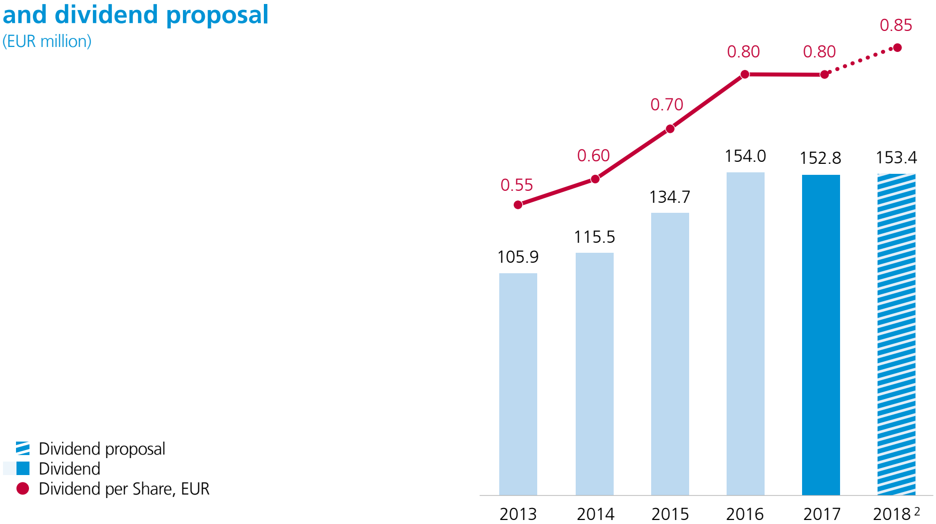
The key factors responsible for the change in net liquidity are shown in the following chart:

Change in net liquidity
(EUR million)



GEA Group Aktiengesellschaft paid an unchanged dividend of EUR 0.80 per share for fiscal year 2017. GEA began purchasing treasury shares in March 2017 as part of its share buyback program. As a result, the dividend payment fell slightly from EUR 154.0 million in the previous year to EUR 152.8 million in 2017.

Dividend payments[1] for the last 5 years and dividend proposal
(EUR million)



1) Dividend payments for the previous fiscal year, respectively
2) Based on the divided proposal and the shares issued as of December 31, 2017
(less the company's own shares acquired under the share buyback scheme that do not carry the right to dividends)

The consolidated cash flow statement can be summarized as follows:

Overview of cash flow statement (EUR million)	2017	2016	Change absolute
Cash flow from operating activities	269.5	161.2	108.4
Cash flow from investing activities	–319.5	56.3	–375.8
Free cash flow	**–50.0**	**217.5**	**–267.4**
Cash flow from financing activities	–598.2	–459.8	–138.4
Net cash flow from disposal group GEA Heat Exchangers	–11.2	–0.7	–10.5
Net cash flow other discontinued operations	–5.6	–3.7	–1.9
Change in unrestricted cash and cash equivalents	–678.5	–244.8	–433.7

Cash flow from operating activities attributable to continued operations amounted to EUR 269.5 million in the year under review, up EUR 108.4 million on the previous year. This marked improvement is attributable largely to liquidity inflow from the decrease in working capital, this contrasting with the previous year, where a rise in working capital led to a substantial outflow of liquidity. By contrast, GEA posted a decline in other operating assets and liabilities in the year under review.

Cash flow from investing activities attributable to continued operations amounted to EUR –319.5 million in the reporting period (previous year: plus EUR 56.3 million). The figure includes outflows in the reporting year for company acquisitions in the reporting year of EUR 234.4 million, and EUR 118.5 million for capital expenditure on property, plant, and equipment, and intangible assets (previous year: EUR 107.0 million and EUR 91.0 million respectively). In the previous year, this indicator was enhanced by inflows from maturing term deposits (EUR 200.0 million) and by the sale of an EONIA bond (EUR 37.0 million).

The dividend payout (EUR 152.8 million) and, in particular, the repurchase of treasury shares (EUR 429.0 million) were both reflected in the figure for cash flow from financing activities attributable to continued operations. Also reflected in this indicator were the repayment of the loan from the European Investment Bank, of the borrower's note loan and further finance loans, although this was offset by GEA's decision to make greater use of a similar volume of short-term bilateral credit lines. In the previous year, this item had also included the dividend payment and the timely repayment of the non-callable bond (EUR 274.7 million).

Cash flow from discontinued operations amounted to EUR –16.8 million in the reporting period (previous year: EUR –4.4 million).

Cash flow drivers

GEA's overriding goal is to sustainably increase its enterprise value by growing profitably. The cash flow driver margin is a key group performance indicator that is used to create the necessary financial scope for this and to focus the group even more closely on cash flow generation. It is also incorporated into the bonus system.

The operating cash flow driver margin is a simplified cash flow indicator (EBITDA minus capital expenditures for property, plant, and equipment, and intangible assets (capex) and minus the change in average working capital) and is expressed as a ratio to revenue. This indicator does not include investments in strategic projects.

Operating cash flow driver/operating cash flow driver margin (EUR million)	12/31/2017	12/31/2016	Change in %
Operating EBITDA (last 12 months)	563.5	566.3	–0.5
Capital expenditure on property, plant and equipment (last 12 months)	–118.5	–91.0	–30.3
Adjustment of capital expenditure in strategic projects	27.9	–	–
Change in working capital (average of the last 12 months)	–84.4	–48.2	–75.1
Operating cash flow driver (operating EBITDA – capex –/+change in working capital)	**388.5**	**427.0**	**–9.0**
as % of revenue (last 12 months)	**8.4**	**9.5**	**–**

The greater rise in average working capital of EUR 36.2 by comparison with 2016 was the principal cause of the smaller operating cash flow driver margin. Without the additional costs for filling machines, the operating cash flow driver margin would be 8.9 percent.

Net assets

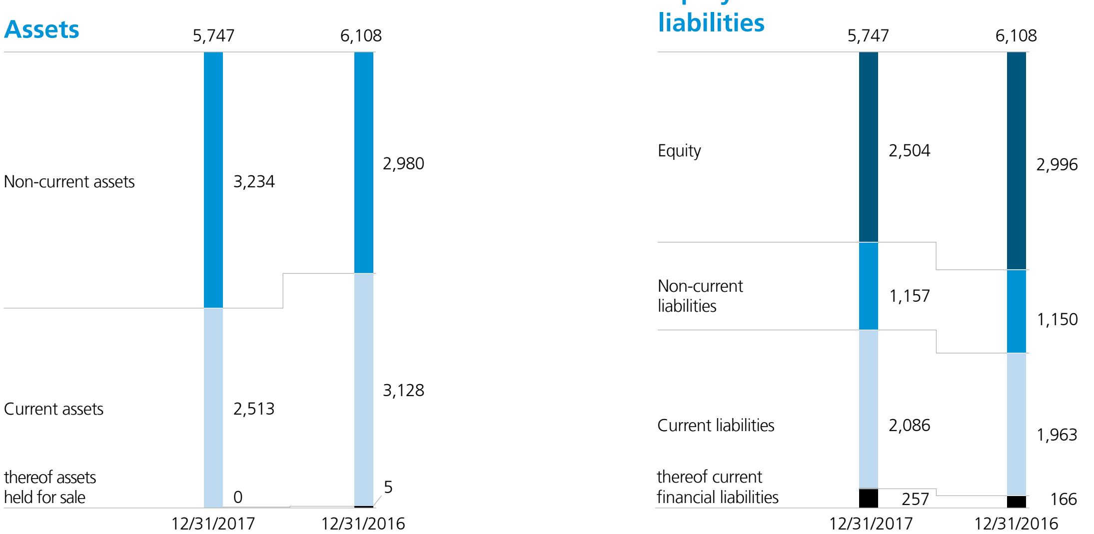
Condensed balance sheet (EUR million)	12/31/2017	as % of total assets	12/31/2016	as % of total assets	Change in %
Assets					
Non-current assets	3,233.9	56.3	2,979.8	48.8	8.5
thereof goodwill	1,725.8	30.0	1,505.6	24.7	14.6
thereof deferred taxes	411.3	7.2	502.1	8.2	–18.1
Current assets	2,513.5	43.7	3,128.1	51.2	–19.6
thereof cash and cash equivalents	250.5	4.4	929.1	15.2	–73.0
thereof assets held for sale	–	–	5.4	0.1	–
Total assets	**5,747.4**	**100.0**	**6,107.9**	**100.0**	**–5.9**
Equity and liabilities					
Equity	2,503.6	43.6	2,995.6	49.0	–16.4
Non-current liabilities	1,157.5	20.1	1,149.8	18.8	0.7
thereof financial liabilities	6.0	0.1	10.2	0.2	–41.3
thereof deferred taxes	171.2	3.0	144.9	2.4	18.1
Current liabilities	2,086.3	36.3	1,962.6	32.1	6.3
thereof financial liabilities	256.8	4.5	165.7	2.7	55.0
Total equity and liabilities	**5,747.4**	**100.0**	**6,107.9**	**100.0**	**–5.9**

The marked fall in total assets of almost 6 percent was due in particular to the decrease in cash funds as a result of the share buyback program and extra outlay for corporate acquisitions. Acquisition of the Pavan Group gave rise to an increase in intangible assets. The ratio of non-current to current assets shifted markedly in favor of non-current assets.

Equity decreased significantly by EUR 492.0 million. Although the consolidated profit of EUR 243.3 million served to bolster equity, this item was reduced by the dividend payout (EUR 152.8 million), the repurchase of treasury shares (EUR 431.2 million) and currency translation effects (EUR 151.2 million). The equity ratio at the end of the year was 43.6 percent after 49.0 percent a year earlier.

In respect of non-current liabilities, there was a notable increase in deferred taxes. Repayment of both the loan from the European Investment Bank and the borrower's note loan helped to reduce current liabilities significantly, while greater use of bilateral credit lines and a rise in trade payables served to lengthen the balance sheet.

Comparison of net assets (2017 vs. 2016)
(EUR million)



Performance of discontinued operations

Other companies

Once again, other companies classified as discontinued operations did not have a material impact overall on consolidated profit in fiscal year 2017.

In the context of the former mining activities, provisions had to be increased as a result of discount rate effects during the measurement of non-current liabilities. However, certain provisions were reduced as risks and liabilities from the sale of GEA's Heat Exchangers Segment were either mitigated or eliminated altogether.

Employees

Workforce numbers increased by 927 compared with December 31, 2016. Of these new employees, 691 arrived in the wake of the acquisition of the Pavan Group, while 24 were the result of other changes in the basis of consolidation. Adjusted for these effects, the number of employees in the workforce increased by 212, thereof 93 were in Germany.

Employees* by region	12/31/2017	in %	12/31/2016	in %
DACH & Eastern Europe	6,398	35.8	6,301	37.2
Western Europe, Middle East & Africa	3,401	19.0	2,727	16.1
North and Central Europe	2,927	16.4	2,924	17.3
Asia Pacific	2,904	16.3	2,867	16.9
North America	1,763	9.9	1,709	10.1
Latin America	471	2.6	409	2.4
Total	**17,863**	**100.0**	**16,937**	**100.0**

	12/31/2017					
Employees*	Employees total		thereof permanent		thereof temporary	
by employment contract and gender	Number	in %	Number	in %	Number	in %
Men	14,933	83.6	14,059	94.1	874	5.9
Women	2,930	16.4	2,699	92.1	231	7.9
Total	**17,863**	**100.0**	**16,758**	**93.8**	**1,106**	**6.2**

*) Full-time equivalents (FTE) excluding vocational trainees and inactive employment contracts

	12/31/2017					
Employees*	Employees total		thereof permanent		thereof temporary	
by employment contract and region	Number	in %	Number	in %	Number	in %
DACH & Eastern Europe	6,398	35.8	6,163	96.3	235	3.7
Western Europe, Middle East & Africa	3,401	19.0	3,383	99.5	18	0.5
North and Central Europe	2,927	16.4	2,853	97.5	74	2.5
Asia Pacific	2,904	16.3	2,201	75.8	702	24.2
North America	1,763	9.9	1,763	100.0	0	0.0
Latin America	471	2.6	471	100.0	0	0.0
Total	**17,863**	**100.0**	**16,758**	**93.8**	**1,106**	**6.2**

*) Full-time equivalents (FTE) excluding vocational trainees and inactive employment contracts

	12/31/2017					
Employees*	Employees total		thereof men		thereof women	
by employment type and gender	Number	in %	Number	in %	Number	in %
Full-time	17,189	96.2	14,688	85.5	2,501	14.5
Part-time	675	3.8	245	36.4	429	63.6
Total	**17,863**	**100.0**	**14,933**	**83.6**	**2,930**	**16.4**

*) Full-time equivalents (FTE) excluding vocational trainees and inactive employment contracts

Total workforce*	12/31/2017	in %
GEA employees	17,863	89.0
Contingent workers	2,208	11.0
thereof temporary staff/agency workers	2,156	97.7
thereof self-employed contractors	52	2.3
Total	**20,071**	**100.0**

*) Full-time equivalents (FTE) excluding vocational trainees and inactive employment contracts

In-depth information on staff issues such as learning and training, management development processes, and diversity can be found in the Sustainability Report (see page 90 ff.).

Net Assets, Financial Position, and Results of Operations of GEA Group Aktiengesellschaft

In addition to the reporting by the group, the following section describes the performance of GEA Group Aktiengesellschaft (group management). The annual financial statements are prepared in accordance with the Handelsgesetzbuch (HGB – German Commercial Code) and the Aktiengesetz (AktG – German Stock Corporation Act). They are presented here in condensed form.

Net assets of GEA Group Aktiengesellschaft (HGB) (EUR million)	12/31/2017	as % of total assets	12/31/2016	as % of total assets
Assets				
Intangible fixed assets	8.4	0.2	5.3	0.1
Tangible fixed assets	2.1	–	1.7	–
Long-term financial assets	2,337.2	57.7	2,394.6	57.4
Fixed assets	**2,347.7**	**57.9**	**2,401.6**	**57.5**
Receivables and other assets	1,652.4	40.8	1,122.8	26.9
thereof Receivables from affiliated companies	1,636.2	40.4	1,102.1	26.4
thereof Other assets	16.2	0.4	20.7	0.5
Cash	47.2	1.2	648.2	15.5
Current assets	**1,699.6**	**42.0**	**1,771.0**	**42.4**
Prepaid expenses	**2.4**	**0.1**	**2.6**	**0.1**
Total	**4,049.7**	**100.0**	**4,175.2**	**100.0**
Equity and liabilities				
Subscribed capital	520.4	12.9	520.4	12.5
Own shares	–30.9	–0.8	–	–
Capital reserves	250.8	6.2	250.8	6.0
Revenue reserves	523.1	12.9	836.7	20.0
Net retained profits	154.5	3.8	155.1	3.7
Equity	**1,417.9**	**35.0**	**1,763.0**	**42.2**
Provisions	**236.3**	**5.8**	**284.5**	**6.8**
Liabilities to banks	225.0	5.6	140.0	3.4
Trade payables	3.8	0.1	0.3	–
Liabilities to affiliated companies	2,161.0	53.4	1,981.5	47.5
Other liabilities	5.7	0.1	5.8	0.1
Liabilities	**2,395.5**	**59.2**	**2,127.6**	**51.0**
Deferred income	**–**	**–**	**0.1**	**–**
Total	**4,049.7**	**100.0**	**4,175.2**	**100.0**

Total assets decreased by EUR 125.5 million compared with the prior-year period. The principal reason for this was a EUR 601.0 million reduction in cash funds, mainly as a result of the purchase of treasury shares worth EUR 427.5 million in the context of the share buyback initiative. This was countered by receivables from affiliated companies which grew as a result of the need to finance acquisitions. Furthermore, Group financing resulted in an increase in both liabilities to banks and liabilities to affiliated companies of EUR 85.0 million and EUR 179.5 million respectively.

Net income for the fiscal year of EUR 235.2 million less the dividend of EUR 152.8 million paid out in fiscal year 2017, together with the purchase of treasury shares valued at EUR 427.5 million (thereof EUR 30.9 million were included in subscribed capital) produced a EUR 345.1 million fall in equity, down to EUR 1,417.9 million. The equity ratio fell by 7.2 percentage points to 35.0 percent.

With regard to further disclosures concerning treasury shares pursuant to section 160(1) no. 2 AktG in conjunction with section 315(2) sentence 2 HGB, we refer to the chapter on equity in the notes to the annual financial statements (HGB) for GEA Group Aktiengesellschaft.

There were only minor changes overall to the rest of the balance sheet items compared with the previous year.

Income statement of GEA Group Aktiengesellschaft (HGB) (EUR million)	12/31/2017	in %	12/31/2016	in %
Revenue	130.3	55.4	136.4	52.5
Other operating income	223.8	95.2	157.9	60.8
Cost for purchased services	–88.3	–37.5	–91.4	–35.2
Personnel expenses	–37.6	–16.0	–40.1	–15.4
Amortization amd writedowns of intangible fixed assets and depreciation and writedowns of tangible fixed assets	–2.2	–0.9	–1.4	–0.5
Other operating expenses	–245.7	–104.5	–183.7	–70.8
Investment income	274.3	116.6	291.4	112.2
Net interest income	–2.0	–0.9	–5.8	–2.2
Taxes on income	–17.9	–7.6	–3.7	–1.4
Net income after income tax	**234.7**	**99.8**	**259.6**	**100.0**
Other tax expenses	0.5	0.2	0.0	–
Net income for the fiscal year	**235.2**	**100.0**	**259.6**	**100.0**
Retained profits brought forward	2.3	1.0	0.5	0.2
Appropriation to other revenue reserves	–83.0	–35.3	–105.0	–40.4
Net retained profits	**154.5**	**65.7**	**155.1**	**59.7**

The revenues of GEA Group Aktiengesellschaft essentially comprise charges of EUR 116.2 million allocated to subsidiaries in the course of the 2017 fiscal year (previous year: charges of EUR 109.8 million allocated to subsidiaries for services provided by Global Corporate Center and Shared Service Center functions), the final account for these services for the 2016 fiscal year in the amount of EUR –2.3 million, and income from the trademark fee of EUR 16.2 million (previous year: EUR 24.1 million). To this end, some services rendered by group companies are initially charged to GEA Group Aktiengesellschaft before being passed on to subsidiaries in the form of intragroup allocations.

Currency translation gains and losses from own hedges and hedges for affiliated companies are reported gross within other operating income and expenses, as in the previous year. Gains of EUR 161.5 million (previous year: EUR 131.0 million) and losses of EUR 158.4 million (previous year: EUR 122.5 million) resulted in net exchange rate gains of EUR 3.1 million (previous year: EUR 8.5 million).

In addition to exchange rate gains, other operating income primarily includes income from the reversal of provisions.

Outlay for purchased services mainly comprises those services provided by other group companies (EUR 69.2 million) or by external service providers (EUR 18.9 million) for carrying out Global Corporate Center and Shared Service Center functions.

In addition to currency translation losses, other operating expenses mainly comprise outlay for expert opinions and consulting, IT expenditure, and third-party services.

Investment income comprises income and expenses from profit and loss transfer agreements. Income from profit transfer agreements mainly comprises profits transferred by GEA Mechanical Equipment GmbH, GEA Group Holding GmbH, GEA Refrigeration Technologies GmbH, GEA Refrigeration Germany GmbH, and GEA Brewery Systems GmbH. Expenses for loss absorption mainly comprise assumed losses from ZiAG Plant Engineering GmbH, LL Plant Engineering GmbH, and GEA IT Services GmbH.

During the fiscal year, GEA Group Aktiengesellschaft repaid long-term loans, while interest-rate and currency hedges were terminated as planned. This was the predominant factor in the decline of EUR 6.7 million in bank interest payments, which was in turn the main reason for the improvement of EUR 3.8 million in net interest income to EUR –2.0 million (previous year: EUR –5.8 million).

Cash flow of GEA Group Aktiengesellschaft (HGB) (EUR million)	2017	2016
Cash flow from operating activities	–92.3	–57.5
Cash flow from investing activities	–13.4	33.9
Cash flow from financing activities	–495.3	–428.7
Liquid funds	47.2	648.2

GEA Group Aktiengesellschaft's business development is subject, in particular, to the same risks and opportunities as the GEA group. These are presented in the report on risks and opportunities. Additionally, the relationships with subsidiaries may result in negative effects due to statutory and contractual contingent liabilities (in particular finance).

The most important key performance indicator for GEA Group Aktiengesellschaft is net income (HGB) for the fiscal year, which, together with the available provisions, allows it to pay out a dividend of between 40 and 50 percent of the (IFRS) consolidated profit.

Due to its overlap with the group as a whole, further details on the future business development of GEA Group Aktiengesellschaft can be found in the chapter entitled "Business outlook" (see page 120 f.).

Proposal on the appropriation of profits

GEA Group Aktiengesellschaft's annual financial statements in accordance with the HGB report net income for the fiscal year of EUR 235.2 million. In 2017, the Executive Board and Supervisory Board transferred EUR 83.0 million to the other revenue reserves in accordance with section 58(2) of the AktG. The Executive Board and Supervisory Board will propose to the Annual General Meeting to pay a dividend of EUR 0.85 per dividend-bearing share to shareholders from net retained profits of EUR 154.5 million for a total of 180,492,172 dividend-bearing shares (previous year: 192,495,476 shares), and to carry forward the remaining net retained profits of EUR 1.1 million to new account.

The dividend will be paid from the contribution account for tax purposes (section 27 of the Körperschaftsteuergesetz (KStG – German Corporate Income Tax Act)) and therefore without deduction of investment income tax and the solidarity surcharge. In the case of shareholders in Germany, the dividend is not subject to current taxation in the year of payment. The general opinion of the German tax authorities (see also the Federal Ministry of Finance (BMF) circular dated January 18, 2016, para. 92) is that the payment of dividends from the contribution account for tax purposes constitutes a repayment of shareholder contributions, which results in a retrospective reduction in the cost of the shares. This can lead to the imposition of higher capital gains taxes if the shares are sold at a later date.

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Explanatory information in accordance with sections 289(4), 289a(1), 315(4) and 315a(1) of the HGB

Composition of the subscribed capital and restrictions on rights

As of December 31, 2017, the subscribed capital of GEA Group Aktiengesellschaft was EUR 520,375,765.57 and was composed of 192,495,476 no-par value bearer shares. All the shares are ordinary shares. The rights and obligations arising from these shares are defined in the German Stock Corporation Act (AktG). This can result in restrictions affecting voting rights. For example, section 71b AktG states that GEA Group Aktiengesellschaft is not entitled to voting rights from its own shares (treasury stock).

The Executive Board is not aware of any contractual restrictions affecting voting rights. Participation in the GEA Performance Share Plan requires a personal investment by participants in GEA shares, which are subject to a holding period of three years. Participants who infringe the holding period lose their right to participate in the plan.

Interests in the share capital exceeding 10 percent of the voting rights

There were no interests in the company exceeding 10 percent of the voting rights as of December 31, 2017.

Provisions governing the appointment and dismissal of members of the Executive Board and amendments to the Articles of Association

The members of the Executive Board are appointed and dismissed in accordance with sections 84 and 85 of the AktG in conjunction with section 31 of the Mitbestimmungsgesetz (MitbestG – German Codetermination Act).

Under Article 20(1) of GEA Group Aktiengesellschaft's Articles of Association, amendments to the Articles of Association may – where legally permissible – be adopted by a simple majority of the share capital represented at the vote. Under Article 21 of the Articles of Association, the Supervisory Board may resolve amendments and additions to the Articles of Association that only affect their wording. In other respects, section 179 of the AktG applies to amendments to the Articles of Association.

Powers of the Executive Board to issue and repurchase shares

In accordance with Article 4(3) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 77 million by issuing new no-par value shares against cash contributions until April 19, 2022 (Authorized Capital I) and, in accordance with Article 5(4) of said Articles, to define a starting date for profit rights in this case that differs from the date stipulated by law. The authorization may be exercised fully or in partial amounts, on one or several occasions.

Shareholders are generally entitled to subscribe to the new shares. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). The Executive Board is authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) insofar as this is necessary to eliminate fractional amounts, and/or (ii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations.

In accordance with Article 4(4) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital, wholly or in part, by up to EUR 130 million by issuing new no-par value shares against cash and/or non-cash contributions on one or more occasions until April 15, 2020 (Authorized Capital II) and, in accordance with Article 5(4) of said Articles, to define a starting date for profit rights in this case that differs from the date stipulated by law. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). Furthermore, the Executive Board is authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights in the case of capital increases against noncash contributions for the purpose of business combinations or the acquisition of companies, parts of companies, or equity interests in companies or other assets. The Executive Board is further authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) in order to implement a so-called scrip dividend where the shareholders of GEA Group Aktiengesellschaft are given the option of contributing their dividend entitlement either wholly or partially to the company as a noncash contribution in return for the granting of new shares, (ii) insofar as it is necessary to eliminate fractional amounts, and (iii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations. The total proportionate amount of GEA Group Aktiengesellschaft's share capital allocable to shares issued against cash and/or noncash contributions under disapplication of shareholders' preemptive rights must not exceed 10 percent of the company's share capital at the time when the resolution was adopted by the Annual General Meeting. Finally, the Executive Board is authorized, with the approval of the Supervisory Board, to stipulate the further details of the capital increases from Authorized Capital II and the terms and conditions of the share issue.

In accordance with Article 4(5) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 52 million by issuing new no-par value shares against cash contributions on one or more occasions until April 15, 2020 (Authorized Capital III) and, in accordance with Article 5(4) of the Articles of Association, to define a starting date for profit rights in this case that differs from the date stipulated by law. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). The Executive Board is authorized, with the approval of the Supervisory Board, to exclude shareholders' subscription rights if the issue price of the new shares is not significantly lower than the stock exchange price for company shares of the same kind at the time of setting the issue price. In line with the modalities of this disapplication of preemptive rights, the shares issued in accordance with section 203(1) and section 186(3) sentence 4 AktG may not exceed 10 percent of the share capital of the company either at the time at which this authorization takes effect or at the time at which it is exercised (upper limit). The upper limit of 10% shall be reduced by the proportionate amount of the share capital allocable to shares (i) issued during the term of the Authorized Capital III under disapplication of preemptive rights in accordance with section 71(1) no. 8 sentence 5, and section 186(3) sentence 4 AktG or (ii) issued to service convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company, as long as the convertible or option bonds have been issued during the term of the Authorized Capital III under disapplication of preemptive rights in accordance with section 186(3) sentence 4 AktG. The Executive Board is further authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) insofar as it is necessary to eliminate fractional amounts, and (ii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations. Finally, the Executive Board is authorized, with the approval of the Supervisory Board, to stipulate the further details of the capital increases from Authorized Capital II and the terms and conditions of the share issue.

Under a resolution adopted by the Annual General Meeting on April 16, 2015, the share capital was contingently increased by up to EUR 51,903,633.82, comprising up to 19,200,000 bearer shares (Article 4(6) of the Articles of Association, Contingent Capital 2015). The contingent capital increase will be implemented only to the extent that the holders of conversion or option privileges from convertible bonds or option bonds, profit participation rights or profit participating bonds or a combination of these instruments issued against cash contributions by GEA Group Aktiengesellschaft or a subordinate group company of the company on the basis of the authorization by the Annual General Meeting resolution dated April 16, 2015 exercise their conversion or option privileges, or, if they are obliged to convert or exercise options, satisfy their obligation to convert or exercise options, and if no cash settlement is granted or own shares or shares of another listed company are used in settlement. New shares will be issued at the conversion or option price to be determined in each case in accordance with the authorizing resolution referred to above. The new shares bear dividend rights from the beginning of the fiscal year in which they were created as a result of the exercising of conversion or option privileges or the fulfillment of conversion or option obligations. The Executive Board is authorized, with the approval of the Supervisory Board, to determine the further details of the implementation of the contingent capital increase.

Under a resolution adopted by the Annual General Meeting dated April 16, 2015, GEA Group Aktiengesellschaft is authorized to purchase own shares up to a total of 10 percent of the total proportionate amount of share capital in accordance with section 71(1) no. 8 AktG. The authorization is valid until April 15, 2020. The shares may be purchased via the stock exchange or by means of a public purchase offer to all shareholders. The shares may subsequently be used for all purposes allowed by law. With the approval of the Supervisory Board, the shares may also (i) be sold in another manner than through the stock exchange or by means of a public offering addressed to all shareholders, provided that the issue price of the new shares is not significantly lower than the price for GEA Group Aktiengesellschaft shares of the same kind at the time of sale, (ii) be transferred to third parties for the purpose of business combinations or the acquisition of companies, parts of companies, or equity interests in companies or other assets, (iii) be used to service convertible or option bonds, (iv) be used to implement a scrip dividend or (v) be withdrawn. Further details on the resolutions on the share buyback adopted by the Annual General Meeting on April 16, 2015 are available in the invitation to the Annual General Meeting, which was published in the electronic Federal Gazette on March 9, 2015.

Material agreements that take effect in the event of a change of control following a takeover bid

The individual lenders of the syndicated credit line (club deal) amounting to EUR 650 million may refuse new drawdowns in the event of a change of control. The lenders may call in any amounts already drawn down and terminate the respective credit line giving 20 days' notice.

Under a cash management credit line and master loan agreement totaling EUR 300 million, which is primarily used to issue guarantees for subsidiaries, the lender has the right in the event of an imminent change of control to negotiate the continuation of the agreement under changed terms. If no agreement is reached, the loan agreements fall due with immediate effect. In this case, the lender must be released from its obligations under guarantees furnished within two months or, at the discretion of the borrower, the latter shall make a cash deposit in the amount of the outstanding obligations under the guarantees furnished and any credit drawdowns settled.

All Performance Shares under the GEA Performance Share Plan expire in the event of a change of control. Managers who have participated in the plan then receive a compensation payment for the expired Performance Shares. This payment corresponds to the allocated target value in each case.

A change of control within the meaning of these agreements and the GEA Performance Share Plan is deemed to have occurred in particular if a majority of voting rights or shares of the company are transferred to a single person or group of persons.

Compensation arrangements with members of the Executive Board or employees

Executive Board members' contracts include provisions on the calculation of bonuses in the event of a change of control. Additional details can be found in the remuneration report starting on page 57. Further compensation arrangements with employees have been agreed with regard to the Performance Shares under the GEA Performance Share Plan.

Key attributes of the internal control and risk management system relating to the financial reporting process

See the "Risk Management System" and "Internal Control System" sections starting on page 108 ff. of the management report.

Overall Assessment of Business Development

Two key developments shaped 2017 for GEA. The Group was hampered, on the one hand, by the enduring weakness of the important dairy processing industry; on the other, by the strength of the euro, which had a negative impact on business, particularly in the second half of the year. Nevertheless, GEA did manage to post a moderate rise in revenue, as predicted. Besides dairy processing, the beverages customer industry also proved a disappointment in 2017, while both the food and dairy farming customer industries had excellent years. GEA narrowly failed to reach its target – adjusted in summer 2017 – for operating EBITDA, this as a result of negative currency effects in the second half of the year coupled with a drop-off in revenue volume. At year-end, the operating cash flow driver margin was slightly below the predicted corridor.

Not including the effects of the 2017 acquisition, order intake increased to around EUR 4.7 billion in 2017. Revenue also increased by 2.5 percent, up to around EUR 4.6 billion. At EUR 564 million, operating profit was on a par with the previous year. This figure includes the additional costs for filling machines, which impacted the result to the tune of approx. EUR 20 million. However, it is assumed that there will be no further negative impacts from this filling equipment in fiscal year 2018. The operating EBITDA margin reached 12.2 percent of revenue, while the corresponding operating cash flow driver margin was 8.4 percent. GEA therefore remains in robust economic shape.

On the basis of the largely stable business outlook, and in light of the reduction in the number of dividend-bearing shares following GEA's recent share buyback program, the Supervisory Board and Executive Board will propose that the Annual General Meeting approve payout of an increased dividend of EUR 0.85 per share for fiscal year 2017. This dividend payment would be another record high. As such, the total dividend volume would be more or less on a par with the previous year's payout.

All told, we can reaffirm that the earnings forecast for 2017 (delivered in March 2017) with respect to revenue was fulfilled. Operating EBITDA (forecast delivered in July 2017) and the operating cash flow driver margin (forecast delivered in March 2017) both fell just short of the expected corridor. Nevertheless, GEA's business progressed on a stable footing in 2017 despite a highly volatile geopolitical climate and negative exchange-rate effects in the year under review.

Corporate Governance Report including Corporate Governance Statement

The disclosures to be made within the framework of the Corporate Governance Statement in accordance with sections 289f para. 2 and 5, 315d Handelsgesetzbuch (HGB – German Commercial Code) do not form part of the annual audit pursuant to section 317 para. 2 sentence 6 HGB.

Transparent, responsible corporate governance and control geared towards long-term value enhancement are given high priority by GEA Group Aktiengesellschaft. In doing so, we align our actions with the generally accepted principles of corporate governance while implementing the suggestions and recommendations of the German Corporate Governance Code as amended on February 7, 2017 (published in the Federal Gazette on April 24, 2017) to the greatest possible extent.

Declaration of Conformity

GEA Group Aktiengesellschaft complies with the recommendations of the German Corporate Governance Code (GCGC) as amended on February 7, 2017, and published by the Federal Ministry of Justice in the official section of the Federal Gazette, with the exception of the recommendation set forth in section 4.2.3 para. 2 sentence 3 GCGC, according to which variable remuneration components generally have a multiple-year assessment basis that shall have essentially forward-looking characteristics; with this exception, the company will continue to comply with the recommendations of the GCGC.

Explanation:

The multi-year variable remuneration granted to the members of the Executive Board comprises two components that are weighted and account for 20 and/or 40 percent of their total variable remuneration. The three-year assessment basis of the 20 percent component of variable remuneration has forward-looking characteristics, while the assessment basis underlying the 40 percent component of multi-year variable remuneration embraces the current as well as the two previous fiscal years and is, thus, not forward-looking. As a consequence, taken as a whole, the assessment bases governing multi-year variable remuneration do not have essentially forward-looking characteristics. The current remuneration system was last approved by a large majority of the shareholders at the Annual General Meeting held in April 2012. Given the new requirements of the GCGC, the company plans to undertake a comprehensive review of the current Executive Board remuneration system in fiscal year 2018, amending this system by incorporating the new requirements set out above as well as other more recent developments relating to remuneration models, where applicable.

After issuing the Declaration of Conformity on December 16, 2016, until and including December 31, 2016, GEA Group Aktiengesellschaft complied with the recommendations of the GCGC as amended on May 5, 2015, and published by the Federal Ministry of Justice in the official section of the Federal Gazette with the exception of the recommendation set forth in section 4.2.3 para. 2 sentence 6 GCGC, according to which the amount of remuneration of the Executive Board members shall be capped as regards variable components and in the aggregate. Since January 1, 2017, GEA Group Aktiengesellschaft has complied with all recommendations of the GCGC as amended on May 5, 2015.

Explanation:

If the activities of the Executive Board members lead to an extraordinary increase in value for the benefit of the shareholders of the company, the Supervisory Board may, subject to its dutiful discretion, grant a discretionary bonus in accordance with the service agreements concluded with the members of the Executive Board. The latter are not entitled to receive this special bonus. The respective clause in the service agreements of the Executive Board members only authorizes the Supervisory Board to make an adequate discretionary decision pursuant to statutory provisions and within the limits of the jurisdiction of the highest courts in exceptional situations. Since the introduction of section 4.2.3 para. 2 sentence 6 GCGC, the amount of this special bonus had been gradually and expressly capped in the Executive Board service agreements concluded within the framework of reappointments or new appointments of Executive Board members. Given that, since January 1, 2017, the amount of the potential special bonus has been subject to a cap in all Executive Board service agreements, the previous deviation from the recommendation under section 4.2.3 para. 2 sentence 6 GCGC, which was declared until that point in time, is no longer applicable.

Düsseldorf, December 15, 2017

For the Supervisory Board	For the Executive Board	
Dr. Helmut Perlet	Jürg Oleas	Dr. Helmut Schmale

Code of Conduct

The Code of Conduct of GEA Group Aktiengesellschaft stipulates that the group's business activities are to comply with all existing laws and high ethical standards. This Code of Conduct applies to all GEA employees and bodies worldwide. It is supplemented by guidelines on individual topics, in particular the Anti-Corruption Guideline. In addition, the company and the European Works Council jointly agreed general principles of social corporate responsibility ("codes of conduct") laying down ethical, social and legal standards that are binding on all GEA employees. The Code of Conduct and the general principles of social corporate responsibility constitute a globally applicable and uniform policy governing the areas of Quality, Health, Safety & Environment ("QHSE"). The Code of Conduct, the Anti-Corruption Guideline, the QHSE policy and further information are published on GEA's website under Investors/Corporate Governance.

Compliance

Compliance in terms of measures designed to ensure adherence to legal, statutory and internal corporate policies, as well as group companies' compliance therewith, is considered to be a key management and supervisory task at GEA. Group-wide compliance activities focus on corruption prevention, antitrust law as well as data protection. The Chief Compliance Officer coordinates and ensures the implementation of compliance measures, in particular in the aforementioned areas. In this capacity, he/she reports to both the Executive Board and the Audit Committee of the Supervisory Board. Moreover, the compliance organization is involved in processing any and all compliance incidents carrying the risk of criminal proceedings or a fine. The Chief Compliance Officer is assisted by the extended legal compliance organization and the internal audit department. Central legal compliance activities are bundled in the "Compliance & Principle Legal Matters" unit that forms part of the group's corporate legal department. Apart from that, the Business Area Compliance Officers, who also belong to corporate legal, support the compliance activities undertaken at operational business level. Each operating entity is assigned a Local Compliance Manager. In addition, a Compliance Committee may be convened to advise the Chief Compliance Officer if need be. In parallel, GEA has a worldwide operational export control organization. Key export control activities fall within the remit of the Business Area Export Control Managers. Each operating entity is assigned one Local Export Control Manager.

The members of the compliance organization meet at regular intervals to discuss the latest developments and the potential impact of and/or need to supplement GEA's compliance program. Since December 1, 2014, GEA has relied on the so-called Integrity System that was implemented on a global level. This Integrity System allows GEA employees and independent third parties to report suspected compliance infringements or violations of the GEA codes of conduct – i.e., the general principles of social responsibility – via an internet-based system. The Compliance Organization rigorously investigates all suspected cases, if necessary by involving group internal audit. Moreover, the group employees responsible for compliance regularly receive face-to-face and web-based training covering current issues and regulations relative to the law, the Code of Conduct and GEA's additional compliance guidelines. GEA's compliance program is rounded off by a close cooperation between the compliance organization and the group's internal audit department as well as on-site talks between representatives of the compliance organization and local managers for evaluating best practices within the group.

Finally, the company set up an QHSE organization designed to develop and implement group-wide guidelines, programs and procedures in this specific field.

Responsible risk management

Sustainable growth can only be achieved if both the opportunities and the risks associated with business activities are identified and adequately taken into account. For this reason, an effective control and risk management system represents one of the core elements of corporate governance at GEA. For further details see page 108 ff. of this Annual Report.

Transparency in accounting and audit transparency

GEA Group Aktiengesellschaft is committed to transparent reporting. The company's consolidated financial statements and half-yearly financial reports are prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. The single entity financial statements of GEA Group Aktiengesellschaft, which are legally required and determine dividend payout, are governed by the German Handelsgesetzbuch (HGB – German Commercial Code). The Supervisory Board engages the external auditor elected by the shareholders at the Annual General Meeting. The Audit Committee gives particular attention to the oversight of the accounting process, the effectiveness of the internal control, risk management and internal audit systems, the audit of the annual financial statements (in this context, notably the selection and independence of the auditor and the additional services provided by the auditor, auditor engagement, the determination of key audit areas as well as the audit fee) as well as compliance. While also taking into account the EU audit reform, it ensures that the auditor's work is not compromised by any conflicts of interest and that the auditor immediately reports any and all findings and events relevant to the Supervisory Board's discharge of duties that have come to the attention of the auditor in the course of the audit. Apart from the consolidated and annual financial statements, the Audit Committee also discusses the half-yearly financial and quarterly statements with the Executive Board.

Detailed reporting

GEA Group Aktiengesellschaft communicates openly, actively and extensively. It regularly and promptly informs shareholders, shareholders' associations, analysts, and interested members of the public on equal terms about the company's situation as well as any material changes to its business. In this respect, the company's website constitutes an important means of communication. It contains the annual and half-yearly reports as well as quarterly statements, press releases, ad hoc disclosures as well as other notifications required under the EU Market Abuse Regulation (MAR) and the Wertpapierhandelsgesetz (German Securities Trading Act), the financial calendar and other relevant information. Moreover, the group regularly hosts analyst meetings, press conferences and events for investors. All presentations delivered on these occasions can also be downloaded from our website under "Investor Relations".

Managers' Transactions and shareholdings held by members of governing bodies

Under section 19 MAR, Executive Board and Supervisory Board members or persons closely associated with them are obliged to disclose reportable transactions in shares of GEA Group Aktiengesellschaft or related financial instruments if the transactions concluded in one calendar year reach or exceed the threshold of EUR 5,000. The two transactions reported to the company in fiscal year 2017 were duly disclosed and published on the company's website. The total number of shares in GEA Group Aktiengesellschaft held by all Executive Board and Supervisory Board members amounts to less than 1 percent of the shares issued by the company.

Securities-based remuneration scheme for company executives

With effect from July 1, 2006, GEA Group Aktiengesellschaft launched a long-term, share price-based remuneration scheme called "GEA Performance Share Plan" for certain managers below Executive Board level. Details are available in note 6.3.3 (see page 194 ff.) to the consolidated financial statements.

Corporate governance and control: Executive Board and Supervisory Board

GEA Group Aktiengesellschaft is subject to the German Stock Corporation Act and, therefore, has a two-tier board structure comprising the Executive Board and the Supervisory Board. The Executive Board constitutes the group's management body. The Supervisory Board – which is composed of twelve members, half of whom are shareholder representatives, while the other half comprises employee representatives – appoints and advises the Executive Board while overseeing its work. The Executive Board and the Supervisory Board cooperate closely for the benefit of the company, their common goal being the sustainable increase in enterprise value.

Executive Board

The Executive Board holds overall responsibility for the management of the company in accordance with statutory requirements, the Articles of Association as well as the rules of procedure and the corporate policies that are in place. In line with the Rules of Procedure of the Executive Board, each Executive Board member has overall responsibility for and independently manages the area of responsibility assigned to him/her under the schedule of responsibilities while keeping the entire Executive Board consistently informed of all essential business affairs. Decisions on matters of fundamental importance or particular magnitude must be taken by the entire Executive Board. Executive Board resolutions are adopted at regular meetings or, should no member of the Executive Board raise any objections, in writing, orally (also via telephone), via telefax or by referring to other common means of communication such as emails. Each member of the Executive Board must immediately disclose conflicts of interests to the Supervisory Board and inform the other members of the Executive Board, accordingly.

The Executive Board reports to the Supervisory Board regularly, promptly and comprehensively on all issues relating to strategy, planning, business progress, risk exposure, the risk management system as well as compliance that are relevant to the company. Should important issues or business matters that may considerably impact on the situation of the company arise, the Executive Board will notify the Chairman of the Supervisory Board without undue delay. The Articles of Association and the rules of procedure specify key transactions that require the Supervisory Board's approval. Further information on the individual members of the Executive Board can be found on pages 20 as well as 246-247 of this Annual Report.

Supervisory Board

The Supervisory Board advises the Executive Board on the management of the company and oversees its conduct of the company's business. Between the Supervisory Board meetings, the Chairman of the Supervisory Board maintains regular contact with the Executive Board, in particular the Chairman of the Executive Board, with whom he discusses matters of strategy, planning, business progress, risk exposure, risk management and corporate compliance. The Supervisory Board usually holds 6 meetings per calendar year that are attended by the members of the Executive Board unless the Chairman of the Supervisory Board determines otherwise. As a rule, the Supervisory Board's resolutions are adopted at these meetings. Unless the majority of Supervisory Board members immediately object, the Chairman of the Supervisory Board may also determine that resolutions be adopted during a conference call or a video conference or outside of meetings by the members casting their votes in writing, text form or by telephone. Resolutions require a simple majority of the votes cast unless statutory law provides for a different majority. After the notice of the meeting has been given to all members, the Supervisory Board has a quorum when a minimum of half of its members vote on a resolution by attending in person, by telephone or video conference or have cast their votes in writing or text form pursuant to section 108 para. 3 Aktiengesetz (AktG – German Stock Corporation Act).

Supervisory Board Committees

The work of the Supervisory Board is supported by committees. These are primarily the Presiding Committee and the Audit Committee. Besides, there is the statutory Mediation Committee as well as the Nomination Committee recommended by the German Corporate Governance Code. The Audit Committee and the Mediation Committee each comprise four members, while the Presiding Committee is composed of 6 members; each of the above committees features equal representation of shareholder and employee representatives. The Nomination Committee consists of 3 members, who include exclusively shareholder representatives in accordance with section 5.3.3 of the German Corporate Governance Code.

In each calendar year, the Presiding Committee and the Audit Committee usually meet four or five times, respectively. During meetings, Presiding Committee and Audit Committee resolutions are adopted by a simple majority of the votes cast, while outside of meetings, they are passed by a simple majority of the members. If the vote is tied, the respective chairman has a casting vote in the event of another ballot on the same resolution. The Nomination Committee and the Mediation Committee only hold meetings when required.

The Presiding Committee focuses on Executive Board matters including succession and remuneration topics, corporate governance as well as specific transactions requiring approval. Moreover, the Presiding Committee is also responsible for jointly deliberating on corporate strategy, capital investments and funding operations together with the Executive Board. In this context, decisions on the Executive Board remuneration system, the total remuneration awarded to the individual Executive Board members, as well as their appointment and dismissal are reserved to the full Supervisory Board.

The Audit Committee, whose chairman has a sound knowledge of and experience in applying financial accounting standards as well as internal control systems, primarily focuses on overseeing the financial accounting process, the efficiency of the internal control and risk management systems, the internal audit process, compliance as well as the audit of the annual financial accounts.

The Mediation Committee performs its duties as set out in sections 27, 31 Mitbestimmungsgesetz (MitbestG – German Co-determination Act). The task of the Nomination Committee is to propose suitable candidates to the Supervisory Board based upon which the latter submits its nominations to the Annual General Meeting.

Further information on the composition of the Supervisory Board and its committees can be found on the company's website at gea.com, as well as on pages 246-247 of this Annual Report. In addition, the Report of the Supervisory Board starting on page 15 of this Annual Report gives further details on the activities performed by the Supervisory Board and its committees in fiscal year 2017. It also discloses individual attendance of meetings held by the Supervisory Board and its committees. In the fiscal year just ended, all Supervisory Board members participated in well over half of the meetings of the Supervisory Board and the committees thereof they are members.

Compliance with minimum quotas pursuant to section 96, para. 2 Aktiengesetz (AktG – German Stock Corporation Act) and commitment to promoting the participation of women in executive positions in accordance with section 76 para. 4 and section 111 para. 5 German Stock Corporation Act

As early as in 2011, GEA started to encourage the promotion of diversity at group level. A description of the diversity strategy is provided in the chapter on Sustainability at GEA (see page 91 f.). Under its diversity strategy, GEA also pursues the aim of attracting more women to join the company while promoting female talent. In the long run, the company seeks to increase the share of women on all management levels. GEA will continue to support this process by means of strategic measures.

The Act on Equal Participation of Women and Men in Executive Positions in the Private and Public Sector, which took effect in April 2015, obliges certain companies in Germany to define targets in relation to the proportion of women represented on the Supervisory Board, the Executive Board and/or the Board of Directors as well as on the two management levels below, and to set target dates for achieving the respective quota of women. Since January 1, 2016, a statutory minimum quota of 30 percent has applied with regard to the underrepresented gender on the supervisory boards of listed and codetermined companies like GEA Group Aktiengesellschaft; this quota has to be observed whenever such companies seek to fill vacant supervisory board positions. Since the 2016 Supervisory Board elections, the Supervisory Board has comprised 5 female members (previously 4). As a result, the share of women represented on the Supervisory Board of GEA Group Aktiengesellschaft currently amounts to 42 percent.

Due to the then composition of the Executive Board and the extremely short statutory deadline of June 30, 2017, which had been set for the initial implementation of the relevant targets, the Supervisory Board of GEA Group Aktiengesellschaft (in September 2015) had set a 0 percent target applicable to the proportion of women represented on the Executive Board of GEA Group Aktiengesellschaft for the initial implementation deadline. The share of women on the Executive Board totaled 0 percent until June 30, 2017.

During its meeting on June 22, 2017, the Supervisory Board of GEA Group Aktiengesellschaft set a new 20 percent target for the proportion of women represented on the Executive Board that will be applicable until December 31, 2021. On October 1, 2017, Martine Snels joined the Executive Board and took over as GEA's head of Regions & Countries. Thus, the share of women represented on the Executive Board currently amounts to 20 percent.

On September 7, 2015, the Executive Board of GEA Group Aktiengesellschaft had determined target quotas for women on the first and second management levels below the Executive Board that were to be implemented within the maximum statutory deadline. As of June 30, 2017, the two defined target quotas of 18.1 percent and/or 23.5 percent had been exceeded, with a 20 percent share of women on the first management level and a 28.6 percent proportion of women on the second management level.

In June 2017, the Executive Board of GEA Group Aktiengesellschaft set target quotas for the two management levels below the Executive Board that are to be achieved by December 31, 2021, namely a 25 percent share of women on the first and a 30 percent proportion of women on the second management level.

Targets for the other GEA group companies affected by this law were also set in due time in relation to the proportion of women represented on the Supervisory Board and/or the Board of Directors as well as the two uppermost management levels below the Board of Directors, just like the corresponding deadlines for timely target implementation.

GEA takes the corresponding measures (see page 92 f.) to ensure that the set targets are accomplished.

Diversity policy governing the composition of the Executive Board and the Supervisory Board

Together with the Executive Board, the Supervisory Board engages in long-term Executive Board succession planning. The selection process for Executive Board positions is subject to a structured standard procedure. Apart from a balance between technical qualifications and personal skills, the Supervisory Board and its committees also take into account the criterion of diversity when appointing members to the Executive Board. As GEA is an international technology group and supplier for the food processing industry and various other sectors, appointments to the Executive Board are to specifically meet the following criteria: In terms of its composition, the Executive Board shall fulfill the criterion of internationality. Its members shall include a minimum of 2 different nationalities, with the entire body covering several languages. The proportion of women represented on the Executive Board shall total a minimum of 20 percent. Overall, the Executive Board shall have a balanced age structure. Apart from that, the company seeks to ensure that at least half of all Executive Board members have gained many years of experience in the food sector, while a minimum of 2 Executive Board members have a technical or scientific background. In its current composition, the Executive Board meets the above criteria.

At its meeting held on December 15, 2017, the Supervisory Board revised the targets for its composition by taking into consideration the recommendations of the German Corporate Governance Code and adding a profile of skills and expertise. Accordingly, the Supervisory Board members shall collectively have the knowledge, skills and professional expertise required to properly perform their duties in consideration of the company-specific situation. This is why, aside from the integrity and commitment of its members, who must have sufficient time to exercise their respective mandate, the Supervisory

Board also pays attention to a balanced profile of skills and expertise amongst its members, in particular sufficient industry and sector knowledge, an adequate number of independent members, international experience as well as diversity. With a view to the benefit of the company, the decisive criterion for filling a position on the board shall in all cases be the professional and individual suitability of the male or female candidate while taking into account the skills and expertise of the other members of the Supervisory Board.

With a view to section 5.4.1 para. 2 sentence 1 of the German Corporate Governance Code, the Supervisory Board seeks to ensure a board composition that takes into consideration the following elements: In terms of the origin, the professional and cultural background as well as the age and gender of its members, the Supervisory Board is to reflect diversity. At least one quarter of the members of the Supervisory Board shall have an international background that ideally covers various regions or cultural areas. Each gender shall account for a minimum of one third of the members of the Supervisory Board. The Supervisory Board shall include – what it considers to be – an adequate number of independent members. For this reason and in consideration of the shareholder structure, the Supervisory Board seeks to ensure that a minimum of two thirds of the shareholder representatives are independent in line with the definition given under section 5.4.2 sentence 2 of the German Corporate Governance Code. At present, all shareholder representatives on the Supervisory Board are independent within the meaning of the German Corporate Governance Code. As a rule, a member's uninterrupted service on the Supervisory Board shall not to exceed three full terms of office and/or a period of 15 years. Generally, nominations shall only consider individuals who have not yet reached the age of 70 at the date of the Annual General Meeting resolving on the election of the proposed candidates. If it is foreseeable that individuals would be subject to permanent or repeated conflicts of interest in the event of their election to the Supervisory Board, such individuals shall not be considered as Supervisory Board candidates. Apart from that, the Rules of Procedure of the Supervisory Board provide for detailed rules and regulations governing the handling of conflicts of interests that may occur after a member is elected to the Board. According to these regulations, each Supervisory Board member has the obligation to disclose potential conflicts of interest to the Supervisory Board. Conflicts of interest of a material and non-temporary nature in relation to a Supervisory Board member shall result in the termination of his/her mandate.

The profile of skills and expertise the Supervisory Board seeks to establish for the entire body may be summarized as follows: The German Stock Corporation Act already stipulates that all members of the Supervisory Board must be familiar with the sector in which the company operates. At least one Supervisory Board member must have expertise in the fields of financial accounting or auditing. In accordance with the regulations of the German Corporate Governance Code, the Chair of the Audit Committee shall also have specific knowledge and expertise in applying internal control procedures. The Supervisory Board shall comprise members with a commercial or business background, individuals from the engineering profession as well as members with experience in one or several of the company's customer industries. A minimum of two Supervisory Board members shall have management experience in operational business. The members of the Supervisory Board shall be able to understand and assess the specific nature of the company's business as well as resulting risks and opportunities. They shall be familiar with the basic principles of accounting and risk management.

In its current composition, the Supervisory Board meets the target composition criteria and lives up to the profile of skills and expertise.

Remuneration Report

The Remuneration Report outlines the key principles applied to determining the total remuneration of the members of the Executive Board of GEA Group Aktiengesellschaft and sets out the structure and level of Executive Board remuneration. Furthermore, it specifies the principles and the level of remuneration awarded to the members of the Supervisory Board.

The Remuneration Report comprises details of the remuneration of board members pursuant to the German Commercial Code in accordance with DRS no. 17 (German Accounting Standard 17). Since GEA complies with the corresponding recommendations of the German Corporate Governance Code (GCGC), this Remuneration Report also includes the model tables on Executive Board remuneration pursuant to the GCGC (see page 77 ff.).

Executive Board remuneration

General remarks

Acting on the recommendation of the Presiding Committee, the Supervisory Board determines the total remuneration of the individual Executive Board members and resolves on the remuneration system applicable to the Executive Board. The Supervisory Board reviews the appropriateness of the remuneration at regular intervals. Criteria for determining the appropriateness of the remuneration include the responsibilities of the individual Executive Board members, their respective personal performance, the business situation, the success and the future prospects of the company as well as the common level of compensation taking into account the peer companies and the compensation structure in place in other areas of the company.

Creating an incentive geared towards successful and sustainable corporate governance represents an essential element of any decision taken with regard to the structure of the company's remuneration system. The latter is to ensure that the Executive Board members strive for the long-term success of the company while participating in a sustainable value enhancement. For this reason, a significant part of total remuneration is tied to GEA's share performance as well as key performance indicators, notably a combination of cash flow aspects and the return on capital employed (ROCE), i.e. a ratio for measuring return on capital. This ensures that outstanding performance is adequately rewarded while non-accomplishment of set targets results in a reduction in remuneration.

The remuneration system, which was approved by a large majority of the votes at the Annual General Meeting held on April 24, 2012, comprises non-performance-related and various performance-related and/or variable components. The variable remuneration system seeks to provide for a highly balanced risk and opportunity profile from the shareholders' and Executive Board's perspective and to further enhance sustainability by decoupling short-term from long-term bonus elements. In addition, it is comparatively simple to transfer the system to the management levels below Executive Board level, thereby guaranteeing enhanced operations management. In the course of the 2018 fiscal year, the company plans to conduct a comprehensive review of its remuneration system, seeking to modify the latter in line with the recommendations of the GCGC as amended on February 7, 2017, while incorporating other recent developments in connection with remuneration models, if need be.

Remuneration components

In fiscal year 2017, the remuneration of the Executive Board members comprised the following elements:

Fixed components of remuneration and fringe benefits

The non-performance-related component of remuneration mainly consists of a fixed annual salary that is paid in twelve equal installments at the end of each calendar month.

In the year under review, the fixed annual salary awarded to Jürg Oleas amounted to EUR 1,250 thousand, Dr. Helmut Schmale was awarded EUR 700 thousand, while Steffen Bersch, Niels Erik Olsen and Martine Snels each received EUR 570 thousand. As Martine Snels joined the company on October 1, 2017, her fixed annual salary for 2017 was awarded on a pro rata temporis basis.

In addition, the Executive Board members receive fringe benefits. In the year under review, the latter mainly comprised the value of the use of a company car in accordance with tax regulations, accident insurance premiums, and – for Niels Erik Olsen – the reimbursement of costs incurred for travel, accommodation and subsistence as well as tax advisory services. Steffen Bersch and Martine Snels were granted a rental allowance for their second homes. Apart from that, Martine Snels availed herself of tax advisory services.

Variable components of remuneration

In addition, each member of the Executive Board receives a variable annual remuneration (bonus) whose level depends on the achievement of specific targets set by the Supervisory Board. In terms of a target achievement of 100 percent, the level of variable remuneration equals that of the fixed remuneration component (target bonus). To ensure that both positive and negative developments are taken into account, the level of variable remuneration increases or decreases in the event of target over- or underachievement.

The bonus consists of 3 components. The latter comprise both one-year and multi-year bases of assessment. Each of the 3 components provides for a cap. Furthermore, taken together, all 3 bonus components applicable to a specific fiscal year are limited to 240 percent of the target bonus (overall cap). At its own dutiful discretion, the Supervisory Board takes into account extraordinary events and developments indicating that a readjustment of the respective value computed in line with the provisions set forth in the respective service agreement is appropriate.

Individual component (weighting of 40 percent)

The individual component of variable remuneration is payable with the next regular salary payment following the date of the Supervisory Board meeting convened to adopt the financial statements for the preceding fiscal year. Its amount is calculated on the basis of 3 to 5 individual annual targets determined for the respective fiscal year by the Supervisory Board. When determining these individual targets, the Supervisory Board primarily bases its decision on the sustainability of corporate governance such as revenue performance. The Supervisory Board's definition of the individual targets also includes their respective weighting. Due to the fact that Martine Snels joined the company on October 1, 2017, the company dispensed with defining individual performance targets for fiscal year 2017 that were to be met by Martine Snels. Instead, the bonus awarded to Martine Snels under the individual component for 2017 is computed on the basis of the average overall degree of target achievement of the other members of the Executive Board and on a pro rata temporis basis.

Under the variable remuneration component, the individual component has a weighting of 40 percent, i.e., 40 percent of the variable remuneration (target amount) is payable if 100 percent of the target set in relation to the individual component is achieved. The overall degree of target achievement and, thus, the amount paid out under the individual component, is limited to 200 percent of this target amount (cap).

After the end of the fiscal year, the Supervisory Board decides on the degree of target achievement. For fiscal year 2017, the Supervisory Board has ascertained a 79.2 percent degree of average target achievement (previous year: 80.0 percent) for the members of the Executive Board.*

Multi-year component (weighting of 40 percent)
The multi-year component is payable with the next regular salary payment following the date of the Supervisory Board meeting convened to adopt the financial statements for the preceding fiscal year. Performance measurement under the multi-year component takes place retrospectively for the previous 3 fiscal years. The period of assessment covers the respective fiscal year just ended, as well as the two preceding fiscal years. The basis of assessment is tied to key performance indicators embracing a combination of cash flow aspects (the so-called "cash flow driver margin" (CFDM)) and the "return on capital employed" (ROCE).

- The CFDM target is a simplified cash flow indicator (EBITDA minus capital expenditure in property, plant and equipment as well as intangible assets (Capex) minus change in working capital on a 12-month average) calculated as a ratio of revenue. The CFDM actually generated is calculated on the basis of average values achieved over the previous three years. The degree of target achievement results from a comparison between the achieved CFDM and the target value and/or target achievement corridor defined by the Supervisory Board. As for fiscal year 2017, just like the previous year, 100 percent of the target is achieved if the group's CFDM during the preceding three-year period averages 8 percent. If the CFDM is lower or higher, the degree of target achievement will go up or down, with a CFDM less than or equal to 4.5 percent being equivalent to a target achievement of zero percent, while a CFDM greater than or equal to 13.25 percent represents a maximum target achievement of 250 percent.

- The level of the ROCE component (ROCE: return on capital employed), which is calculated on the basis of average values attained over the previous three years, corresponds to the ratio of earnings before interest and taxes (EBIT) to the capital employed, while excluding goodwill arising on the acquisition of the former GEA AG by the former Metallgesellschaft AG back in 1999 including effects attributable to the award proceedings. The degree of target achievement depends on the actual ROCE achieved compared with the target value and/or target achievement corridor of +/– 5 percentage points defined by the Supervisory Board. As for 2017, just like the previous year, 100 percent of the target is achieved if the group's ROCE averages 19 percent during the preceding three-year period. If the actual ROCE level is greater than or less than this percentage, but within the defined corridor of +/– 5 percentage points, the degree of target achievement is increased or reduced by up to 50 percentage points.

The key performance indicators CFDM and ROCE are adjusted for the impact of acquisitions made in fiscal year 2014 or later. With respect to acquisitions, such adjustment is effected in the year of first-time consolidation, and in the following fiscal year, respectively. The adjustment includes all acquisitions that require the consent of the Supervisory Board or the Presiding Committee of the Supervisory Board.

*) The degree of target achievement is a rounded figure.

For calculating the overall degree of target achievement, the respective degrees of target achievement relevant to the individual key performance indicators CFDM and ROCE are multiplied. Under the variable remuneration component, the multi-year component has a weighting of 40 percent, i.e. 40 percent of variable remuneration is payable (target amount) if 100 percent of the target set in relation to the multi-year component is achieved. The overall degree of target achievement and, thus, the amount paid out under the multi-year component, is limited to 250 percent of this target amount (cap).

During the preceding three-year period an average of 6.9 percent was achieved for the CFDM key performance indicator that is the result of a CFDM of 6.3 percent in fiscal year 2015, 8.0 percent in fiscal year 2016 and 6.4 percent in the 2017 fiscal year. Thus, in 2017, the degree of target achievement for the CFDM amounts to 68.4 percent (previous year: 93.2 percent). For the ROCE key performance indicator an average of 16.8 percent was achieved during the preceding three-year period; it is the result of a ROCE of 15.2 percent in fiscal year 2015, 18.6 percent in fiscal year 2016 and 16.6 percent in the 2017 fiscal year. Thus, for fiscal year 2017, the degree of ROCE target achievement amounts to 78.2 percent (previous year: 98.3 percent). As to the variable remuneration awarded in the 2017 fiscal year, the overall degree of target achievement under the multi-year component amounted to 53.5 percent (previous year: 91.6 percent).*

Share price component (weighting of 20 percent)

The long-term share price component is payable at the end of a three-year performance period with the next regular salary payment following the date of the Supervisory Board meeting convened to adopt the financial statements for the preceding fiscal year. Performance measurement relating to the long-term share price component is conducted by taking a forward-looking approach. The period of assessment covers a three-year performance period including the relevant fiscal year as well as the two subsequent fiscal years.

Under the variable remuneration component, the long-term share price component has a weighting of 20 percent, i.e., 20 percent of variable remuneration is payable (target amount) if 100 percent of the set target is achieved. The overall degree of target achievement and, thus, the amount paid out under the long-term share price component is limited to 300 percent of the target amount (cap).

Performance measurement for the relevant three-year period is conducted by means of a comparison between GEA's share performance (adjusted for dividends) and the performance of the STOXX® Europe TMI Industrial Engineering (TMI IE) index, in which numerous European industrial enterprises are listed. This comparison is computed on the basis of the respective arithmetic mean closing prices on the last 20 trading days preceding the start of the three-year performance period. 100 percent of the target is attained if the evolution of the daily arithmetic mean closing prices of GEA's share fully (i.e. 100%) corresponds to the relevant TMI IE performance during the three-year performance period. The degree of target achievement increases or decreases by 4 percent for each percentage point greater than or less than a performance level of 100 percent. In the event of outperformance greater than 100 percent, the amount paid out rises to a maximum of 300 percent of the target amount. If the increase in GEA's share price over the three-year period is less than 100 percent of the growth in the TMI IE, the amount payable is reduced down to a performance level of 75 percent. Should GEA shares have dropped, the Supervisory Board may still award a payment if GEA shares have nonetheless outperformed the TMI IE. Such a decision and the level of the amount to be paid out are subject to the discretion of the Supervisory Board.

*) The degree of target achievement is a rounded figure.

For the year under review, no payment under the long-term share price component was made as the latter is (forward-looking and) measured over a three-year period. The amount paid out under the long-term share price component for fiscal year 2017 is measured over the three-year period between 2017 and 2019; a payment is scheduled for fiscal year 2020. In the year under review, the 2014 tranche in the amount of EUR 659 thousand[1] was paid out on the basis of a 133.2 percent target achievement level. As of December 31, 2017, the computed degree of target achievement for the 2017 tranche amounted to 61.0 percent, while totaling 60.3 percent for the 2016 tranche (previous year: 125.4 percent) and 63.7 percent for the 2015 tranche (previous year: 102.6 percent).[2]

Summary of the variable remuneration components

The following table summarizes the respective weighting and assessment periods applicable to the variable components:

					Assessment period				
Variable remuneration component	Target	Weighting	Cap	Overall cap	2015	2016	2017	2018	2019
Individual component	Individual targets	40%	200%				One year		
Multi-year component	Combination of cash flow driver margin and ROCE	40%	250%	240%	Backward-looking (3 years)				
Long-term share price component	Share price in relation to TMI IE	20%	300%				Forward-looking (3 years)		

In exceptional circumstances, the Supervisory Board may also grant a special bonus to the members of the Executive Board if their activities have resulted in an extraordinary value enhancement for the benefit of the company's shareholders. Exercising its dutiful discretion, the Supervisory Board decides to grant this special bonus and sets the respective amount. Under all currently applicable Executive Board service agreements, this special bonus, which may only be awarded in exceptional circumstances, is subject to an express cap that corresponds to a maximum of 100 percent of the target bonus.

The service agreement concluded with Martine Snels provides for the payment of a maximum gross amount of EUR 450,000 in compensation for the bonus entitlements she forfeited when leaving her previous employer and joining GEA in the course of the year upon submission of documents corroborating the corresponding claim.

In the year under review, the Supervisory Board resolved to raise the total annual remuneration awarded to Steffen Bersch, Niels Erik Olsen and Martine Snels – which comprises the fixed annual remuneration as well as the variable annual remuneration (bonus), respectively – by EUR 60,000 from EUR 1,140,000 EUR to EUR 1,200,000, with effect from January 1, 2018, respectively – in each case based on a target achievement level of 100 percent in relation to the variable components of their remuneration. In this context, both their fixed and variable remuneration are to be increased by equal amounts, i.e. by EUR 30,000 per annum, respectively.

1) Payment of the 2014 tranche as of 03/31/2018 was agreed for Dr. Stephan Petri, who left the Executive Board during the business year 2016 under review.
2) The degree of target achievement is a rounded figure.

Pension benefits and surviving dependents' benefits

Jürg Oleas

The contractual pension benefits of the Chairman of the Executive Board, Jürg Oleas, will amount to a maximum of EUR 360 thousand p.a., with full entitlement to the pension arising after 18 years of service (end of April 2019). Under this agreement, maximum pension benefits will be awarded once his Executive Board service agreement ends when or after he reaches the age of 62 or in the event of his permanent incapacity to work. If Jürg Oleas' service agreement ends before one of the aforementioned conditions for payment of a pension is met or before he has completed 18 years of service, he will have vested rights to a pro rata annual pension payable once he reaches the age of 62. The respective amount is calculated based on the ratio of his actual years of service to the maximum period of 18 years of service. If Jürg Oleas leaves the company after a minimum of 15 years of service, but before reaching the age of 62, he will receive a pension in the form of a transitional benefit of EUR 220 thousand p.a. until he reaches the age of 62. In the event of Jürg Oleas's premature departure, any agreed severance payment will be set off against the above transitional benefits. Any and all income from activities Jürg Oleas engages in after leaving the company, but prior to reaching the age of 62, will be fully set off against the transitional benefits up to a maximum of half of the transitional payment awarded in the respective year. Regular pension benefits will be adjusted annually in line with the consumer price index.

The surviving dependents' benefits defined in Jürg Oleas's service agreement mainly provide for a lifelong widow's pension as well as an orphan's pension. The lifelong widow's pension amounts to 60 percent of the retirement pension. The orphan's pension is a specific percentage of the retirement pension and its amount depends on the number of children and on whether they are full or half orphans. In principle, entitlement to an orphan's pension expires on reaching the age of 18, or at the latest on reaching the age of 25 if the child in question is still in full-time education and/or completes vocational or professional training. Collectively, widow's and orphan's pensions must not exceed the level of the retirement pension.

Dr. Helmut Schmale

The contractual pension benefits of the Chief Financial Officer, Dr. Helmut Schmale, amount to a maximum of EUR 200 thousand per annum. Under this arrangement, maximum pension benefits will be paid once his service agreement ends when or after Dr. Helmut Schmale reaches the age of 62 or in the event of his permanent incapacity to work. Should Dr. Helmut Schmale's service agreement end before one of the above conditions for payment of his pension is met, he will have vested rights to a pro rata annual pension that becomes payable once he reaches the age of 62. The amount of this pension is calculated on the basis of the ratio of his actual length of service for GEA group to the maximum possible length of service on reaching the age of 62. Regular pensions will be adjusted annually in line with the consumer price index.

The company covers the employer's contribution to the state pension scheme payable under said statutory state pension scheme for Dr. Helmut Schmale's voluntary enrollment in the state pension scheme.

In addition, in each fiscal year, Dr. Helmut Schmale is entitled to make a personal contribution to a deferred compensation pension scheme for Executive Board members. No employer subsidy is paid.

The surviving dependents' benefits defined in Dr. Helmut Schmale's service agreement are in line with the provisions outlined above in relation to Jürg Oleas.

Steffen Bersch

The contractual pension benefits of Steffen Bersch, member of the Executive Board, amount to a maximum of EUR 200 thousand p.a. Under this arrangement, maximum pension benefits will be paid once his service agreement ends when or after he reaches the age of 62 or in the event of his permanent incapacity to work. Should Steffen Bersch's service agreement end before one of the above conditions for payment of his pension is met, he will have vested rights to a pro rata annual pension that becomes payable once he reaches the age of 62. His pro rata annual pension is composed of two elements: First the fixed amount embracing the vested benefits not resulting from deferred compensation and earned while Steffen Bersch was working for companies of GEA group prior to his appointment to the Executive Board, plus the amount accounting for the vested pension benefits earned during his service as an Executive Board member from the date of his appointment to the day of his departure. His pro rata maximum annual pension totals EUR 200 thousand p.a. and will be fully vested after a ten-year service on the Executive Board. Should Steffen Bersch leave the Executive Board before this ten-year term has elapsed, his vested pension benefits will be subject to a pro rata reduction. Regular pensions will be adjusted annually in line with the consumer price index.

The company covers the employer's contribution to the state pension scheme payable under said statutory state pension scheme for Steffen Bersch's voluntary enrollment in the state pension scheme.

In addition, in each fiscal year, Steffen Bersch is entitled to make a personal contribution to a deferred compensation pension scheme for Executive Board members. No employer subsidy is paid. In addition, Steffen Bersch is entitled to vested benefits to the tune of EUR 23,428 per annum from personal contributions made prior to his appointment to the Executive Board in connection with his participation in GEA's executive pension scheme.

The surviving dependents' benefits defined in Steffen Bersch's service agreement are in line with the provisions outlined above in relation to Jürg Oleas.

Niels Erik Olsen

Instead of pension benefits, Niels Erik Olsen receives a monthly compensation amount for the purpose of making private provisions for old age and surviving dependents. This monthly compensation amount totals EUR 20,751.15. Its level is in line with the regular pension benefits awarded to ordinary Executive Board members, i.e., a pension benefit totaling EUR 200 thousand p.a. payable from age 62 that is fully vested after ten years of service as an Executive Board member. Niels Erik Olsen may use this monthly compensation as he deems fit.

Martine Snels

Each month, Martine Snels receives an amount of EUR 27,754 gross for the purpose of making private provisions for old age. Said amount is paid into a fund, its level being in line with the regular pension benefits awarded to ordinary Executive Board members, i.e., a pension benefit totaling EUR 200 thousand per annum payable from age 62 and fully vested after ten years of service on the Executive Board.

Pension plan reinsurance and capitalization option

As the contractual pension commitments made to the members of the Executive Board were only partly protected against insolvency, namely in the amount of the sum covered by the Pensions-Sicherungs-Verein (PSV – Pension Protection Fund), the Supervisory Board decided to take out pension plan reinsurance policies to secure the proportion of the pension commitments not covered by the PSV for the benefit of the individual Executive Board members back in 2014. At the same time, the members of the Executive Board were granted a capitalization option. The level of the capitalization amount is equivalent to the pension liabilities ascertained by applying the basis of calculation used for the purpose of preparing the consolidated financial statements. Such capitalization option may be exercised upon retirement, but no earlier than age 62. It is possible to exercise this option in part or several times. Any exercise of the capitalization option entails a corresponding reduction in entitlements under the contractually guaranteed benefits for surviving dependents.

Since Niels Erik Olsen is not entitled to any contractual pension benefits, the capitalization option does not apply. At present, neither Niels Erik Olsen nor Martine Snels are covered by a pension plan reinsurance.

Pension scheme contributions and provisions for pension obligations

The company has set aside pension provisions to cover the future entitlements of Executive Board members. The additions to pension provisions for active Executive Board members created by the end of the fiscal year 2017 in accordance with IFRS are listed individually in the table below. The corresponding amounts comprise service cost as well as interest cost.

(EUR)	Pension benefits p. a. (as of 12/31/2017; annual entitlement at start of pension)	Annual pension entitlements earned as of 12/31/2017	Addition to pension provisions in fiscal year 2017	Present value of pension benefits as of 12/31/2017
Jürg Oleas	360,000	333,333	629,822	9,163,609
Dr. Helmut Schmale	200,000	193,528	309,170	5,818,942
Steffen Bersch*	223,428	73,656	498,106	5,192,130
Total	**783,428**	**600,517**	**1,437,098**	**20,174,681**

*) Along with his pension benefits in the amount of EUR 200,000 p.a. in his capacity as a member of the Executive Board, Steffen Bersch is also entitled to vested benefits in the amount of EUR 23,428 p.a. from personal contributions made under GEA's executive pension scheme prior to his appointment to the Executive Board (calculated on the basis of a retirement age of 62).

Termination rights, premature termination of an Executive Board member's appointment, change of control events and effects on remuneration

The Chairman of the Executive Board has a unilateral right of termination if the Supervisory Board revokes his appointment as Chairman of the Executive Board without simultaneously declaring the effective revocation of his appointment as a member of the Executive Board in accordance with s. 84 para. 3 Aktiengesetz (AktG – German Stock Corporation Act). Should he exercise his unilateral right of termination and leave the Executive Board, he will be entitled to receive the corresponding fixed salary for the remaining months of his contractual term, but no longer than 8 months.

If the appointment of an Executive Board member is revoked for good cause with legal effect in accordance with s. 84 para. 3 AktG or if an Executive Board member validly resigns from office pursuant to s. 84 para. 3 AktG, the Executive Board member's service agreement will end on expiry of the statutory notice period pursuant to s. 622 para. 1, 2 Bürgerliches Gesetzbuch (BGB – German Civil Code).

In this event, the respective Executive Board member will first of all receive the bonus he has earned up to the date of his departure. For calculating this bonus, an overall degree of target achievement in relation to the individual component is ascertained on the basis of the targets achieved by the Executive Board member up to the time of his departure. Subsequently, the corresponding pro rata bonus under the individual component is calculated by forming the ratio of this overall degree of target achievement to the target amount set for the entire fiscal year. The pro rata bonus under the multi-year component for the relevant fiscal year is computed by applying the principle of pro rata temporis. With respect to outstanding annual tranches under the long-term share price component, a distinction is made between annual tranches in relation to which the first fiscal year (one-year vesting period) of the three-year performance period has not yet passed, and annual tranches in relation to which the first fiscal year has already passed. In the latter case, the pro rata bonus is fully vested and calculated without applying the principle of pro rata temporis, whereupon it will be paid out once the three-year performance period has elapsed. If the first fiscal year (one-year vesting period) has not yet elapsed, the pro rata bonus is ascertained by applying the principle of pro rata temporis (ratio of the actual period of service during the one-year vesting period to the full relevant one-year vesting period), whereupon it will be paid out after the three-year performance period.

In addition, the respective Executive Board member will receive a severance payment equivalent to the total remuneration agreed for the remaining contractual term by way of compensation for his premature departure from the company. For calculating the corresponding bonus entitlement, an 85 percent degree of target achievement is assumed in relation to the respective target amounts set for bonus entitlements that have not yet vested over the course of the current year or further years, as the case may be. The total remuneration for the remaining term is limited to a maximum of 2 full years of remuneration (severance payment cap). The cap on severance payment is calculated on the basis of the Executive Board member's respective total annual remuneration received during the two calendar years preceding the termination of the service agreement.

If the Executive Board service agreement is unilaterally terminated early without good cause or terminated by the company for good cause, any and all outstanding, undisbursed annual tranches payable under the long-term share price component will be forfeited. Moreover, there is no entitlement to any severance payment in the event of the company exercising its right of lawful extraordinary termination of the Executive Board member's service agreement.

In the event of a change of control, Executive Board members may opt for an early payment at target value of any outstanding, fully vested tranches under the share component. This option will apply regardless of whether or not the respective Executive Board member leaves the company in connection with the change of control event. A change of control event is deemed to have occurred as soon as the company is notified that a shareholder has reached or exceeded 50 percent or 75 percent of the voting rights in the company in accordance with s. 21 Wertpapierhandelsgesetz (WpHG – German Securities Trading Act), an intercompany agreement is entered into with the company as a dependent company in accordance with s. 291 ff. AktG, or absorption under s. 319 AktG or a change of legal form of the company in accordance with the Umwandlungsgesetz (UmwG – German Reorganization Act) is resolved with legal effect. In the event of a change of control, the Executive Board members have no right to unilaterally terminate their respective service agreements.

Remuneration of the members of the Executive Board

Total remuneration in 2017 and 2016

In the year under review, the total remuneration paid to the active Executive Board members of GEA Group Aktiengesellschaft amounted to EUR 6,569,224 and comprised both a fixed component of EUR 4,014,776 and a variable bonus of EUR 2,372,977. The bonus under the long-term share price component is based on the fair value of the entitlement at grant date (January 1, 2017). In the year under review, it amounted to EUR 244,000 for Jürg Oleas, EUR 136,640 for Dr. Helmut Schmale, EUR 111,264 for Steffen Bersch, EUR 111,264 for Niels Erik Olsen and EUR 55,632 for Martine Snels, i.e., a total of EUR 658,800. Martine Snels received a one-time special bonus in the amount of EUR 450,000 gross in compensation for the bonus entitlements she forfeited upon leaving her former employer and joining GEA in the course of the year.

In fiscal year 2016, the total remuneration paid to the incumbent members of the Executive Board amounted to EUR 6,664,764 and comprised both a fixed component of EUR 3,624,014 and a variable bonus of EUR 2,863,417. The bonus under the long-term share price component was based on the fair value of the entitlement at grant date (January 1, 2016). In fiscal year 2016, it amounted to EUR 202,525 for Jürg Oleas, EUR 113,414 for Dr. Helmut Schmale, EUR 92,351 for Steffen Bersch, EUR 92,351 for Niels Erik Olsen as well as EUR 46,176 for Dr. Stephan Petri, i.e. a total of EUR 546,817.

The following table shows an individualized breakdown of fixed remuneration, variable components and other income:

(EUR)	Fixed remuneration	Variable component			Non-cash benefits	Pension subsidies	**Total**
		Individual component	Multi-year component	Long-term share price component[1]			
Jürg Oleas	1,250,000	396,500	267,500	244,000	33,172	–	**2,191,172**
Previous year	1,250,000	400,000	458,000	202,525	43,180	–	**2,353,705**
Dr. Helmut Schmale	700,000	212,800	149,800	136,640	39,418	7,125	**1,245,783**
Previous year	700,000	224,000	256,480	113,414	39,418	6,788	**1,340,100**
Steffen Bersch[2]	570,000	211,128	121,980	111,264	36,879	7,125	**1,058,376**
Previous year	570,000	182,400	208,848	92,351	34,658	6,956	**1,095,213**
Niels Erik Olsen[2]	819,014[4]	156,864	121,980	111,264	50,236	–	**1,259,358**
Previous year	819,014[4]	182,400	208,848	92,351	29,591	–	**1,332,204**
Martine Snels	675,762[5]	45,130	30,495	55,632	7,516	–	**814,535**
Previous year	–	–	–	–	–	–	**–**
Dr. Stephan Petri[3]	–	–	–	–	–	–	**–**
Previous year	285,000	91,200	104,424	46,176	13,348	3,394	**543,542**
Total	**4,014,776**	**1,022,422**	**691,755**	**658,800**	**167,221**	**14,250**	**6,569,224**
Previous year	**3,624,014**	**1,080,000**	**1,236,600**	**546,817**	**160,195**	**17,138**	**6,664,764**

1) In the year under review, no payment under the long-term share price component granted for 2017 was made as this component is computed over a three-year period between 2017 and 2019. The bonus payable under the long-term share price component is based on the fair value of the entitlement at grant date (January 1, 2017).
2) In 2016, due to their participation in the GEA Performance Share Plan 2013 during the period prior to their respective appointment to the Executive Board, Steffen Bersch and Niels Erik Olsen received an additional amount of EUR 27,948.87, each. In 2016, Steffen Bersch received a bonus in the amount of EUR 134,140.68 for his service as Head of Service BA Equipment in the year 2015. In 2016, Niels Erik Olsen received a bonus of EUR 226,305 for his service as Head of Application Centers BA Solutions for the year 2015.
3) Dr. Stephan Petri retired from the Executive Board on June 30, 2016.
4) The amount of EUR 819,014 comprises the annual fixed remuneration of EUR 570,000 and the annual compensation amount of EUR 249,014 Niels Erik Olsen receives instead of pension benefits.
5) The amount of EUR 675,762 comprises the annual fixed remuneration of EUR 570,000 that was granted to Martine Snels on a pro rata temporis basis, as well as a one-off compensation amount of EUR 450,000 paid to Martine Snels in compensation for the bonus entitlements she forfeited when leaving her previous employer and joining GEA during the fiscal year. In addition, Martine Snels received an amount of EUR 83,262 instead of the regular pension commitments to provide for her old age.

Supplemental disclosures relating to share-based remuneration for the period 2015 to 2017

In fiscal years 2015 to 2017, share-based remuneration for the Executive Board was granted under the long-term share price component. Detailed information on existing entitlements of Executive Board members under these remuneration components is outlined in the table below.

Long-term share price component (EUR)	Fair value as of 12/31/2017	Fair value as of 12/31/2016
Jürg Oleas	382,325	676,025
Dr. Helmut Schmale	210,917	367,921
Steffen Bersch	101,722	65,379
Niels Erik Olsen	101,722	65,379
Martine Snels	58,516	–
Markus Hüllmann[1]	70,070	234,366
Dr. Stephan Petri[2]	208,549	355,102
Total	**1,133,821**	**1,764,172**

1) Executive Board service agreement terminated in December 2015
2) Executive Board service agreement terminated in June 2016

In fiscal year 2017, the expenditure for share-based remuneration (i.e. the sum total of the fair value of share-based remuneration awarded in the fiscal year in question as of balance sheet date and the change in fair value in relation to entitlements under share-based remuneration in the fiscal year in question) recognized in the consolidated IFRS financial statements amounted to EUR 39 thousand for Jürg Oleas (previous year: EUR 194 thousand), EUR 23 thousand for Dr. Helmut Schmale (previous year: EUR 108 thousand), EUR 0 thousand for Dr. Stephan Petri (previous year: EUR 143 thousand), EUR –18 thousand for Markus Hüllmann (previous year: EUR 22 thousand), EUR 36 thousand for Steffen Bersch (previous year: EUR 65 thousand), EUR 36 thousand for Niels Erik Olsen (previous year: EUR 65 thousand) and EUR 59 thousand for Martine Snels (previous year: EUR 0 thousand).

Further information on the long-term share price component is outlined in note 6.3.3 (see page 194 ff.) to the consolidated financial statements.

Supplemental disclosures relating to recognized expenditure and disbursed remuneration

In fiscal year 2017, expenditure in the aggregate amount of EUR 7,523,304 (previous year: EUR 8,861,109) was recognized for the members of the Executive Board. Besides expenditure for fixed and variable remuneration, this amount also comprises non-cash benefits, pension subsidies, additions to pension provisions (service and interest cost) as well as changes in the value of the entitlements to share-based remuneration that was recognized as interest expense. In fiscal year 2017, remuneration components totaling EUR 9,005,614 (previous year: EUR 7,779,540) were paid out. Apart from non-performance-related remuneration components, the amounts paid out also include disbursements of variable remuneration for the previous year as well as amounts disbursed under multi-year variable remuneration components in the year under review. Moreover, these disbursements also include the special bonus paid to Martine Snels in compensation for the bonus entitlements she forfeited upon leaving her previous employer.

(EUR)	Recognized expenditure	Disbursements
Jürg Oleas	2,616,369	2,474,240
Previous year	2,933,449	2,917,205
Dr. Helmut Schmale	1,441,170	1,406,880
Previous year	1,638,759	1,640,077
Steffen Bersch[1]	1,481,561	1,005,252
Previous year	1,527,482	611,614
Niels Erik Olsen[1]	1,184,528	1,260,498
Previous year	1,310,508	848,605
Martine Snels	817,419	600,016
Previous year	–	–
Niels Graugaard[2]	–	–
Previous year	–	75,370
Markus Hüllmann[3]	–17,743	146,550
Previous year	22,385	659,843
Dr. Stephan Petri[4]	–	2,112,178[5]
Previous year	1,428,526	1,026,827
Total	**7,523,304**	**9,005,614**
Previous year	**8,861,109**	**7,779,540**

1) In 2016, due to their participation in the GEA Performance Share Plan 2013 during the period prior to their respective appointment to the Executive Board, Steffen Bersch and Niels Erik Olsen received an additional amount of EUR 27,948.87, each. In 2016, Steffen Bersch received a bonus in the amount of EUR 134,140.68 for his service as Head of Service BA Equipment in the year 2015. In 2016, Niels Erik Olsen received a bonus of EUR 226,305 for his service as Head of Application Centers BA Solutions for the year 2015.
2) Executive Board service agreement terminated in April 2013
3) Executive Board service agreement terminated in December 2015
4) Executive Board service agreement terminated in June 2016
5) In January 2017, Dr. Stephan Petri received an amount of EUR 2,112,177.80 in compensation for the remuneration and fringe benefits he forfeited when leaving the company early by mutual agreement as of June 30, 2016.

Executive Board remuneration in accordance with the GCGC model tables

Model table 1 referring to section 4.2.5 para. 3 (1st bullet point) GCGC "Value of the benefits granted for the year under review"

Benefits granted	Jürg Oleas				Dr. Helmut Schmale			
	Chairman of the Executive Board				Chief Financial Officer			
	2016	2017	Min. (2017)	Max. (2017)[2]	2016	2017	Min. (2017)	Max. (2017)[2]
Fixed remuneration	1,250,000	1,250,000	1,250,000	1,250,000	700,000	700,000	700,000	700,000
Fringe benefits	43,180	33,172	33,172	33,172	39,418	39,418	39,418	39,418
Pension subsidies	0	0	0	0	6,788	7,125	7,125	7,125
Total non-performance-related components	**1,293,180**	**1,283,172**	**1,283,172**	**1,283,172**	**746,206**	**746,543**	**746,543**	**746,543**
One-year variable remuneration	**500,000**	**500,000**	**0**	**1,000,000**	**280,000**	**280,000**	**0**	**560,000**
Individual component	500,000	500,000	0	1,000,000	280,000	280,000	0	560,000
Multi-year variable remuneration	**702,525**	**744,000**	**0**	**2,000,000**	**393,414**	**416,640**	**0**	**1,120,000**
Multi-year component	500,000	500,000	0	1,250,000	280,000	280,000	0	700,000
Long-term share price component (tranche 2016)[1]	202,525	0	0	0	113,414	0	0	0
Long-term share price component (tranche 2017)[1]	0	244,000	0	750,000	0	136,640	0	420,000
Total performance-related components	**1,202,525**	**1,244,000**	**0**	**3,000,000**	**673.414**	**696,640**	**0**	**1,680,000**
Service cost	454,378	495,375	495,375	495,375	209,727	218,511	218,511	218,511
Total remuneration (GCGC)	**2,950,083**	**3,022,547**	**1,778,547**	**4,778,547**	**1,629,347**	**1,661,694**	**965,054**	**2,645,054**

1) The bonus attributable to the long-term share price component is based on the fair value of the entitlement at grant date. Grant date for the 2016 tranche was 01/01/2016, for the 2017 tranche it was 01/01/2017.
2) Not taking into account the possibility of granting a special discretionary bonus.

Benefits granted	Steffen Bersch				Niels Erik Olsen			
	Member of the Executive Board				Member of the Executive Board			
	2016	2017	Min. (2017)	Max. (2017)[2]	2016	2017	Min. (2017)	Max. (2017)[2]
Fixed remuneration	570,000	570,000	570,000	570,000	819,014	819,014[3]	819,014[3]	819,014[3]
Fringe benefits	34,658	36,879	36,879	36,879	29,591	50,236	50,236	50,236
Pension subsidies	6,956	7,125	7,125	7,125	0	0	0	0
Total non-performance-related components	**611,614**	**614,004**	**614,004**	**614,004**	**848,605**	**869,250**	**869,250**	**869,250**
One-year variable remuneration	**228,000**	**228,000**	**0**	**456,000**	**228,000**	**228,000**	**0**	**456,000**
Individual component	228,000	228,000	0	456,000	228,000	228,000	0	456,000
Multi-year variable remuneration	**320,351**	**339,264**	**0**	**912,000**	**320,351**	**339,264**	**0**	**912,000**
Multi-year component	228,000	228,000	0	570,000	228,000	228,000	0	570,000
Long-term share price component (tranche 2016)[1]	92,351	0	0	0	92,351	0	0	0
Long-term share price component (tranche 2017)[1]	0	111,264	0	342,000	0	111,264	0	342,000
Total performance-related components	**548,351**	**567,264**	**0**	**1,368,000**	**548,351**	**567,264**	**0**	**1,368,000**
Service cost	454,329	474,620	474,620	474,620	5,276	0	0	0
Total remuneration (GCGC)	**1,614,294**	**1,655,888**	**1,088,624**	**2,456,624**	**1,402,232**	**1,436,514**	**869,250**	**2,237,250**

1) The bonus attributable to the long-term share price component is based on the fair value of the entitlement at grant date. Grant date for the 2016 tranche was 01/01/2016, for the 2017 tranche it was 01/01/2017.
2) Not taking into account the possibility of granting a special discretionary bonus.
3) The amount of 819,014 comprises the annual fixed remuneration of EUR 570,000 and the annual compensation amount of EUR 249,014 granted to Niels Erik Olsen instead of pension benefits.

Benefits granted	Martine Snels			
	Member of the Executive Board			
	As of 10/01/2017			
	2016	2017	Min. (2017)	Max. (2017)[2]
Fixed remuneration	0	142,500	142,500	142,500
Fringe benefits	0	457,516[3]	457,516[3]	457,516[3]
Pension subsidies	0	0	0	0
Total non-performance-related components	**0**	**600,016**	**600,016**	**600,016**
One-year variable remuneration	**0**	**57,000**	**0**	**114,000**
Individual component	0	57,000	0	114,000
Multi-year variable remuneration	**0**	**112,632**	**0**	**228,000**
Multi-year component	0	57,000	0	142,500
Long-term share price component (tranche 2016)[1]	0	0	0	0
Long-term share price component (tranche 2017)[1]	0	55,632	0	85,500
Total performance-related components	**0**	**169,632**	**0**	**342,000**
Service cost	0	83,262	83,262	83,262
Total remuneration (GCGC)	**0**	**852,910**	**683,278**	**1,025,278**

1) The bonus attributable to the long-term share price component is based on the fair value of the entitlement at grant date. Grant date for the 2016 tranche was 01/01/2016, for the 2017 tranche it was 01/01/2017.
2) Not taking into account the possibility of granting a special discretionary bonus.
3) The amount of EUR 457,516 comprises a one-off compensation amount of EUR 450,000 paid to Martine Snels in compensation for the bonus entitlements she forfeited when leaving her previous employer and joining GEA during the fiscal year.

Model table 2 referring to section 4.2.5 para. 3 (2nd bullet point) GCGC "Allocation for the year under review"

Allocation	Jürg Oleas Chairman of the Executive Board		Dr. Helmut Schmale Chief Financial Officer	
	2016	2017	2016	2017
Fixed remuneration	1,250,000	1,250,000	700,000	700,000
Fringe benefits	43,180	33,172	39,418	39,418
Pension subsidies	0	0	6,788	7,125
Total non-performance-related components	**1,293,180**	**1,283,172**	**746,206**	**746,542**
One-year variable remuneration	**400,000**	**396,500**	**224,000**	**212,800**
Individual component	400,000	396,500	224,000	212,800
Multi-year variable remuneration	**955,525**	**600,568**	**525,144**	**329,657**
Multi-year component	458,000	267,500	256,480	149,800
Long-term share price component (tranche 2014)	0	333,068	0	179,857
Long-term share price component (tranche 2013)	497,525	0	268,664	0
Total performance-related components	**1,355,525**	**997,068**	**749,144**	**542,457**
Service cost	454,378	495,375	209,727	218,511
Total remuneration (GCGC)	**3,103,083**	**2,775,615**	**1,705,076**	**1,507,510**

Allocation	Steffen Bersch[1] Member of the Executive Board		Niels Erik Olsen[1] Member of the Executive Board	
	2016	2017	2016	2017
Fixed remuneration	570,000	570,000	819,014	819,014[2]
Fringe benefits	34,658	36,879	29,591	50,236
Pension subsidies	6,956	7,125	0	0
Total non-performance-related components	**611,614**	**614,004**	**848,605**	**869,250**
One-year variable remuneration	**182,400**	**211,128**	**182,400**	**156,864**
Individual component	182,400	211,128	182,400	156,864
Multi-year variable remuneration	**208,848**	**121,980**	**208,848**	**121,980**
Multi-year component	208,848	121,980	208,848	121,980
Long-term share price component (tranche 2014)	0	0	0	0
Long-term share price component (tranche 2013)	0	0	0	0
Total performance-related components	**391,248**	**333,108**	**391,248**	**278,844**
Service cost	454,329	474,620	5,276	0
Total remuneration (GCGC)	**1,457,191**	**1,421,732**	**1,245,129**	**1,148,094**

1) In 2016, due to their participation in the GEA Performance Share Plan 2013 during the period prior to their respective appointment to the Executive Board, Steffen Bersch and Niels Erik Olsen received an additional amount of EUR 27,948.87, each. In 2016, Steffen Bersch received a bonus in the amount of EUR 134,140.68 for his service as Head of Service BA Equipment in the year 2015. In 2016, Niels Erik Olsen received a bonus of EUR 226,305 for his service as Head of Application Centers BA Solutions for the year 2015.
2) The amount of EUR 819,014 comprises the annual fixed remuneration of EUR 570,000 and the annual compensation amount of EUR 249,014 Niels Erik Olsen receives instead of pension benefits.

Allocation	Martine Snels		Dr. Stephan Petri	
	Member of the Executive Board		Member of the Executive Board	
	As of 10/01/2017		Until 06/30/2016	
	2016	2017	2016	2017
Fixed remuneration	0	142,500	285,000	0
Fringe benefits	0	457,516*	13,348	0
Pension subsidies	0	0	3,394	0
Total non-performance-related components	**0**	**600,016**	**301,742**	**0**
One-year variable remuneration	**0**	**45,130**	**91,200**	**0**
Individual component	0	45,130	91,200	0
Multi-year variable remuneration	**0**	**30,495**	**323,335**	**0**
Multi-year component	0	30,495	104,424	0
Long-term share price component (tranche 2014)	0	0	0	0
Long-term share price component (tranche 2013)	0	0	218,911	0
Total performance-related components	**0**	**75,625**	**414,535**	**0**
Service cost	0	83,262	713,645	0
Total remuneration (GCGC)	**0**	**758,903**	**1,429,922**	**0**

*) The amount of EUR 457,516 comprises a one-off compensation amount of EUR 450,000 paid to Martine Snels in compensation for the bonus entitlements she forfeited when leaving her previous employer and joining GEA during the fiscal year.

Benefits granted	Markus Hüllmann		Niels Graugaard	
	Member of the Executive Board		Member of the Executive Board	
	Until 12/31/2015		Until 04/18/2013	
	2016	2017	2016	2017
Fixed remuneration	0	0	0	0
Fringe benefits	352	0	0	0
Pension subsidies	0	0	0	0
Total non-performance-related components	**352**	**0**	**0**	**0**
One-year variable remuneration	**0**	**0**	**0**	**0**
Individual component	0	0	0	0
Multi-year variable remuneration	**164,183**	**146,550**	**75,370**	**0**
Multi-year component	0	0	0	0
Long-term share price component (tranche 2014)	0	146,550	0	0
Long-term share price component (tranche 2013)	164,183	0	75,370	0
Total performance-related components	**164,183**	**146,550**	**75,370**	**0**
Service cost	0	0	0	0
Total remuneration (GCGC)	**164,535**	**146,550**	**75,370**	**0**

Remuneration of former Executive Board members and their surviving dependents

In fiscal year 2017, former members of the Executive Board and their surviving dependents received remunerations in the amount of EUR 4,552 thousand (previous year: EUR 6,892 thousand) from GEA. As of December 31, 2017, GEA had set up pension provisions totaling EUR 66,544 thousand (previous year: EUR 69,547 thousand) for former Executive Board members and their surviving dependents.

In January 2017, Dr. Stephan Petri received an amount of EUR 2,112,177.80 in compensation for the remuneration and fringe benefits he forfeited when leaving the company early by mutual agreement as of June 30, 2016. For further information on Dr. Stephan Petri's departure and the agreement concluded in this context, please see the 2016 Annual Report (see page 58 ff.).

Remuneration of the Supervisory Board members

The remuneration of the Supervisory Board members comprises solely a fixed compensation. It does not include any performance-related component.

In the year under review, the expenses incurred for the Supervisory Board amounted to EUR 1,260 thousand (previous year: EUR 1,217 thousand). Pursuant to s. 15 para. 1 of the Articles of Association, each member of the Supervisory Board receives a fixed annual fee of EUR 50 thousand payable after the end of each fiscal year, in addition to the reimbursement of their expenses. The Chairman of the Supervisory Board receives two and a half times, his deputy one and a half times this amount. In accordance with s. 15 para. 2 of the Articles of Association, members of the Presiding Committee and the Audit Committee each receive an additional EUR 35 thousand. The chairman of each of these committees receives twice this amount. No separate remuneration is paid to members of the Mediation Committee and the Nomination Committee. Members who join or leave the Supervisory Board and/or its Committees during the year only receive a pro rata amount for the period of their membership. Pursuant to s. 15 para. 3 of the Articles of Association, after the end of the fiscal year, the Supervisory Board members also receive an attendance fee of EUR 1 thousand for each meeting of the Supervisory Board, the Presiding Committee and the Audit Committee that they have attended. In fiscal year 2017, the Supervisory Board held eight meetings while the Presiding Committee and the Audit Committee each convened on five occasions.

The following table shows the individual remuneration and its respective components for the members of the Supervisory Board, the Presiding Committee and the Audit Committee in 2017 compared with the previous year:

(EUR)	Supervisory Board remuneration	Presiding Committee remuneration	Audit Committee remuneration	Attendance fees	Total
Dr. Heraeus (until April 20, 2016)	–	–	–	–	–
Previous year	37,910	21,230	10,615	4,000	**73,755**
Siegers* (until September 29, 2016)	–	–	–	–	–
Previous year	55,943	26,107	–	8,000	**90,050**
Dr. Perlet	125,000	70,000	35,000	18,000	**248,000**
Previous year	102,254	59,385	24,385	14,000	**200,024**
Löw*	75,000	35,000	–	13,000	**123,000**
Previous year	55,055	24,385	26,107	14,000	**119,547**
Bastaki	50,000	35,000	–	12,000	**97,000**
Previous year	50,000	24,385	–	10,000	**84,385**
Prof. Dr. Bauer	50,000	35,000	–	12,000	**97,000**
Previous year	50,000	24,385	–	10,000	**84,385**
Eberlein	50,000	–	70,000	13,000	**133,000**
Previous year	50,000	–	70,000	12,000	**132,000**
Gröbel*	50,000	35,000	–	13,000	**98,000**
Previous year	50,000	35,000	–	11,000	**96,000**
Hubert*	50,000	35,000	–	12,000	**97,000**
Previous year	12,705	7,077	–	2,000	**21,782**
Kämpfert	50,000	–	35,000	13,000	**98,000**
Previous year	50,000	–	7,077	8,000	**65,077**
Kerkemeier*	50,000	–	–	5,000	**55,000**
Previous year	50,000	–	–	7,000	**57,000**
Krönchen*	50,000	–	35,000	13,000	**98,000**
Previous year	50,000	–	35,000	12,000	**97,000**
Spence	50,000	–	–	8,000	**58,000**
Previous year	50,000	–	–	7,000	**57,000**
Dr. Zhang (since April 21, 2016)	50,000	–	–	8,000	**58,000**
Previous year	34,836	–	–	4,000	**38,836**
Total	**700,000**	**245,000**	**175,000**	**140,000**	**1,260,000**
Previous year	**698,703**	**221,954**	**173,184**	**123,000**	**1,216,841**

*) The employee representatives from the Works Council and the Union remit their respective remuneration to the Hans Böckler Foundation in accordance with applicable guidelines.

Non-Financial Statement – Sustainability at GEA

About sustainability reporting

GEA's sustainability report for the fiscal year 2017 is in line with the international Standards set by the Global Reporting Initiative (GRI). The report has been prepared in accordance with the Core Option of the GRI Standards. This way, GEA focuses on the group's sustainability issues that were identified on the basis of a materiality analysis. The reporting profile is outlined on page 103 ff.

Unless otherwise specified, the company's sustainability reporting embraces GEA's worldwide activities. The information provided is based on an analysis of GEA's management systems with the data being supplied by the operational units as well as the competent departments at the Global Corporate Center. The GRI Content Index can be found at the end of the Annual Report (see page 249 ff.).

Sustainability reporting embraces the following subject areas:

- Responsibility for the economic performance of the company
- Responsibility for correct behavior
- Responsibility for employees
- Responsibility for quality, health, safety and the environment
- Social responsibility
- Reporting profile

Responsibility for the economic performance of the company

All GEA stakeholders expect the company to show economic strength. The latter guarantees jobs, efficient and innovative products, reasonable shareholder value, as well as sound investments, value creation – also outside of the company – and social engagement. Supply chain topics are addressed in the chapter covering "Procurement" (see page 27 f.).

Profitability and liquidity

Being a listed company, GEA has a particular responsibility towards its investors. Its focus is placed on growth, operational efficiency as well as cash management. GEA's primary objective is to sustainably increase enterprise value by accomplishing profitable growth. For the purpose of providing the necessary financial leeway and focusing the group even more closely on cash flow generation, the cash flow driver margin (see page 25) represents one performance indicator of the group that is also firmly embedded in the bonus system. For this reason, GEA reports this key figure as an indicator of economic performance.

Corporate structure

Relying on the "Equipment" and "Solutions" Business Areas, GEA seeks to harness operational synergies across technologies and applications while promoting functional efficiency by means of standardized processes. Customer-focused sales and service activities are locally bundled in dedicated country organizations. Today, the company's OneGEA group structure embraces flat hierarchies, with GEA operating close to the customer and presenting a unified brand all around the globe.

Service

The commercial success of our customers' manufacturing operations is largely dependent on machine performance and uptime. State-of-the-art production facilities and plants are highly automated, and even minimal downtime may have a major impact on productivity.

In 2017, GEA decided to merge the service divisions of the Equipment and Solutions Business Areas into OneGEA Global Service Operations – a milestone in the further development of the business. The new service organization ensures enhanced internal cooperation between the former Equipment and Solutions service teams while fostering synergies and, most notably, allowing to gain higher levels of customer satisfaction. For this purpose, GEA is collecting the relevant data on the installed base in order to sustain the knowledge of existing plants and systems and offer tailored services.

GEA seeks global recognition as a leading industrial supplier of life cycle service concepts. GEA's job is to establish, preserve and enhance the customers' performance through the entire life cycle of their respective plants or facilities. For this purpose, the group has developed a whole string of strategic initiatives that also take into account the results of GEA's global customer satisfaction survey conducted in 2016 and those of the follow-up survey of 2017:

The service business is built on the performance and personal relationships between the members of the local workforce. For guaranteeing high-quality service, GEA focuses on the development of regional skills, the exchange of best practice and the expansion of the regional service footprint. A management system designed to structure and manage expertise on an organizational, team and individual level was implemented with a view to supporting the new setup. The new system promotes the provision of adequate training and learning activities and helps identify the right service staff capable of tackling specific service tasks.

Based on its life-cycle approach, GEA acts as a value creation partner that accompanies its customers through the entire life cycle of the product: from plant dimensioning, commissioning, spare parts supply with shorter response times, service level agreements, repair following failure up to preventive and predictive maintenance. In this context, digital services like condition-based monitoring play an important role. GEA PerformancePlus represents an all-embracing and proactive approach aimed at offering innovative services that go beyond routine maintenance and repair. By employing and integrating state-of-the-art condition monitoring techniques in combination with its manufacturing knowhow, GEA is also capable of supporting customers in accomplishing ambitious performance targets.

Speed is an essential requirement made by the customer in connection with the service business. In the year under review, GEA completed highly promising projects designed to quickly support customers: GEA Remote Eye Wear constitutes a service innovation allowing the company to handle repairs, process optimization or inspections online and with the help of smart glasses – in real time and without travel, while GEA offers parties operating GEA homogenizers the so-called "HOM Upgrade Identification Tool". If an upgrade is required, the customer merely needs to enter the respective serial number and, within seconds, GEA will identify the correct part including the respective order number, whereupon delivery will occur as fast as possible. For the purpose of being able to ensure the efficient and swift provision of an even larger number of parts, spare parts for packaging plants and equipment are now integrated into the GEA European Parts Logistics Center located in Cologne, to give but one example.

In the year under review, GEA's service business accounted for more than 30 percent of group revenue, which was in line with the set target.

Economic impacts of climate change

"Engineering for a better world": this GEA tagline embodies the core value proposition of the group. Apart from responsibly shaping its own value creation processes, the company fosters sustainable business practices and makes a contribution to the protection of the natural environment by offering its customers efficient products and process solutions. As a rule, the technologies and processes they employ are highly energy-intensive, which is why energy savings and reductions in emissions or waste increasingly affect the investment decisions made by these customers. For this reason, GEA's ambition is to come up with more and more sophisticated technology solutions.

Lower consumption of resources, less floor space, extensive energy recovery potential, ease of operation – these are the criteria currently applied by customers when making their purchasing decisions. In turn, the latter have a direct and favorable impact on climate-relevant emissions. More often than not, the economic and ecological criteria governing investment decisions made in GEA's customer industries are virtually identical since enhanced efficiency triggers lower emissions and results in lower costs. Amongst other things, GEA's business success depends on products and solutions that are more efficient than previous generations while alleviating ecological impacts in the process.

A capital goods manufacturer may only set itself apart from its peers and provide enhanced customer value by gaining technological leadership, which, in turn, requires innovation. In this respect, there is a connection between GEA's innovative strength and the positive effect of its products, solutions and services when it comes to mitigating climate change.

Best practice: The world's largest ammonia heat pump made by GEA

In November 2017, the world's largest ammonia heat pump supplying a capacity of 40 megawatts for district heating was put into operation in Malmö, Sweden. GEA's concept provides a solution that recovers the city's waste water heat using it for heating 10,000 households while considerably reducing the ecological footprint of both the customer and the city.

Thus, the renewable heating system devised by GEA lowers Malmö's carbon dioxide emissions by 50,000 tons per year, which is equivalent to the emissions generated by around 10,000 motor vehicles. Using ammonia, GEA's heat pump allows the city to save 20 tons of R134a, a gas that has traditionally been used in heat pumps and would have entailed a high GWP (global warming potential) equivalent to 26,000 tons of CO_2.

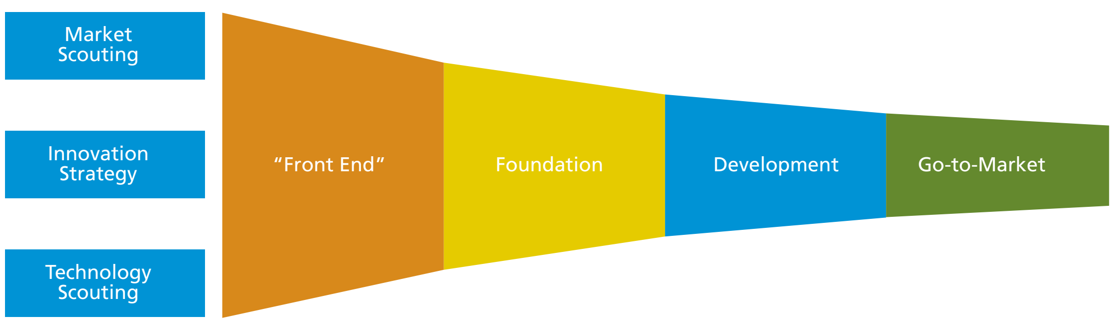
GEA's innovation process

GEA offers a wide range of components, systems and process equipment while never tiring of improving them in terms of resource efficiency, flexibility, quality and costs. GEA has defined around 200 core technologies that offer tremendous potential for optimization, also when combined with other technologies.

As part of the realignment of the group's structure, GEA adjusted its innovation process and revised the set of key performance indicators. In the year under review, GEA defined a unified company-wide innovation process and commenced roll-out. As a result, particular emphasis is placed on further evolving the first stages ("front end") of the new innovation management scheme, i.e. the systematic generation of ideas as well as a feasibility check. For instance, this includes advanced issue resolution and tools for more and better ideas, the systematic analysis of market and technology-driven trends and customer needs as well as a new state-of-the-art idea management platform.

GEA's innovation management process is as follows:

Innovation Management at GEA



So-called campaigns represent the core instrument designed to align ideas with a strategic objective. Once the theme of a campaign – such as 'sustainable industrial heat production' – is determined, a workshop or even an "Innovation Day" covering this field is held at a specifically selected GEA site. There, the topic is presented and refined by all parties involved. Subsequently, the respective campaign theme is activated on the browser-based innovation platform including the seed ideas of the initial workshop. This allows the experts involved to further develop the topic on an interdisciplinary level. The year under review witnessed the launch of several bigger campaigns.

For gauging the success of the resources allocated to the field of innovation across the entire company, GEA relies on key performance indictors along the "innovation funnel". At the end of 2017 there were approx. 300 active ideas or projects in the "front end" and "foundation" phase, with around 240 future product innovations undergoing the "development" and "go-to-market" phase. Another example is the revenue generated by new products and technologies that are less than three years old: for typical GEA product groups its share is on average 20 percent. The corresponding reporting process will be further refined over time.

Best practice: Digi@GEA

The Digi@GEA initiative is designed to accelerate GEA's digital journey. It embraces five lighthouse projects in the field of digitalization tasked with developing efficient and powerful products that are of great relevance to GEA:

1. OptiProcess, which has been launched in the meantime, makes use of production data and machine learning to support customers in optimizing the performance of their plants.
2. Process Business Modelling is designed to provide a real-time overview of key financial and operating data of a plant or installation. This is to allow customers to take more informed business decisions and define an optimum benchmark level.
3. Digital Twin is to create virtual plant models that take into consideration real data and components while allowing GEA to provide efficient services, shorten time-to-market and offer the customer state-of-the-art simulations.
4. ServiceMe seeks to develop an open, global and cloud-based platform that pairs customers up with service engineers for the purpose of providing real-time support.
5. Big Data Analytics is to develop a platform that enables GEA to collect, save, maintain and analyze large amounts of data for the purpose of deriving and offering effective and profitable business recommendations.

Best Practice: Brewery 4.0

At the drinktec 2017 trade fair, GEA showcased its "Brewery 4.0" concept designed for the brewing industry of the future. It combines the process of continuous beer production with just-in-time production technologies while harnessing the potential offered by digitalization. Brewery 4.0 aims at affording customers maximum flexibility along the supply chain while simultaneously reducing the level of tied-up capital. In doing so, GEA considers aspects of sustainability that involve both the handling of the raw ingredients malt and water as well as the energy and space required by the respective plants.

In the field of digitalization, GEA is currently In the field of digitalization, GEA is currently working on the development of a system capable of connecting production technology with the storage, delivery and order management system in an IT-based brewery environment. Moreover, the consumer behavior of end users, for instance in supermarkets, is to be integrated into the organization of the supply chain. Due to the digitalization of the process stages involved, brewers are provided with ever increasing volumes of data that need to be logically qualified, consolidated and translated into automatic operational instructions. For instance, this will allow the generation of trend analyses resulting in increased plant efficiency and availability. This data is vital for business processes like raw material yield, plant availability and efficiency as well as service offers like preventive maintenance.

For a detailed report on GEA's research and development activities, including expenses and the number of allocated staff, see the section on "Research and Development" (see page 28 ff.).

Responsibility for correct behavior

Compliance as a group-wide basic principle designed to warrant adherence to the law as well as internal corporate policies represents an essential element of corporate governance that impacts each and every area of day-to-day business within the group. All GEA managers and employees are obliged to make sure that no compliance violations are committed in their respective areas of responsibility. A detailed outline of GEA's Compliance Management System can be found in the Corporate Governance Report (see page 58 ff.) as well as online on GEA's website.

Human rights

As early as 2007, the Executive Board and the European Works Council of GEA Group Aktiengesellschaft as well as the European and International Metalworkers' Federation developed and adopted the basic principles of social responsibility ("Codes of Conduct"). The latter apply to all group employees worldwide. In these Codes, GEA inter alia pledges to respect people's inalienable human rights, equal opportunities and the principle of non-discrimination, the freedom of association for workers, the prohibition of child and forced labor as well as fair wages and working conditions.

Integrity system (whistleblower system)

A professional integrity system represents an effective tool for guaranteeing and monitoring compliance with the basic principles of social responsibility as well as adherence to compliance rules and regulations. Since 2014, GEA has offered its employees and third parties the certified Business Keeper Monitoring System (BKMS), a secure portal that may be used for reporting such violations.

The integrity system does not constitute a general platform for voicing complaints. It merely embraces selected reporting categories that imply particular risks to the company, its employees and any other stakeholders. These categories include corruption, fraud and breach of trust, money-laundering, violations of anti-trust and competition law, export control regulations, data protection as well as accounting regulations. Breaches of the Codes of Conduct come under a distinct reporting category that also includes reports on potential human rights violations.

GEA's Integrity System is available worldwide 24/7 in nine different languages and may be accessed from any PC connected to the Internet. The information technology used by the external provider ensures the protection of the whistleblower as well as confidentiality. Subject to their respective remits, only a very limited number of GEA employees from Compliance, Internal Audit and Human Resources have access to the reports submitted. For protecting both whistleblowers and accused individuals, all incoming reports are treated confidentially. Should the whistleblower prefer to submit his/her report anonymously, he or she may do so provided that this is permitted in their respective country.

The system ensures that all steps involved in processing and resolving the reported cases are documented in a transparent and plausible way. If an incident is reported under the integrity system, this report is assigned to the competent department (e.g. HR), whereupon the respective facts of the case are investigated in order to arrive at a conclusion. Should it be impossible to ultimately clarify the circumstances without additional information that may identify the whistleblower outside the integrity system, the whistleblower is contacted by one of the above departments asking whether a further probe into the matter is requested. Individual cases reported in 2017 included compliance with safety regulations, purported fraud committed by employees to the detriment of GEA or cases of alleged harassment or discrimination within the group. The competent departments get to the bottom of concrete individual incidents and consider whether enhanced communication or staff management, a change of processes or the use of software may help avoid such cases in the future.

In the year under review, a total of three reports were filed under the BKMS falling within the remit of Human Resources.

Preventive processes

Processes designed to prevent compliance violations figure prominently in GEA's compliance scheme. For this reason, individuals in close contact with the customer, such as sales agents, have to undergo strict risk vetting for the purpose of corruption prevention prior to entering into a contract with GEA. In countries with a higher risk of corruption, a compliance officer must approve the conclusion of such a contract if commission rates exceed a certain limit or if other predefined risk criteria apply. Sponsoring and donations are subject to specific internal authorization schemes. For instance, all donations and sponsoring activities exceeding the amount of EUR 5,000 have to be approved by a competent member of the group's Executive Board; all amounts greater than EUR 10,000 require the approval of the full Executive Board.

Training and consulting

Once again, the year under review saw the continuation of compliance training courses:

- Basic compliance training comprises extensive group training; in 2017, such training was delivered to selected groups of employees in Australia, Germany, Dubai, France, Japan, South America, Ukraine as well as the USA.
- Face-to-face training for selected Local Export Managers and employees regularly doing business in countries subject to partial embargoes addressed the following topics: sanctions, embargoes and US Re-export Controls.
- Apart from that, an e-learning seminar on export control legislation for all local export control managers was delivered worldwide.
- In addition, 2017 saw the organization of further compliance e-learning courses with a focus on anti-corruption and anti-trust law. All employees from the target groups at risk were invited to attend. The group included circa 7,000 attendees for anti-corruption and/or approximately 6,600 that addressed matters of anti-trust law.
- Relevant target groups – IT staff, project managers – received training in the field of data protection.

Apart from the competent Compliance Officer, larger sites also have so-called Local Compliance Managers to ensure correct behavior in operational day-to-day business and offer a competent point of contact at all times; at regular intervals, they receive specific fraud prevention, anti-corruption, money-laundering, anti-trust and data protection training. They serve as points of contact in relation to local compliance issues and are to offer some initial advice.

Audits

Within the framework of its standard, selective and special audits, Group Internal Audit also checks compliance aspects. 2017 saw the performance of 23 audits at GEA sites worldwide. Group Internal Audit is tasked with protecting corporate assets, verifying process efficiency and compliance, as well as checking the completeness and documentation of dossiers. This also includes compliance audits in the fields of anti-corruption and export control. In the 2017 fiscal year, the audits performed by Group Internal Audit were supplemented by the group auditor's focus on compliance, which represented one of the key audit areas.

Violations

If employees violate compliance rules, such non-compliance is punished depending on the degree to which the individual can be blamed as well as the severity of the case. The sanctions imposed range from a reprimand to a warning letter and may ultimately lead to the termination of employment. In very severe cases, GEA reserves the right to sue the person in question for damages and/or report the violation to the competent authority.

If there is a risk of investigative or regulatory proceedings of fundamental importance being instituted by a prosecuting or regulatory agency against a group company or a GEA employee in connection with his or her service for the company, this must be immediately reported to the Global Corporate Center.

GEA uses a risk matrix to ascertain whether fines may be significant (see page 109). A risk and, thus, a fine is deemed significant if it exceeds an amount of EUR 10 million. In the 2017 fiscal year, no significant fines were imposed on GEA.

Supply chain compliance

GEA customers do not only consider quality, efficiency and safety as well as correct behavior in business to be important in connection with GEA's products and services, but also with regard to the entire supply chain. Only by observing fundamental compliance standards and adhering to the basic principles of occupational health and safety while respecting the environment along the entire supply and value chain will the company ensure the necessary trust that forms the bedrock of each and every business relationship, which is why this area is given highest priority. GEA practices a zero-tolerance policy with regard to unethical behavior in business transactions, in particular in connection with bribery, corruption or forced labor. GEA expects all its suppliers to abide by comparable standards and to demonstrate ethically correct behavior in the conduct of their business. As a technology group with a high level of materials expertise, GEA sources its raw materials, goods and services worldwide by relying solely on qualified suppliers to ensure the sustained success of its customers by providing innovative product and service solutions.

The new group structure allowed GEA to establish a streamlined OneGEA procurement organization. In this context, the company put in place a new procurement portal on GEA's website at gea.com. The registration process requires that suppliers commit themselves to adhering to the code of conduct established by the German Association of Materials Management, Purchasing and Logistics. The code refers to the ten principles of the United Nations Global Compact on human rights, labor standards, the environment and anti-corruption. By the end of the period under review, a total of 740 suppliers had registered since the launch of the portal in May 2016.

Apart from continuously improving its internal behavioral guidelines, GEA also considered it necessary to define its own code of conduct for suppliers. In September 2017, the company's "Quality, Health, Safety and Environment" (QHSE) department initiated a corresponding project together with Procurement.

GEA continuously screens all suppliers. As a rule, these screenings also embrace environmental and social criteria. Key suppliers are inspected on a yearly basis. In the year under review, the company conducted 453 supplier screenings (previous year: 300).

Responsibility for employees

The group's success reflects the result of the performance of almost 18,000 employees. Each and every one of them is instrumental in accomplishing the company's overall result. It is the employees and the managers who make all the difference and form the fundamental bedrock of the future value enhancement of the company.

Detailed headcount figures are provided in the company's financial report (see page 49).

Co-determination

Labor relations at GEA are characterized by many years of respectful mutual dialogue and interaction between employer and employees as well as parity co-determination on the company's Supervisory Board. Half of the members of the Supervisory Board are shareholder representatives while the other half is composed of employee representatives. As the employee representatives serving on the Supervisory Board are elected by the entire German workforce, the interests of all German employees – blue collar workers, white collar workers, and executives alike – are represented by means of this kind of corporate co-determination. Apart from numerous local works councils and shared works councils, GEA also has a Group Works Council established in accordance with the German Works Constitution Act. At company level, local matters and issues are governed by works agreements.

GEA's European Works Council has the right to be informed and consulted by the management. It engages in a regular dialogue with the Executive Board and Human Resources. The activities of the European Works Council focus on transboundary effects of decisions and developments on employees in the EU member states, the countries of the European Economic Area as well as Switzerland.

The basic principles of social responsibility ("Codes of Conduct") signed by the Executive Board and the European Works Council apply worldwide. The latter include GEA's pledge to respect human rights as well as the generally accepted core labor standards of the International Labor Organization (ILO). Furthermore, GEA fully abides by the OECD Guidelines for Multinational Enterprises. A professional, certified whistleblower system for reporting potential violations of the basic principles of social responsibility is in place and globally available (see page 87).

Disclosure 102-41

Worldwide, around 42 percent of the workforce are covered by collective bargaining agreements. This data is based on a country-specific survey that was conducted. Starting from the next fiscal year onwards, this data will be compiled on the basis of the new "Workday" Human Resource Management system.

New personnel management system

In the year under review, GEA implemented the "Workday" Human Resource Management system on a global level. This created a uniform global basis for personnel data. Apart from that, global processes and tools for planning, recruitment and talent development were made available. Going forward, the latter may be adjusted to allow an early response to internal and external trends like demographic change. With the help of this new, flexible system, Human Resources has the possibility of purposefully supporting business processes and adding value to the company. Last but not least, the consistency of a uniform global database meets the increasing demands on corporate management.

Employee engagement survey

The fourth quarter of fiscal year 2016 saw the second edition of "GEA Voices", the company's employee engagement survey. Employees were asked for their opinion on corporate image, line manager, leadership and strategy, human resources development, sustained commitment as well as customer orientation. The response rate (proportion of the company's workforce worldwide) amounted to 80 percent. 2017, the year under review, saw a comprehensive analysis of the results with measures being defined. For this purpose, each manager responsible for an organizational unit received his or her own report in February 2017 provided that a minimum of six of their employees had participated in the survey. The findings reaffirmed GEA's previous strengths that had been identified as a result of the first survey back in 2013, namely operational efficiency, sustained commitment and staff retention. In the opinion of its employees, GEA has specifically enhanced its performance in the field of customer orientation. By April 2017, all employees had been informed about the results of the staff engagement survey. In addition, the respective organizational units organized at least one workshop aimed at deriving relevant measures. This was followed by a combination of global and local measures. In total, more than 1,500 measures were derived from the findings of the employee engagement survey. This allowed the workforce to take an active part in GEA's development.

Diversity and equal opportunities

GEA operates in a challenging international market environment with a large number of players who influence the company in many different ways – ranging from customers, competitors and employees down to the government and society in general. GEA meets the numerous challenges associated with this extremely diverse cultural environment by adhering to the principle of diversity. GEA considers diversity to be a strategic success factor. In this context, diversity is defined as the composition of the workforce in terms of internationality, gender, age and qualification. Overall, GEA employs people from around 70 different nations. The age structure of GEA's workforce is as follows: 9.9 percent of the employees are younger than 30, 58.5 are aged between 30 and 50 while 31.6 percent exceed the age of 50.

In order to promote diversity on as many levels as possible and create an attractive working environment by doing so, GEA also takes into account aspects of modern work flexibilization while fostering mobility within the group.

To institutionalize and manage diversity within the company, the latter relies on a diversity management policy as well as a corresponding guideline for executives: This policy describes the overriding goals and the steady state of diversity management at GEA. The guideline provides managers with an instrument for implementing diversity management at all group levels. It defines diversity on the basis of four personal criteria – origin, gender, age and qualification – as well as two organizational criteria, namely mobility and flexible working. The latter refers to both working time and the workplace. GEA has implemented a mixture of measures designed to promote diversity. For instance, staffing processes place emphasis on including diversity criteria as a standard practice. Despite the sector-specific challenges, GEA seeks to attract more women to join GEA while aiming at including more female talents in the company's internal career development programs. Moreover, diversity management sets the stage for a reliable identification of high potentials and talents.

Members of govering bodies and employees by gender	12/31/2017	
(in %)	thereof men	thereof women
Supervisory Board	58,3	41,7
Executive Board	80,0	20,0
Managers*	90,8	9,2
Total workforce	83,6	16,4

*) Number of employees in leadership positions, without inactive work relationships. At GEA, the first three management levels below Executive Board level are defined as managers

For a number of years, the principles of diversity and equal opportunities have been taken into account with a particular emphasis on human resources. In fiscal year 2017, one focus was on the advancement of women, in particular in relation to human resources development. In general, GEA makes sure that a minimum proportion of female candidates are considered in the selection process when management positions need to be filled. In the year under review, an average of 40 percent of all shortlisted candidates eligible for positions on the management levels below Executive Board level were women.

Besides, in 2016, the company decided to place more emphasis on promoting women in leadership positions going forward. For this reason, a specific program for female high potentials and executives that started in February 2017 with 27 international participants was developed. The program is aimed at allowing candidates to evaluate themselves, further develop their personalities and specifically plan the next steps in their careers. The pilot program will continue until March 2018.

German Remuneration Transparency Act

The German Remuneration Transparency Act that took effect in 2017 seeks to increase transparency in comparing the wages and salaries of men and women performing the same work or work of equal value while avoiding gender pay gaps in the long run. GEA is convinced that gender is irrelevant to the establishment of remuneration levels that are in line with both the market and an individual's performance. The company takes the view that greater transparency may instill additional trust in a legally sound and responsible pay scheme in both employees and job candidates. In turn, this may increase staff retention, increase industrial peace and reduce staff turnover levels. The implementation of this individual right to information enshrined in the law takes place in consultation with the respective employee representative body.

Leadership development

Since mid-2016, GEA managers have been included and assessed within the framework of a unified global, cross-functional and connected OneGEA talent identification process designed to help meet the company's current and future demand for managers. Together with Human Resources, the respective managers conduct so-called "talent days – leadership pipeline reviews" during which they assess the potential and performance of individual candidates and draw up succession plans. This global process aims at identifying the capabilities and skills of GEA's top performers for the purpose of efficiently further developing them to meet the current and future demands of the organization. This is how GEA seeks to contribute to the future success of the group.

GEA promotes young talents and executives by offering various programs. Talent development schemes like the "First Professional Program" serve the purpose of identifying and developing employees with leadership potential. Furthermore, GEA is a member of the Global Business Consortium of the London Business School together with five other renowned international enterprises. The program is open to top managers and aims at enhancing their strategic skills. In addition, GEA offers training for experienced managers. Such courses include "Leading Others", "Leading Leaders" and "Engaging Employees" that focus on strengthening leadership skills. Apart from that, the "Leading

Virtual Teams" module was added in 2017. Furthermore, all managers may avail themselves of a wide range of e-learning opportunities.

Work-life balance

GEA Group Aktiengesellschaft explicitly endorses a better reconciliation of work and family life and supports its employees in many different ways. For instance, some sites have experienced go-to persons for expectant mothers and fathers while offering a sponsorship program for employees on parental leave, corporate child care or flexible working arrangements. A large number of employees make use of alternating telework, part-time work as well as trust-based working hours. In the year under review, 1.5 percent of the German workforce took advantage of parental leave, 65.5 percent of them being fathers with 34.5 percent mothers. Apart from that, GEA cooperates with an international external service provider to support employees in their search for suitable facilities that provide childcare and/or look after dependents in need of care. In addition, this offering includes free social counseling.

Learning and continuous education

Since 2015, employees worldwide may avail themselves of GEA's Learning Center, a central learning and training platform. The latter offers management, sales and project management training as well as GEA product and user training courses; in 2017, further training modules were added. Additional e-learning programs on technical, business and product-related topics are available. These programs are open to all GEA employees and may be attended anywhere irrespective of a person's location. They aim at supporting employees in their individual and occupational development. In the year under review, an overall number of 7,925 employees, i.e. 44.4 percent of GEA's entire workforce, made use of the learning and training opportunities offered by the company. 1,337 participants attended face-to-face training, 987 participated in integrated training initiatives while 2,007 attended trainer-hosted webinars. E-learning seminars attracted 11,559 participants, a large number of whom had enrolled in a compliance training initiative of the company. The average time per employee invested in taking part in a face-to-face training module was 3.2 days of learning.

Vocational training in Germany

	GEA 12/31/2017	GEA 12/31/2016	Mechanical Engineering 12/31/2016*
Apprentices	358	381	65,174
Apprentice-employee ratio (in %)	6.0	6.5	6.3

*) Apprentice-employee ratio in Germany as of 12/31/2016. Source: VDMA 2018 (vdma.org)

In the year under review, GEA trained 358 young people at 16 German sites in 21 different commercial and industrial/technical occupations. In this context, the company's site in Oelde serves as the center of technical training that coordinates the respective training schedule for the whole of Germany. Moreover, a total of 15 combined vocational training and degree programs were realized in cooperation with polytechnics and universities. These combined training programs cover a period of six semesters and lead to bachelor degrees in various different fields.

The new OneGEA organization has allowed an increase in the exchange of trainees amongst German sites. Undergraduate students participating in combined degree programs may benefit from practical project-related training periods at foreign GEA companies as GEA puts more emphasis on the international orientation of its training.

Company pension schemes

GEA offers its employees participation in individual pension schemes. Together with the company, each employee may play an active role in shaping his or her future pension. Supporting company pension schemes allows GEA to respond to demographic change while retaining qualified staff in the long run. GEA strives to continuously optimize existing administrative processes as well as global pension-related services structures to enhance both the transparency and the economic efficiency of such pension schemes. In doing so, the company never fails to ensure that the pension schemes fully comply with any and all legal and regulatory requirements.

Employee mobility

To meet market requirements and safeguard the sustained, long-term competitiveness of the company, it is increasingly imperative that the knowhow and expertise of GEA's employees are available on a global level. For this reason, GEA established a central competence center for international employee mobility as early as 2014. This does not only ensure professionalism when it comes to the legally correct implementation of global contractual standards, but also enhances the level of efficiency in terms of the operational realization of international work assignments. The activities undertaken by the competence center guarantee the equal treatment of all internationally mobile employees.

Disaster relief for employees

In the wake of the hurricanes in North America, the company set up its "Emergency Response Team" (ERT) in the year under review. This team identifies, accompanies and supports employees that are exposed to a high risk at their particular location, offering assistance to those who are particularly affected by such natural disasters. For instance, 2017 saw the launch of a donation campaign that collected approximately USD 15,000 in emergency aid from co-workers. GEA topped up this amount by donating the equivalent sum.

GEA Aid Commission

GEA supports its employees in need in many different ways. In a works agreement concluded with the Group Works Council, GEA has pledged to grant swift and unbureaucratic financial assistance to individuals in distress, for instance in the event of accidents or sudden, severe illness. Under such circumstances, affected employees, including their families, may turn to the GEA Aid Commission for help.

Responsibility for quality, safety, health and the environment

Joint management approach to quality, health protection, industrial safety and the environment

As early as 2016, GEA's Executive Board committed to a clear policy regarding quality, health, industrial safety and the environment by adopting the "Quality, Health, Safety and Environment (QHSE) Policy": GEA conducts all business in accordance with the values and ethical principles enshrined in the Global Business Conduct Policy as well as the Codes of Conduct that define the basic principles of social responsibility. In essence, the "QHSE Policy" embraces the following points:

- Identification, analysis and efficient management of all quality, health, safety and environmental risks that occur within the framework of business activities
- Creation of an accident- and incident-free workspace for preventing occupational diseases
- Environmental protection and reduction in energy consumption, waste and emissions
- Provision and maintenance of adequate technologies, tools and processes supporting the achievement of the set goals
- Integration of QHSE into the company's business strategy and day-to-day processes

GEA communicates these corporate standards to all individuals acting for or on behalf of the company while actively integrating them into the implementation of this policy. The latter is displayed at all sites and made publicly available on the corporate website at gea.com.

For the very first time, the company defined tangible targets in and for fiscal year 2017 in addition to the above QHSE Policy (see gea.com).

In the year under review, GEA conducted an extensive overhaul of its QHSE organization, aligning it with the OneGEA group structure. In organizational terms, Quality & HSE (QHSE) is firmly embedded in all layers of the company and comprises three levels of responsibility.

- The central governance function directly reports to GEA's Executive Board.
- The QHSE governance team draws up the global QHSE strategy and makes available general guidelines and reports. It defines the management system, establishes and supports the implementation of as well as the company's compliance with the legal and individual requirements made by investors, customers, internal and external stakeholders.
- The "Excellence level" reflects the various functions and is divided into production, project implementation and service. These teams support the organization by issuing functional guidelines.

The Regions and Countries on the third level of responsibility ensure the local implementation of such guidelines and programs. Due to legal or cultural differences between the various sites, it is imperative to have a central OHSE contact in each region that allows those involved to share knowhow, give feedback and respond to local requirements in a timely manner.

CSR rating

For ensuring maximum transparency in the markets, GEA – inter alia – participates in the annual EcoVadis CSR performance monitoring scheme. EcoVadis represents the technical platform used for the audit program of the TfS initiative ("Together for Sustainability"), which was initiated by six multinational chemical companies back in 2011. It pursues the objective of developing and implementing a global audit program comprising audits and assessments for the purpose of evaluating and enhancing the sustainability practices in the supply chain. According to EcoVadis, more than 40,000 companies currently rely on the CSR ratings provided by the platform it operates, including the buying organizations of more than 175 leading multinational corporations worldwide. In 2017, GEA improved its EcoVadis CSR rating to "Silver", scoring 52 points (2016: "Bronze" with 43 points).

Certification of the management systems

GEA had already started clustering its sites with integrated management systems under the umbrella of a unified GEA group certificate in 2016. GEA Group Aktiengesellschaft, headquartered in Düsseldorf, was certified as meeting the requirements of ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007 as well as ISO 50001:2011 in June 2016, and, thus, heads the group of certified sites. Integration priority is subject to the expiry dates of the respective certificates awarded. In the year under review, the company succeeded in subsuming all certified sites of the Business Area Equipment as well as the first three sites of the Business Area Solutions under the group's matrix certificate. Moreover, GEA Food Solutions Germany GmbH in Wallau was awarded its first certification in accordance with the DIN EN ISO 9001:2015 and the BS OHSAS 18001:2007 standards.

The status quo of certifications within the group in 2017 is as follows:

Management system	Number of certificates 2017*	Number of certificates 2016*	Number of certificates under matrix certificate 2017	Covered by matrix certificate 2017 (in %)
DIN EN ISO 9001:2015	120	104	76	63
DIN EN ISO 14001:2015	29	23	15	51
BS OHSAS 18001:2007	24	17	12	50
DIN EN ISO 50001:2011	20	15	5	25

*) Comprises manufacturing sites, service and sales offices

ISO 9001 defines the minimum requirements to be met by the quality management system of an organization allowing the latter to provide products and services that fulfill customer expectations and comply with regulatory requirements. At the same time, the management system is to be subject to a continuous improvement process.

The international environmental management standard ISO 14001 stipulates the requirements to be met by an environmental management system and forms part of the family of standards applicable to environmental management.

BS OHSAS 18001 (Occupational Health and Safety Assessment Series) is an internationally accepted basis for management systems in the field of occupational safety and health.

DIN EN ISO 50001 governs the establishment of a corporate energy management system for the purpose of increasing energy efficiency in the long run.

Quality and processes

The "Process Description and Procedure Platform", the PPP for short, centralizes business processes and procedural instructions governing the functioning of the OneGEA organization. Its objective is to ensure that GEA products and services continuously and consistently comply with the standards, specifications and customer requirements in place. Being available to all GEA employees, the online platform is fed with processes and templates by the competent organizational units across the entire group. This is where roles and responsibilities, for instance internal approval processes, are clearly defined and put into practice.

Customer satisfaction surveys 2016 and 2017

In the year under review, one of the most important stakeholder groups attested to the quality of the products and services delivered by GEA: Customers are most satisfied with machine quality and performance as well as the company's technical innovations. This is one of the key findings of the second global customer satisfaction survey initiated by GEA. It was conducted in the fourth quarter of 2016. In total, around 3,500 GEA customers from 41 countries participated in the survey.

For the first time, the poll also included non-GEA customers in selected countries and customer industries. The results of both surveys are incorporated into improvement processes. This global survey is to be repeated at regular intervals in the future. In addition, GEA frequently organizes customer satisfaction surveys at a local level.

GEA identified room for improvement in the field of claims management. In 2016, some customers had pointed out the absence of a dedicated communication channel for addressing complaints to the competent internal point of contact. As a matter of fact, complaints management within the old GEA organization had been handled differently and is being integrated into a unified system as part of the new OneGEA organization in order to meet the objectives of the new OneGEA organization. A centralized customer relationship management project was initiated that same year in 2016. Moreover, this subject-matter is also part of the company's new global Customer Relationship Management System. A representative of the QHSE Governance team is a member of the central project team.

In the year under review, the company conducted a follow-up survey on the basis of almost 600 online interviews focusing on these topics in eleven countries in which customers had been less satisfied with GEA's service and complaints management. Overall, the findings already revealed a slight improvement; apart from that, GEA was able to gain useful insights with respect to further measures that may be taken.

Handling serious adverse events, learning process

Serious incidents such as fatal and severe accidents, fires and explosions as well as environmental and security incidents are reported to the competent employees within the organization by means of the "Serious Events Reporting System". This allows GEA to respond as quickly as possible to such events while minimizing their impact and promptly initiating probes into the respective incidents. Afterwards, a dedicated 'lessons learned process' is started; its findings are also used proactively to prevent risks, identify measures for improvement and communicate them to the organization.

Workplace health and safety

GEA gives top priority to occupational safety and health. Above and beyond legal requirements, GEA feels obligated to protect both its own and the customer's employees. As a rule, customers have developed their own sets of strict criteria that are met by GEA employees on the basis of good occupational and further training as well as regular technical training delivered in-house.

It is encouraging that the number of accidents has continuously declined. Accordingly, the Lost Day Frequency Rate dropped to 6.18 accidents per million working hours in 2017. In the year under review, a total of 242 accidents were reported, with 85 sites – i.e. 57 percent of all GEA locations – remaining accident free. 2017 was another year without fatal industrial accidents. The Lost Day Severity Rate climbed to 172.18. This implies that, once again, there were fewer accidents, but a higher amount of working days lost.

To further reinforce its proactive approach, the company recorded and extensively analyzed near misses worldwide for the very first time in the year under review. This helps detect and avert potential risks and hazards at an early stage. In addition, the company's key safety rules, the so-called "GEA Safety Core Rules", were defined and translated into 13 different languages to train the workforce accordingly, raise their awareness and further reinforce the safety culture at GEA.

Key figures occupational safety	2017 ✓	2016	2015
Number of industrial accidents	242	264	295
Number of Days Lost	6,716	6,338	5,198
Lost Day Frequency Rate[1]	6.18	6.69	7.27
BA Equipment	8.90	8.44	9.57
BA Solution	3.37	5.18	5.24
Lost Day Severity Rate[2]	172.18	159.82	128.07
BA Equipment	229.37	195.30	165.10
BA Solution	113.89	130.99	97.14
Near misses (Proactive injury rate, PAIR)[3]	97.1		
Total Injury Rate, TIR[3]	45.2		
Accident free sites, in percentage of all locations	57.0		

✓ Audited by KPMG

1) Frequency of accidents: lost time injuries per million working hours; GEA counts up to 365 days of time lost
2) Severity rate: days lost broken down by types of accident per million working hours; GEA counts up to 365 days of time lost
3) Per million working hours

Best practice: 365 days accident free

GEA's Vadodara site in India has continuously reduced the number of industrial accidents since 2011. Finally, in November 2017, the company celebrated a full year of accident-free operation. Established in 2008, when it was still a small production facility employing few workers, the site located in the western Indian state of Gujarat has meanwhile become one of GEA's most important multipurpose plants operating on a global level. Vadodora's successful and consistent health and safety management sets new standards within the group.

Health management

GEA already offers the GEA Care health management scheme at 19 sites. In the year under review, experiences gained within the framework of these projects were brought together for the purpose of developing a group-wide program. GEA plans to offer employees experiencing particular levels of stress and strain training in the fields of stress management and mindfulness. The call for tenders to external service providers was made in the year under review, with worldwide implementation being scheduled for the year 2018 in close cooperation with the works council.

Safety management

GEA also fulfils its duty of care to its employees by providing a comprehensive safety management that was aligned with the OneGEA corporate structure in the year under review. The "Major Incident Management Manual" outlines the procedures to be taken in the event of risky incidents that may have a potential impact on GEA's safety, operations or reputation or affect the safety, health and life of its employees or other stakeholder groups.

GEA's safety management provides a comprehensive and reliable service to employees who set off on worldwide business trips on behalf of GEA, even prior to their respective departure. This includes detailed travel and safety information for every region around the globe. Should an employee nonetheless get caught up in an emergency while he or she is away on business, they can contact the 24/7 "GEA Security and Support Hotline": In the event of health-related issues, the company's Medical Support Service Hotline provides assistance and ensures appropriate medical care or even repatriation, if need be. Via a security app, GEA employees can also obtain medical and safety-related information on a group location at any time or directly contact the 24-hour hotline at GEA's Security Center. If employees have booked their business trip via the "GEA Travel Center", they can be tracked everywhere in the world via the so-called "travel tracker" while en route. In the event of crises like natural disasters or political unrest, GEA's safety management team may quickly respond and intervene.

Internal HSE legal compliance audits

Compliance with local statutory rules and regulations applicable to health, safety and the environment is regularly reviewed by means of audits that are conducted by an external service provider. The reports are uniform and compiled on the basis of a set of 25 criteria, with all observations and recommendations being entered into a software that is available across the group. This approach reveals areas for improvement that need to be tackled. Those responsible on a local level may directly document their corrective action in the system. The respective organization undertakes to sustainably implement these corrective measures in the long run. The entire process is tracked and validated by the responsible QHSE officers of the country and excellence function. The improvement process is not completed until the QHSE governance function has given its final approval. 2017 did not see any new audits (2016: 21) enabling the company to process the findings of the previous audits. Thus, a total of 375 observations made in 2017 were finally resolved.

Environmental management

GEA's products and services support the customers in making their business processes more efficient and environmentally compatible. Apart from that, GEA also makes sure to mitigate environmental impacts when it comes to its own business activities. The specific targets and programs are individually defined by the respective sites and in line with GEA's global QHSE targets. For further information on environmental impact management see "Joint management approach to quality, health, safety and the environment", page 95.

Emissions and energy consumption

As in previous years, GEA took part in the 2017 survey conducted within the framework of the Carbon Disclosure Project (CDP). CDP is an independent, not-for-profit organization that currently represents more than 800 institutional investors. Each year, it gathers information on the specific greenhouse gas emissions of major listed corporations and their strategies to combat climate change. The results are then made available to current and potential investors. In this survey, GEA also regularly provides information on the risks and opportunities related to climate change, as well as its action taken in the field of climate protection.

For the first time, GEA presents timely data from the year under review that was audited by KPMG in accordance with ISAE 3000 in this report. As the report for the year 2016 still included 2015 levels, the data series shown below comprises the years 2015, 2016 and 2017 to enhance comparability.

All over the world, the key figures for energy consumption are collected via a standardized system and reported as follows:

- Scope 1 – Direct Greenhouse Gas Emissions: GEA includes emissions from fuel oils, various gases, coal as well as diesel and gasoline.
- Scope 2 – Indirect Greenhouse Gas Emissions: GEA reports emissions from electricity, heat, steam and cooling.
- Scope 3 – Other Indirect Greenhouse Gas Emissions: Currently, this category merely includes reporting on business travel.

For further information on the method for calculating 2017 CO_2 emissions see the company's website at gea.com under "Explanatory notes to environmental reporting".

Direct Greenhouse Gas Emissions (Scope 1), in tons of CO_2 equivalent	2017 ✓	2016	2015
Business Area Equipment	24,688	24,321	25,001
Business Area Solutions	7,988*	14,341	14,703
Global Corporate Center & Shared Service Center	656	686	614
GEA's total	**33,332**	**39,348**	**40,318**

✓ Audited by KPMG
*) Due to changes in classification and computation, the reference base of reporting sites was adjusted in 2017.

Indirect Greenhouse Gas Emissions (Scope 2), in tons of CO_2 equivalent	2017 ✓	2016	2015
Business Area Equipment	28,280	28,885	30,278
Business Area Solutions	9,971	10,871	11,794
Global Corporate Center & Shared Service Center	260	315	285
GEA's total	**38,511**	**40,071**	**42,357**

✓ Audited by KPMG

Other Indirect Greenhouse Gas Emissions (Scope 3), in tons of CO_2 equivalent	2017 ✓	2016	2015*
GEA's total	**15,958**	**19,167**	**19,558**

✓ Audited by KPMG
*) The 2015 key figure was recalculated with retroactive effect

Total – Greenhouse Gas Emissions (Scope 1, 2, 3), in tons of CO_2 equivalent	2017 ✓	2016	2015
GEA's total	**87,801**	**98,586**	**102,233**

✓ Audited by KPMG

GEA was able to further reduce greenhouse gas emissions, in particular through its own energy efficiency optimization initiatives focused on lowering the consumption of fossil fuels.

A worldwide survey has revealed that as many as 22 of the company's production sites are seeking to reduce greenhouse gas emissions while engaging in 53 local projects.

GEA will continue to improve the quality of energy and CO_2 performance indicators throughout the year 2018. A particular focus will be placed on further automating and formalizing the methods, systems, processes and internal controls governing data collection. Enhanced data quality will serve as a basis for making future decisions in relation to energy and climate management as well as the corresponding targets.

Water and waste

In the third quarter of 2017, GEA started recording water consumption and waste generation levels worldwide to set up its very first group-wide reporting system covering these topics. Besides, more extensive environmental reporting is also requested by customers and investors. A group-wide survey has revealed that there are twelve local projects aimed at reducing freshwater consumption.

Products subject to specific regulatory requirements

GEA's portfolio embraces two relevant product groups and/or substances required for operating products that are subject to specific regulations: chemical products for farm technology and coolants for refrigeration systems. Undiluted chemicals for farm technology applications, such as dipping agents for milking hygiene, are processed at five GEA facilities worldwide – in Austria, New Zealand, Great Britain and at two US sites. In terms of coolants for GEA refrigeration systems, ammonia has become widely accepted as the natural and carbon-neutral cooling agent of choice.

All GEA products meet the respective statutory requirements of the markets, come with the necessary certifications and/or comply with the technical specifications and any further demands made by the customers.

Social responsibility

By adopting the mission statement "Sustainable Value Creation at GEA" in 2017, the Executive Board defined the group's ambitions and targets in terms of sustainability, incorporating them into GEA's values. This has given rise to a strategic vision that applies worldwide. The corresponding document is available at gea.com.

As a global player, GEA participates in a multitude of regional and local projects and initiatives, interacting with other players by addressing technical and market-related issues within the framework of circa 100 trade and industry associations. For instance, GEA is a member of the "Verband Deutscher Maschinen- und Anlagenbau" (VDMA – German Engineering Association) and also actively involved in the association's "Corporate Responsibility" working group that was established in 2017. A list of GEA's key memberships in organizations is available at gea.com. As a rule, membership matters are handled autonomously by the individual sites as they see fit.

GEA's social engagement – inter alia, via sponsoring activities – focuses on charitable projects in the immediate vicinity of GEA's sites, as well as further activities associated with mechanical engineering topics and the field of innovation. For instance, in the year under review, GEA donated food to the Banco Alimentare food bank at its site in Parma, Italy. Banco Alimentare collects, stores and distributes food to welfare organizations that take care of people in need who live in Parma. GEA's York site, USA, supported the Children's Miracle Network for the second time. The respective donation was dedicated to children's hospitals located in the region, allowing them to fund critical treatments and health services, medical devices and welfare activities. The following examples are typical of the activities undertaken by the company in 2017:

In the year under review, the company presented its innovation GEA OxyCheck (see page 29) and made a contribution to the fight against food waste as defined in the statutes of Save Food. The latter is a joint initiative of the Food and Agriculture Organization (FAO), the United Nations Environment Program (UNEP), the Messe Düsseldorf (Düsseldorf trade fair) as well as the Interpack trade fair. GEA and further members of the initiative have committed to reducing the loss and waste of food along the value chain. GEA takes the view that the negative developments witnessed in the course of the previous years can only be counteracted by means of maximum product safety. This is why GEA affords the industry the opportunity of safely producing food and avoiding waste as early as in the production phase.

In the year under review, GEA sent a young team of developers from the group to MassChallenge Switzerland for the very first time. GEA had joined the organization as a founding member in 2016. MassChallenge is a non-governmental organization allowing start-ups to gain access to a global network of mentors and venture capital investors without actually acquiring any shares in these start-ups. Meetings with mentors, field trials and workshops assisted GEA's young entrepreneurs in mapping out their business concept: Eventually, this gave rise to the idea of a mobile engineering solution for collecting, processing and transporting milk that mainly targets developing countries and emerging markets.

Apart from that, GEA is engaged in a multitude of cooperation schemes involving German schools and universities. By joining forces and working together, educational facilities and companies support students' transition into the world of work as well as career guidance and counseling to ensure that, going forward, they will find enough young talents willing to take up jobs in the fields of technology and natural sciences. For this reason, GEA's largest site in Oelde participates in a cooperation network involving schools and businesses ("Kooperationsnetz Schule-Wirtschaft");

amongst other things, this network embraces information events held in the participating schools, job application training for students as well as joint projects involving students and apprentices.

Oelde also represented the venue chosen for the first meeting between budding young engineers who wanted to learn first-hand about health and safety at work put into practice in a technology group with global production facilities. Competent GEA employees showed them the substantial importance of product and machine safety, health and safety at work, health prevention and quality management for the benefit of the company’s own workforce and the customers. A string of seminars called “ing.meet.safety“ was initiated by the “Verein Deutscher Ingenieure (VDI)” (Association of German Engineers). GEA was the first partner enterprise joining the initiative.

At its site in Niederahr, GEA established an education partnership with a nearby vocational college. Together, they joined the XarXa project that embraces more than 20 European towns and cities; since 1999, the latter have given young people the possibility of spending some time abroad or gaining work experience in various companies across Europe. Within the framework of the XarXa project, trainees from other European countries come to GEA for doing an internship. In the year under review, GEA welcomed young people from Finland and Spain, to give but two examples.

Another event serving the purpose of promoting qualified young talent is the Industry Contact Forum that was organized for the tenth time at GEA’s site in Büchen in 2017. Once again, it was jointly hosted by brewery and dairy experts. Approximately 40 students from HAW Hamburg (University of Applied Sciences) as well as the universities of Flensburg, Hanover and Fulda were given an insight into the work of a project engineer.

Reporting profile

This sustainability report was submitted to the GRI Materiality Disclosures Service. GRI has confirmed the accuracy of the position of the Materiality Disclosures (Disclosures 102-40 to 102-49).

KPMG AG Wirtschaftsprüfungsgesellschaft conducted an independent limited assurance engagement on selected sustainability performance disclosures on emissions as well as occupational safety. The review was in accordance with the applicable “International Standard on Assurance Engagements”, ISAE 3000, see disclosure 102-56. For results, see page 242 ff.

Disclosure 102-45

Unless indicated otherwise, the disclosures basically comprise the worldwide activities of the overall group, i.e., GEA Group Aktiengesellschaft including all companies over which GEA can exercise controlling or material influence. A list of the subsidiaries, associated companies and joint ventures that comply with this definition can be found in the list of shareholdings included in chapter 12.4 of the consolidated notes.

Disclosure 102-48

As opposed to previous reporting periods, the following information was reformulated:

- For the very first time, greenhouse gas emissions (scope 1 to 3) for the year under review can be reported in a timely manner.
- Compared with the previous year, many disclosures are made in more detail and embrace additional data.

Disclosure 102-46

In 2016, GEA started the process of defining report contents by holding two full-day workshops in which the economic, ecological, social and management-related performance of the group and its impact were intensely discussed with a multitude of internal experts. The overall process was steered by the Global Corporate Center. The following functional departments were involved, sometimes with several experts who focused on the respective disciplines they had been assigned: Legal, Human

Resources, Sales, Purchasing, Service and Complaints Management, Controlling, Accounting, Quality, Health, Safety and Environment, Strategy, Investor Relations, Communication and Marketing, Compliance, Research and Development as well as Innovation Management.

Disclosure 102-46 The findings of both workshops were summarized in a comprehensive list of sustainability issues that included an initial assessment of relevance, which provided some guidance in terms of stakeholder engagement. For performing this assessment, the above experts relied on the experience they had gained during their exchange with stakeholder groups closely related to them as well as their personal industry and competition-related expertise and knowledge.

In GEA's business-to-business model, the functional departments are the day-to-day contact points for their respective stakeholder groups, which is why they must be regarded as a primary source. For the purpose of the materiality analysis, interviews with internal experts were conducted. In parallel, several hundred documents were evaluated, including results of employee engagement surveys (from 2013 and 2016) as well as customer satisfaction surveys (from 2014 and 2016). Detailed discussions were held with the members of the Group Works Council and further employee representatives on the Supervisory Board.

This report on the 2017 fiscal year takes into consideration the final analyses of the 2016 employee engagement survey, the 2016 customer satisfaction survey, as well as the findings of a limited follow-up customer survey conducted in the year under review.

Every year, GEA participates in the Climate Change Information Request of the Carbon Disclosure Project (CDP), a non-governmental organization. The relevant documents have also been taken into account. Apart from the sustainability reports compiled by key customers and competitors, the analysis also placed particular emphasis on customers' supplier guidelines and audits as well as investor queries relating to sustainability issues.

Disclosure 102-42 The internal experts represented the most important source when it came to defining and engaging external stakeholder groups.

Disclosure 102-40 As a listed company with a shareholder structure characterized by the presence of institutional investors – without a dominant major shareholder – GEA defined the classic stakeholder group, i.e., the "shareholders", as "capital market". Besides shareholders, this group also includes (potential) investors, analysts, investment firms as well as rating agencies. All in all, GEA identified the following stakeholder groups:

- Capital market
- Customers
- Suppliers/contractors
- Local communities
- Employees
- General public/media
- Regulators/public authorities
- Schools/universities
- Competitors

For the purpose of corroborating and refining the content of the report, GEA conducted focus interviews with sustainability and production experts of important customers in 2017. These talks cover GEA's key customer industries. In addition, the capital market's feedback on the company's sustainability report was subjected to a thorough analysis together with the QHSE experts. In summary, it can be said that the previous assessments as well as the results of the materiality analysis still hold water. The stakeholder groups demand more detailed reporting – in particular on environmental issues as well as the sustainability of products and services.

Disclosure 102-43

The "CSR Directive" 2014/95/EU of the European Parliament and the Council of October 22, 2014, as well as the corresponding German law for reinforcing non-financial reporting by companies in their combined management and group management reports ("CSR Directive Implementation Act") were taken into consideration as in the previous year.

The company's reporting addresses the following key issues:

Disclosure 102-47

- Economic performance, incl. implications due to climate change
- Procurement practices
- Anti-corruption
- Emissions
- Supplier assessment (environmental/social)
- Labor/management relations
- Occupational health and safety
- Training and education
- Diversity and equal opportunity
- Human rights assessment
- Socioeconomic compliance

In principle, the material aspects that have been ascertained are of group-wide relevance.

Disclosure 102-49

Now, the innovation process no longer refers to ecological aspects, but is reported under "Impacts of climate change" within the framework of standard "GRI 201: Economic Performance". This is due to the abolition of the former G4-EN27 indicator governing the aspect 'products and services' that was replaced by the introduction of the GRI Standards.

Disclosure 102-44

This overview outlines the aspects that were given particularly high priority by specific stakeholder groups:

Assessment of material topics by stakeholders	Capital Market	Customers	Suppliers/ Sub-contractors	Local commu-nities	Employees	Public/ media	Govern-ment/Public authorities	Schools/ Universities	Competi-tors
Economic Performance, incl. implications due to climate change	✓	✓	✓	✓	✓	✓	✓	✓	✓
Procurement Practices	✓	✓	✓	✓					
Anti-corruption	✓	✓	✓		✓	✓	✓		✓
Emissions	✓	✓		✓	✓	✓	✓		
Supplier Assessment (Environmental/Social)	✓	✓	✓						
Labor/Management Relations	✓			✓	✓	✓			
Occupational Health and Safety	✓	✓	✓		✓		✓		
Training and Education	✓			✓	✓			✓	
Diversity and Equal Opportunity	✓				✓	✓		✓	
Human Rights Assessment	✓	✓	✓		✓	✓	✓		
Socioeconomic Compliance	✓	✓	✓		✓	✓	✓		✓

Report on Risks and Opportunities

Risk and opportunity management targets

GEA's ability to leverage its growth and earnings potential depends on it using the opportunities that arise, although this in turn is associated as a matter of principle with business risks. Taking calculated risks is therefore part of GEA's corporate strategy. To meet the objective of steadily increasing enterprise value, it is necessary, as far as possible, to enter into only those risks that are calculable and matched by greater opportunities. This requires active risk and opportunity management, which avoids inappropriate risks, monitors and manages risks entered into, and ensures that opportunities are identified and utilized in good time.

GEA's strategic and medium-term planning are key components of the way in which it manages opportunities and risks. These processes are used to prepare decisions on core technologies and markets, along with the corresponding allocation of resources. The objective is to ensure stability by diversifying and by concentrating on markets of the future. At the same time, developments that may jeopardize GEA's continuing existence can be identified at an early stage.

Opportunities and risks arising from significant operating decisions – for example whether to take on orders or to implement capital expenditure projects – are assessed and hence actively managed by the relevant departments and decision-makers at all group levels and in all functional units in a decision-making process that takes materiality criteria into account.

Overall assessment of the risk position and changes compared with the previous year

The identified risks from operating activities and the negative impact on earnings that could result have changed only immaterially as against the previous year. As in previous years, the structure of GEA with its regional and industry diversification offers protection to a large extent against individual risks clustering into a single risk that could threaten the group's continued existence as a going concern. In addition, GEA is not dependent on individual business partners, be they either suppliers or customers.

The sale of the GEA Heat Exchangers segment resulted in risks in the form of financial obligations towards the purchaser arising within discontinued operations.

Overall, no risks to GEA or GEA Group Aktiengesellschaft were identified that, alone or in combination with other risks, could endanger the company's continued existence as a going concern.

Risk and opportunity management system

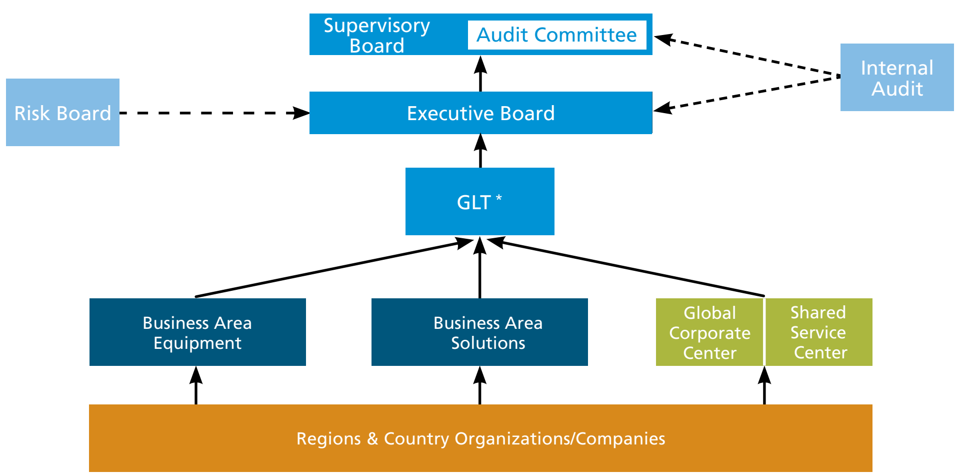
Risk management system

All group companies are integrated into GEA's risk management system. Quarterly risk reports and size-related ad hoc risk reports aim to ensure that decision-makers at all levels are informed promptly about material existing risks and potential risks affecting future development.

The fundamental principles and procedures underpinning an effective risk management system are set out in risk guidelines that apply to the entire group. These guidelines also document mandatory risk reporting and management requirements. Compliance with these requirements is monitored regularly by the Internal Audit function.

Risk management instruments such as the Risk Assessment and Advisory Committees (RAACs) are supplemented by a reporting system encompassing evaluated risk reports, consolidated financial projections, monthly consolidated financial statements, and regular meetings of the Global Leadership Team (consisting of members of the Executive Board and the top management of the Business Areas, the regions, and the Global Corporate Center) enable the various risks to be identified and analyzed.

Risk management organization



*) Global Leadership Team

GEA's risk management system is based on the management hierarchy. Risks are reported to the next higher management level using predefined thresholds.

The specific requirements of the group's project business are addressed by risk boards at business area and group management level. Before a binding quotation is submitted or an agreement signed, the commercial and contractual terms of potential orders are examined in detail by specialists from various departments so that risks that cannot be controlled are avoided. The risk management system therefore already comes into play before risks arise, in the form of a critical examination of the opportunity and risk profile of quotations. No agreement may be signed if the profile is inappropriate.

The risk management system not only serves the statutory purpose of identifying existential risks as early as possible, it also covers all risks that might have a material impact on the financial position and results of operations of a business area or of the group as a whole.

To identify risks that could endanger the existence of GEA as a going concern, all issues are assessed for their financial materiality and probability of occurrence. This is done on a gross basis, i.e. excluding any risk-mitigating measures. In addition, the timing (less than or more than one year) of each risk is individually assessed. The risks were assessed over a defined period of one year. This period is also the forecast horizon.

The following criteria are used to determine materiality:

Opportunities and risks

	Probability		
	< 33%	33–66%	> 66%
Insignificant	L	L	M
Moderate	L	M	H
Considerable	M	H	H

Low
Middle
High

Moderate	Impact on financial and earnings position between EUR 10 – 50 million
Considerable	Impact on financial and earnings position > EUR 50 million

This makes it possible to classify both risks and opportunities in accordance with their impact on GEA. Issues with short-term relevance that have a high ("H") materiality and probability rating are initially classified as a significant risk or significant opportunity.

The GEA Business Climate (GBC) is used to collate estimates by GEA's market experts of expected current and short-term market developments. The GBC makes it possible to obtain an early indication of positive or negative market developments in the industries and regions that are relevant for GEA.

Adequate provisions have been recognized for all identifiable risks arising from the group's operating activities provided that the recognition criteria for liabilities have been met. The following section provides details of existing risks. Risks that are not yet known or currently regarded as insignificant may also have an adverse effect on business activities.

Internal control system

GEA's internal control system (ICS) is based on the COSO framework and comprises the risk management system (RMS) as well as other principles, measures, and rules (other components of the ICS). While the RMS aims at identifying and classifying risks, the components comprising the rest of the ICS serve primarily to prevent or mitigate risk using control measures. The Internal Audit function is another component of the ICS.

The RMS comprises principles, measures, and rules relating to the early risk recognition system in accordance with section 91(2) of the Aktiengesetz (AktG – German Stock Corporation Act), as well as those relating to other components of the risk management system. In the other components of the ICS, a distinction is made between principles, measures, and rules that are related or unrelated to financial reporting.

GEA's ICS relevant for financial reporting encompasses all principles, measures, and rules that ensure the proper approval and recording of business transactions for monthly, quarterly, and annual financial statements. The goal of the implemented ICS is to ensure reliable financial reporting, compliance with the relevant laws and standards, and the cost-effectiveness of business workflows.

In addition to GEA Group Aktiengesellschaft, all group companies are integrated into the ICS.

The following key principles of GEA's ICS must be applied in all business functions: clearly defined areas of responsibility, the separation of functions in all areas of activity, dual signature policies, compliance with guidelines, instructions, and procedural requirements (manuals), the obligation to obtain comparative offers before awarding contracts, protection of data from unauthorized access, and the holding of training sessions to ensure uniform procedures within the group.

Key measures and rules that are relevant for financial reporting and are designed to ensure uniform accounting at all subsidiaries are: accounting and account allocation manuals, a uniform chart of accounts, consolidation and calculation manuals, the approval of entries using the dual control principle, and the fact that certain entries can only be made by selected persons. Guidelines and IT systems are updated on a continuous basis to reflect legal and business requirements. The IT Security Officer is responsible for implementing appropriate IT guidelines throughout the group based on regulatory and substantive requirements.

Compliance with the principles, measures, and rules set out in the ICS as described above is monitored systematically; this takes the form of regular reviews by GEA's Internal Audit function, which reports directly to the Executive Board and regularly submits reports to the Audit Committee. The results enable the elimination of defects identified at the companies reviewed and the ongoing enhancement of the ICS in the group.

Overall, the ICS aims to ensure the early identification, assessment, and management of those risks and opportunities that could materially influence the company's ability to achieve its strategic, operating, financial, and compliance-related objectives.

Legal risks

Legal risks are not quantified in detail since disclosing the specific probability of occurrence could have a material effect on the group's position in current litigation or other legal disputes.

Dörries Scharmann AG insolvency proceedings

An action brought by the insolvency administrator of Dörries Scharmann AG against GEA Group Aktiengesellschaft is pending before the Higher Regional Appeal Court of Düsseldorf. The former Metallgesellschaft AG, the legal predecessor to GEA Group Aktiengesellschaft, held an interest in Schiess AG, which later became Dörries Scharmann AG. On the basis of that interest, the insolvency administrator has asserted various claims under company law, in particular for equity substitution, amounting to approximately EUR 18 million plus interest in the first instance. The District Court of Düsseldorf threw out the initial action brought by the insolvency administrator, who is now appealing that judgment. GEA Group Aktiengesellschaft considers the asserted claims to be unfounded and will continue to defend itself against all such demands.

General

Further claims or official investigations have been or may be instituted against GEA companies as a result of earlier business disposals and operating activities.

Adequate provisions have been recognized for all risks arising from both the legal disputes described above and other legal disputes being pursued by GEA in the course of its ordinary operating activities. However, the outcome of these proceedings cannot be predicted with any degree of certainty. It is therefore possible that the conclusion of the proceedings may result in income or expenses if the amounts that have been set aside for them are higher or lower than required.

Performance risks

The performance risks presented below can take a wide variety of forms. The elements of the GEA risk management system are designed to help identify emerging risks before they materialize, so that appropriate measures can be implemented on a case-by-case basis to avoid negative effects on the group's financial position and results of operations. As a rule, potential business performance risks are minimized by avoiding significant dependencies and ensuring a balanced mix of fixed and flexible capacities.

GEA's sales markets have a diverse product and customer structure. This diversification moderates the impact on total demand of fluctuations in demand in specific submarkets. However, the food industry is the main focus of the business. A significant decline in demand for food and beverages would have a material impact on GEA's financial position and results of operations. GEA considers the probability of a global decline in demand to be low. This risk is rated as medium overall.

A significant proportion of GEA's business consists of projects that depend on the financing options of GEA's customers. A general decline in demand, shifts in currency parities, or a credit squeeze could make it more difficult to implement such projects. For the same reason, existing orders could be deferred or even canceled. If such risks were to occur on a global level, they would have a material impact on GEA's financial position and results of operations. The probability of such risks occurring globally is considered to be low. This risk is classified as medium overall due to GEA's diversified positioning in particular.

Country-specific conflict situations that could give rise to risks for the group are continually observed as part of risk management. However, the potential risks arising from such situations are difficult to quantify. However, no material impact on the group's results of operations is anticipated. What is more, elections in key sales markets can significantly affect a future political climate and thus negatively impact GEA's business operations. This risk is rated as medium overall.

On the sales side, future prices will depend to a considerable extent on general economic trends. Any fall in capacity utilization in the industry could also have a significant negative impact on price levels and therefore on the financial position and results of operations of GEA. Thanks to the group's regional and industrial diversification, the probability of such a risk is considered to be low. This issue is rated as a medium risk overall.

GEA utilizes a number of materials, such as stainless steel, especially as part of processed products. Purchase prices for these metals may fluctuate significantly depending on market conditions. Long-term supply agreements are entered into with selected suppliers in order to lock in the procurement prices used as the basis for costing orders. However, the potential risks arising from such situations are difficult to quantify. With respect to procurement, current expectations are that prices for key materials will not increase significantly. The risk is rated as medium overall.

Long-term engineering orders are a significant element of GEA's business. Some of these contracts entail particular risks, as they involve assuming a significant portion of the risk associated with the project's completion. The high percentage of innovative products in the GEA range can also harbor technological risk. This is particularly the case with the complex solutions, plant and equipment produced by the Business Area Solutions which, on account of their size and/or customized design, cannot always be fully tested prior to rollout. In addition, they may provide for warranty obligations that remain in force for several years after the project's acceptance. Technical problems, quality problems at subcontractors, and missed deadlines may lead to cost overruns. There is therefore an extensive risk management system in place at group management and business area level to closely monitor order-related risks. This comes into play before binding quotations are submitted. Adequate provisions have been recognized for all foreseeable risks in this area. This could give rise to both risks and opportunities in relation to the financial position and results of operations. As a whole, these issues are rated as a medium risk.

GEA's business processes are highly dependent on information technology. The failure or malfunction of critical systems can give rise to risks relating to confidentiality, availability, and integrity, and key business processes could be compromised. GEA protects its IT systems against unauthorized access to the extent that this is economically feasible. The relevant security systems are updated on an ongoing basis. This issue is classified as a medium risk overall.

Furthermore, macroeconomic trends are deemed to pose a risk to the Company. If a downturn in the economy leads to a reduction in order intake to below the level of the previous fiscal year, this could have a negative impact on earnings due to capacity underutilization and capacity adjustment measures. Thanks to the group's regional and industry diversification, and the fact that it is structured for flexibility, the probability of this significant risk occurring is considered to be low. This issue is classified as a medium risk overall.

The sale of the GEA Heat Exchangers segment resulted in risks in the form of financial obligations towards the purchaser. These relate to contractual warranties and indemnifications, as well as risk sharing for major projects. This issue is assessed as a medium risk overall, with a low probability of occurrence.

Dedicated and qualified employees are a critical success factor for GEA. GEA has various staff policy measures in place to counter the risk that it will be unable to fill vacant positions adequately or that it will lose skilled employees. The measures aim to position GEA as an attractive employer and foster employees' longterm loyalty to the group (see page 90 f.). The probability of this significant risk occurring is considered to be low. This issue is rated as a medium risk overall.

Acquisition and integration risks

Acquisitions and internal company reorganizations entail risks resulting from the integration of employees, processes, technologies, and products. It is possible, therefore, that the aims of the measures in question will not be achieved at all or within the timeframe envisaged. Moreover, such transactions may give rise to substantial administrative and other expenses. Portfolio measures may also result in the need for additional finance and may impact negatively on financing requirements and the financing structure. These risks are countered by a structured integration concept and close supervision by internal experts, as well as specific training measures. This issue is rated as a medium risk overall.

Environmental risk

Several properties in our portfolio entail risks relating to historic environmental contamination and mining damage, primarily as a result of earlier business activities. These risks are countered through appropriate measures and supervision by internal and external specialists. Adequate provisions were recognized for the measures in 2017. This could give rise to both risks and opportunities in relation to the financial position and results of operations. Their probability is regarded as medium and their materiality as moderate.

Financial risks

Because it operates worldwide, GEA is continuously exposed to financial risks in the course of its ordinary activities. The Executive Board has implemented an effective set of guidelines with which to monitor and thus largely limit or hedge these financial risks throughout the group. The objectives with regard to protecting assets, eliminating security shortfalls and enhancing efficiency when identifying and analyzing risks are clearly defined, as are the relevant organizational structures, powers, and responsibilities. The guidelines are based on the principles of system security, separation of functions, transparency, and immediate documentation.

The material financial risks include currency, interest rate, commodity price, credit, and liquidity risk. Financial risk management aims to reduce this risk through the appropriate use of derivative and nonderivative hedging instruments. The group's financial risks are quantified in section 3 of the notes to the consolidated financial statements (see page 160 ff.).

Based on a gross assessment of the situation, the financial risks described there are generally considered to be significant for GEA in terms of scale and likelihood of occurrence. These risks are therefore rated as high overall.

Tax risks

GEA's Tax department has issued guidelines to ensure that fiscal risks are identified and minimized in good time. These risks are examined and evaluated regularly and systematically.

The applicable national tax legislation may affect the use of loss carryforwards and thus the recoverability of the deferred taxes recognized in the consolidated financial statements and current taxation. Furthermore, future changes to the ownership structure could significantly reduce or even render impossible the use of German loss carryforwards (section 8c of the Körperschaftsteuergesetz (KStG – German Corporate Income Tax Act)). The ability to use U.S. loss carryforwards could also be restricted in the case of certain changes to the ownership structure of GEA Group Aktiengesellschaft under IRC section 382 (limitation on net operating loss carryforwards following an ownership change).

Moreover, in Germany and abroad, there is considerable uncertainty regarding future changes to, and the application of, tax legislation as a result of tighter public sector finances, the resulting pressure for reform, and tangibly greater scrutiny by the tax authorities.

The tax risks presented could have a material effect on GEA's financial position and results of operations. The occurrence of further material negative effects is considered to be relatively unlikely.

Opportunities

Overall assessment of opportunities and changes compared with the previous year

GEA's end markets offer a variety of opportunities for positive business performance over the long term. A key task of the opportunity and risk management system is to systematically evaluate both internal and external information in order to identify opportunities at an early stage and appropriately assess the potential they offer (see page 108 f.). Specific measures are then developed to enable GEA to convert opportunities into actual economic success.

The identified opportunities from operating activities and the additional positive impact on earnings that could result have not changed significantly as against the previous year.

Planning of the group's economic development is based on certain assumptions regarding the development of the performance parameters described below. If these parameters develop more positively than expected overall, this could have a corresponding effect on GEA's financial position and results of operations.

Performance opportunities

GEA is entering fiscal year 2018 with an unchanged high order backlog. Further growth is expected in the more rapidly expanding Asian markets in the medium term. GEA will further expand its presence in these regions and thus participate in the growth of these markets.

If the expected moderate growth in the global economy materializes, GEA's continued focus especially on the food and beverages end markets will allow it benefit more than average, especially in growth markets.

In the area of food process technology, GEA's further growth will be driven not only by the trend toward high-quality foods demanded by a burgeoning middle class, but also by the expected rise in production and quality standards as well as innovative process improvements and new product developments.

Thanks to the OneGEA structure, the group now boasts much flatter hierarchies and is also much closer to its customers thanks to the uniformity of its national organizations. This more prominent positioning of the portfolio as a whole coupled with intensified service business will promote additional profitable growth while nurturing customer loyalty. This will continue to further strengthen and expand the sustainable competitiveness of GEA until 2020 and beyond.

The previously relatively decentralized group structure featuring segmentation by technology meant that procurement was also organized on a highly individual basis. The new structure, in which the development and manufacturing of products and the provision of process solutions have been bundled in two new business areas, will give rise to optimization potential in the future. The company sees opportunities especially in the harmonization of material categories, the clustering of suppliers, and through the expansion of centrally coordinated purchasing processes.

GEA sees further potential in the structure of its present global production network. Thanks to the new group structure, it will now be possible to centralize management, optimize production capacities, and monitor capital expenditure to a greater degree than before, and this could give rise to additional, significant savings.

GEA's in depth understanding of its customers' production processes is a cornerstone of its success. Increasing scarcity of resources means that ever more efficient use needs to be made of raw materials and energy. In addition, end consumers' rising expectations call for the implementation of higher quality standards in production processes. Growing awareness of the environment means we must meet more stringent standards on CO_2 emissions, for example. This creates additional opportunities for GEA by focusing on research and development activities on environmentally friendly technologies and production processes and thus offer specialist solutions.

With the purchase of the Italian Pavan Group (see page 167 ff.), GEA acquired a leading supplier of extrusion and milling technology for processing and packaging all kinds of fresh and dried pasta, pelleted snack products and breakfast cereals. This is confirmation of GEA's growth strategy of expanding its activities in the area of food processing. Additional acquisitions may well see GEA further expand its portfolio of skills and achieve market leadership in new fields of activity. As the group's acquisition strategy is clearly focused on sophisticated process technology for the food industry, these acquisitions may well bring about a further increase in group profitability.

GEA considers the probability of the performance opportunities exceeding the planning assumptions and therefore having a material positive impact on net assets, financial position, and results of operations to be medium overall.

Report on Expected Developments

GEA's Report on Expected Developments takes into account relevant facts and events that were known at the date of preparation of these consolidated financial statements and that could influence the future development of its business.

Economic environment in 2018

As described in the section on the macroeconomic environment in the report on the economic position (see page 32), GEA, as a global technology company, considers global growth in gross domestic product (GDP) and the corresponding forecasts made by the IMF, the World Bank Group and the UN to be key benchmarks in terms of its own performance.

World Economic Outlook IWF (Januar 2018)	Outlook	
	2017	2018
Worldwide	3.7%	3.9%
Advanced economies	2.3%	2.3%
Emerging market and developing economies	4.7%	4.9%

In the January update of its "World Economic Outlook", the IMF stated that it expects global economic activity to increase. Global growth forecasts for 2018 and 2019 were each raised to 3.9 percent; according to the IMF, this is the result of rising global growth dynamics and the likely implications of recent changes to US fiscal policy. Further, the experts postulate that while the global economy is set to gain momentum in the short term, several risks and challenges are looming on the mid-term horizon. A significant risk, for example, is the potential for stricter global financing terms and conditions. What is more, the onus is on politicians to exploit favorable economic conditions to eliminate the weaknesses evident in many of the world's economies – if they don't, economic researchers believe, the upswing will surely not endure.

In its global economic report, the UN is predicting, for the most part, stable growth for the global economy in the coming years. A healthier economic backdrop would provide the nations of the world with opportunities to focus their policies on long-term issues, such as promoting eco-friendly growth, reducing inequality, diversification, and eradicating deep-rooted constraints on development. The UN predicts robust global growth of 3.0 percent for 2018 and 2019. Economic output in the industrialized nations is set to rise by 2.0 percent in 2018 and by 4.6 percent in the developing countries. That said, economic prospects remained challenging for many a commodity-exporting nation. Also, countries that rely on a small number of natural resources would be vulnerable to cyclical upturns and downswings. The global economy as a whole was still facing risks in the form of changes in trade policies, a sudden deterioration in the global financial situation, and heightened geopolitical tension. According to the UN, although the investment climate is brighter now, the increasing political uncertainty and growing debt could hinder a more marked recovery in the investment appetite of the markets.

The World Bank Group is predicting an extensive economic upswing that will define the coming years. For 2018, it is forecasting global economic growth of up to 3.1 percent after 2017 turned out to be much better than expected. Nonetheless, downside risks could tarnish the global economic situation. Indeed, growth potential was diminishing and was below the long-term average – both globally and in terms of the emerging and developing countries. In 2018, growth in the industrialized nations is likely to decline slightly to 2.2 percent, while growth in the emerging and developing countries is set to rise to 4.5 percent in 2018.

Economic environment for GEA

GEA's planning for the current fiscal year 2018 assumes that demand in its sales markets will be on or around the 2017 level.

The group's enduring success is founded on a number of major global trends:

1. Continuous growth in the global population
2. Growing middle class
3. Growing demand for high-quality foods and beverages
4. Increasing demand for production methods that are efficient and conserve valuable resources.

The United Nations believe that the world's population, which currently stands at more than 7.6 billion people, is set to rise by around 80 million people per year in the coming years (see World Population Prospects: The 2017 Revision). Since 2005, therefore, the world's population has grown by around a further 1 billion people, and by around 2 billion compared with 1993. The number of people on the globe is set to rise to between 8.4 and 8.7 billion by 2030. This means that, in future, significantly more food will have to be produced on more or less the same cultivation area. For this reason, the methods and production processes used must become much more efficient – which is why innovative process technology is needed.

At the same time, urbanization continues unabated. The number of people living in cities meanwhile rose to 4.0 billion in 2016 (see The World's Cities in 2016). This means that more than half of the world's population now lives in urban areas. This figure is set to expand by a further billion people by 2030, particularly in Asia and Africa. More and more foods must be preserved for longer and be easier to transport in order to secure the necessary supplies for metropolitan areas and to maintain world trade. Only state-of-the-art technologies can provide the capacity needed to cope with this rising demand.

What is more, as the middle class grows, so will the number of people who will be able to afford processed foods, beverages, and dairy products. This is equally true for pharmaceutical products, which must meet the needs of an increasingly health-conscious population.

Against the backdrop of the trends in the global economy and the food industry presented in this chapter, and the impact of the various megatrends on its direct sales markets, GEA is expecting demand for high-quality foods to rise in the long term and, linked to this, investment in the food industry to remain stable. Additionally, GEA is anticipating sustained customer interest in process optimization for improving efficiency, productivity, energy usage, and plant availability, which its technologies are able to provide.

With regard to commodity prices, the World Bank (see Commodity Markets Outlook, October 2017) expects the prices of most industrial goods to remain stable throughout the current year. But there is a slight difference here between the burgeoning price of energy (increase of 4 percent) and that of the other commodities (increase of 1 percent).

The proportion of GEA's revenue accounted for by the food industry in 2018 is expected to remain at its current high level. From a regional perspective, too, GEA is not anticipating any significant change in the current breakdown of revenue in 2018 as against the past fiscal year.

Growth in the customer industries

Based on its own latest estimates, external reports, and analyses conducted by industry associations, the following trends are expected for GEA's main customer industries:

Dairy Farming
Milk prices recovered strongly in the first half of 2017, bringing to an end what had been the longest milk price crisis to date. Driven by, among other things, the high price of butter, global milk prices made further gains in the second half of the year and reached the highest level for three years on global markets. Although dairy farming also recovered from its low-point of the previous year, this trend may well flatten out in terms of investment activity during 2018. Even if milk prices do fall in the first half of 2018, we still expect agricultural enterprises to maintain a certain propensity to invest, especially in the first half of 2018 – although this is likely to be on a lesser scale than in 2017.

In the mid to long term, GEA generally expects the global milk market to remain on a stable footing, with the consumption of dairy products, in particular, set to rise further thanks to the expansion of the global middle-class population. However, short-term effects such as poor harvests due to the weather can always generate substantial volatility, especially with regard to the price of milk.

Dairy Processing
Global demand for dairy products is set to rise further in the coming years. GEA is looking at above-average growth in fermented products such as yogurt, kefir and curd cheese, as well as cheese and baby food. In geographical terms, the markets of Asia, Eastern Europe, North Africa, and the Middle East will be the principal drivers of growth – thanks, in particular, to the added purchasing power created by an expanding middle-class population.

Investments in extra production capacity and in new dairy products are set to profit from this increased demand, also in Western Europe, North America, and Asia Pacific. This will also manifest itself in a corresponding rise in exports, above all to Asia, something which began again in 2017 after a break since 2014. Whereas major projects still formed a relatively large part of business in 2016 with an eye to expanding capacities for the production of milk powder, the focus since 2017 has been more on mid-scale investments in the wake of recent innovations in dairy products.

Food
With demand for packaged food rising – especially in Asia – corresponding global consumer demand is also set to increase more sharply in the medium term than in the recent past, with global consumption of pasta and baked goods, for example, leading the way.

Beverages
Global beverage consumption is likely to grow faster over the next few years than in the recent past, with demand for soft drinks increasing at a faster pace than that for alcoholic beverages. Together with an expanding middle-class population, product innovations such at non-alcoholic beer and sports drinks, which place a greater emphasis on health and functionality, are the key motors of growth.

Pharma
Global outlay on drugs and global R&D spending will continue to rise, not least as a result of the continuous rise in the number of drugs at various stages of clinical trials – something which will inevitably lead to the emergence of new medicinal products. Another factor to be considered is patent expiry, which will lead to the increased manufacture of generic products. All told, therefore, we are predicting stable growth in investment outlay for the pharmaceuticals sector, with the pharmerging markets of e.g. India, China, Russia and Brazil posting better-than-average growth.

Chemical
The manufacture of petrochemical products, especially "special chemicals", is set to rise, with a concomitant increase in investment activity expected. Here, growth will be driven largely by regional and mid-sized chemical companies, less so by the major global groups. In geographical terms, Asia – principally China and India – are expected to be the main growth drivers, with the Gulf States and North America being other focal points of investment activity.

Business outlook

This forecast is based on exchange rates that are unchanged relative to 2017 and assumes that there will be no slowdown in global economic growth. The acquisitions of Pavan Group and Vipoll (but not further possible acquisitions in 2018) have already been factored into calculations of the key performance indicators. Further, we are assuming an absence of serious slumps in demand from relevant customer industries or shifts between these industries that could negatively impact margins.

Revenue

Thanks to an additional revenue boost from the two acquisitions, GEA is targeting revenue growth of between 5 and 6 percent for the 2018 financial year.

Earnings

The operating EBITDA margin for the current fiscal year is expected to be between 12.0 and 13.0 percent of revenue. A loss of income from the real estate divestments in fiscal year 2017 as well as the anticipated increase in IT infrastructure expenses during the 2018 fiscal year will be offset by margin improvements in the company's operating segments. In this context, the EBITDA margin of the Business Area Solutions will increase disproportionately more than that of the Business Area Equipment.

Cash flow driver margin

With respect to our operating cash flow driver margin – i.e. the net amount of operating EBITDA, the change in working capital, and capital expenditure – we are expecting a ratio to revenue of between 8.7 percent and 9.7 percent in 2018. This indicator does not include investments in strategic projects.

Further expectations

Portfolio

The strategy of acquiring companies to open up new markets for GEA or specifically expand GEA's product portfolio in existing markets remains in place. This will enable us to provide our customers with an ever-broader range of services from a single source. In addition, we subject our current portfolio of products and services to regular reviews.

Dividend

The Executive Board and Supervisory Board will propose an increased dividend of EUR 0.85 to the Annual General Meeting for the 2017 financial year. The total dividend will thus amount to EUR 153.4 million on the basis of the number of shares in circulation as of February 28, 2018 . This would be the highest dividend per share ever paid out.

Summary

Overall, GEA expects the group to achieve growth of between 5 and 6 percent in real terms. This guidance factors in the recent acquisitions of Pavan Group and Vipoll and presupposes a stable global economy. With profitability now increasing again, and given our ongoing focus on liquidity generation, we hope to have the financial leeway necessary to attain our strategic growth targets. Our objective as regards the distribution ratio remains unchanged: We want to distribute between 40 and 50 percent of net income to our shareholders.

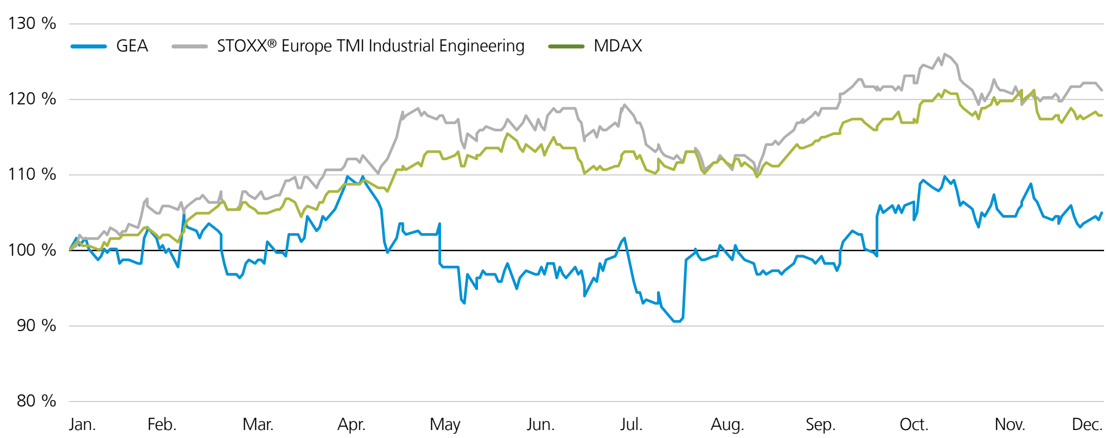
Düsseldorf, March 2, 2018

Jürg Oleas   Dr. Helmut Schmale   Steffen Bersch   Niels Erik Olsen   Martine Snels

GEA Shares/Investor Relations

Performance of GEA shares on the capital markets

GEA's share price increased by 4.7 percent over the course of the fiscal year in a market environment dominated by strong economic and political factors. On April 7, 2017, GEA shares reached EUR 42.04 – the highest closing price. Just a few days after the figures for the second quarter were published, GEA's share price fell to EUR 34.10 on July 31, 2017, its lowest point in the year. At the end of the year, the share was quoted at EUR 40.01.



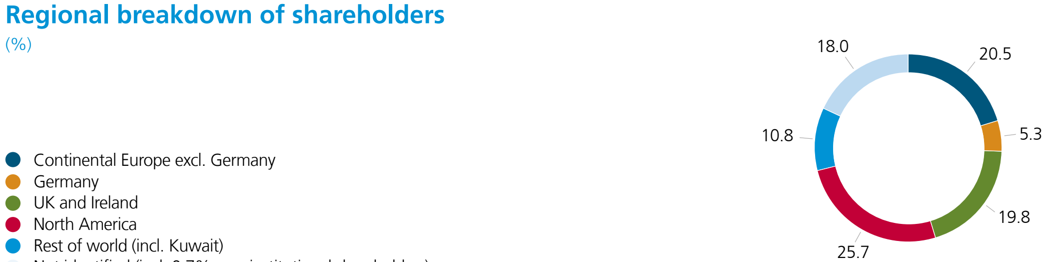
Shareholder structure

As of December 31, 2017, GEA Group Aktiengesellschaft held around 11.5 million or 6.0 percent of treasury shares. The number of shares outstanding at the end of the year was unchanged at 192,495,476. This led to a market capitalization of EUR 7.7 billion as of the end of 2017 compared with EUR 7.4 billion in December 2016.

As in previous years, the company performed detailed analyses of its shareholder structure in 2017 too. The current analysis from the second half of 2017 identified 88 percent of the company's shareholders. Institutional investors held 73 percent of the shares. The Kuwait Investment Office – the only GEA shareholder not assigned to free float by the German stock exchange – accounted for around 8.9 percent.

Regional breakdown of shareholders

(%)



Based on 192,495,476 shares, which were issued by GEA Group Aktiengesellschaft at the date of the survey in the third quarter of 2017

Investment styles of institutional investors

(%)

*) Growth at a Reasonable Price

Based on 192,495,476 shares, which were issued by GEA Group Aktiengesellschaft at the date of the survey in the third quarter of 2017

Investor relations activities

GEA takes its task of maintaining close contact with capital market players – and hence close relationships with its shareholders, potential investors, and analysts – extremely seriously. In 2017, too, GEA's investor relations activities again facilitated an ongoing, effective dialog with the capital markets. The Company used these activities to inform its shareholders and investors about developments within the group above and beyond its two quarterly statements, the half-yearly report, and the annual report. It also kept in close contact with investors by taking part in international conferences and roadshows, which were regularly attended by the CEO and the CFO. In 2017, it held a total of 26 roadshows. GEA representatives also took part in 18 conferences, as well as holding 340 one-on-one meetings.

Credit ratings/debt market

Rating agencies assess the ability of a company to honor its financial obligations. Through regular meetings with a company's management and financial department, and by conducting its own extensive analysis, the agencies are able to arrive at an individual score or rating for the organization. These ratings serve as evidence of the Company's creditworthiness to existing and potential debt capital providers. For many years now, the international agencies Moody's and Fitch have been rating the financial standing of GEA Group Aktiengesellschaft. Both rating agencies upheld their assessment of GEA Group Aktiengesellschaft's creditworthiness in fiscal year 2017, resulting in the following score for the GEA group:

	2017		2016	
Agency	Rating	Outlook	Rating	Outlook
Moody's	Baa2	stable	Baa2	stable
Fitch	BBB	stable	BBB	stable

The ratings enable GEA to raise funding by utilizing various debt instruments available on the inter national financial markets. This highlights how important it is for GEA to maintain its investment grade rating and continue to optimize its financial results going forward.

In total, GEA has credit lines in the amount of EUR 949.2 million, thereof EUR 244.9 million had been utilized as of the balance sheet date. Further information on the credit lines and their utilization can be found in note 3 to the consolidated financial statements beginning on page 160.

Consolidated Financial Statements

Consolidated Balance Sheet
as of December 31, 2017

Assets (EUR thousand)	Section	12/31/2017	12/31/2016
Property, plant and equipment	5.1	501,448	485,046
Investment property	5.2	2,415	3,662
Goodwill	5.3	1,725,808	1,505,629
Other intangible assets	5.4	539,844	428,801
Equity-accounted investments	5.5	14,414	15,929
Other non-current financial assets	5.6	38,723	38,654
Deferred taxes	7.8	411,290	502,117
Non-current assets		**3,233,942**	**2,979,838**
Inventories	5.7	659,580	611,405
Trade receivables	5.8	1,391,993	1,390,397
Income tax receivables	5.9	30,738	25,832
Other current financial assets	5.6	180,642	165,942
Cash and cash equivalents	5.10	250,507	929,120
Assets held for sale	5.11	–	5,403
Current assets		**2,513,460**	**3,128,099**
Total assets		**5,747,402**	**6,107,937**

Equity and liabilities (EUR thousand)	Section	12/31/2017	12/31/2016
Issued capital		489,372	520,376
Capital reserve		1,217,861	1,217,861
Retained earnings		756,923	1,067,812
Accumulated other comprehensive income		38,247	188,977
Non-controlling interests		1,191	578
Equity	6.1	**2,503,594**	**2,995,604**
Non-current provisions	6.2	152,531	138,751
Non-current employee benefit obligations	6.3	794,716	807,652
Non-current financial liabilities	6.4	6,008	10,238
Other non-current liabilities	6.7	33,041	48,181
Deferred taxes	7.8	171,170	144,930
Non-current liabilities		**1,157,466**	**1,149,752**
Current provisions	6.2	127,920	144,465
Current employee benefit obligations	6.3	147,071	181,424
Current financial liabilities	6.4	256,809	165,719
Trade payables	6.5	736,906	624,817
Income tax liabilities	6.6	28,489	33,317
Other current liabilities	6.7	789,147	812,839
Current liabilities		**2,086,342**	**1,962,581**
Total equity and liabilities		**5,747,402**	**6,107,937**

Consolidated Income Statement
for the period January 1 – December 31, 2017

(EUR thousand)	Section	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Revenue	7.1	4,604,514	4,491,894
Cost of sales		3,171,033	3,102,505
Gross margin		**1,433,481**	**1,389,389**
Selling expenses		518,786	499,632
Research and development expenses		65,259	57,391
General and administrative expenses		502,984	479,485
Other income	7.2	379,618	383,276
Other expenses	7.3	346,557	352,412
Share of profit or loss of equity-accounted investments		1,765	3,070
Other financial income	7.6	803	503
Other financial expenses	7.7	1,176	271
Earnings before interest and tax (EBIT)		**380,905**	**387,047**
Interest income	7.6	7,897	7,857
Interest expense	7.7	30,127	44,676
Profit before tax from continuing operations		**358,675**	**350,228**
Income taxes	7.8	130,607	81,628
thereof current taxes		64,347	57,792
thereof deferred taxes		66,260	23,836
Profit after tax from continuing operations		**228,068**	**268,600**
Profit or loss after tax from discontinued operations	7.9	**15,246**	**15,975**
Profit for the period		**243,314**	**284,575**
thereof attributable to shareholders of GEA Group AG		243,274	284,555
thereof attributable to non-controlling interests		40	20

(EUR)		01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Basic and diluted earnings per share from continuing operations		1.22	1.40
Basic and diluted earnings per share from discontinued operations		0.08	0.08
Basic and diluted earnings per share	7.10	**1.31**	**1.48**
Weighted average number of ordinary shares used to calculate basic and diluted earnings per share (million)		**186.3**	**192.5**

Consolidated Statement of Comprehensive Income
for the period January 1 – December 31, 2017

(EUR thousand)	Section	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Profit for the period		**243,314**	**284,575**
Items, that will not be reclassified to profit or loss in the future:			
Actuarial gains/losses on pension and other post-employment benefit obligations	6.3.1	–4,257	–25,262
thereof changes in actuarial gains and losses		955	–37,192
thereof tax effect		–5,212	11,930
Items, that will be reclassified subsequently to profit or loss when specific conditions are met:			
Exchange differences on translating foreign operations		–151,213	45,435
thereof changes in unrealized gains and losses		–151,213	45,435
Result of available-for-sale financial assets	6.8	–35	–233
thereof changes in unrealized gains and losses		–53	–331
thereof tax effect		18	98
Result of cash flow hedges		518	898
thereof changes in unrealized gains and losses		740	1,283
thereof tax effect		–222	–385
Other comprehensive income		**–154,987**	**20,838**
Total comprehensive income		**88,327**	**305,413**
thereof attributable to GEA Group AG shareholders		88,287	305,393
thereof attributable to non-controlling interests		40	20

Consolidated Cash Flow Statement
for the period January 1 – December 31, 2017

(EUR thousand)	Section	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Profit for the period		243,314	284,575
plus income taxes		130,607	81,628
minus profit or loss after tax from discontinued operations		–15,246	–15,975
Profit before tax from continuing operations		358,675	350,228
Net interest income		22,230	36,819
Earnings before interest and tax (EBIT)		**380,905**	**387,047**
Depreciation, amortization, impairment losses, and reversal of impairment losses on non-current assets		117,766	113,568
Other non-cash income and expenses		11,114	3,548
Employee benefit obligations from defined benefit pension plans		–41,294	–41,036
Change in provisions and other employee benefit obligations		–44,046	–65,969
Losses and disposal of non-current assets		–16,776	–4,321
Change in inventories including unbilled construction contracts*		–47,715	–72,130
Change in trade receivables		–24,616	–118,859
Change in trade payables		113,303	–5,882
Change in other operating assets and liabilities		–107,268	31,869
Tax payments		–71,841	–66,678
Cash flow from operating activities of continued operations		**269,532**	**161,157**
Cash flow from operating activities of discontinued operations		–7,535	1,229
Cash flow from operating activities		**261,997**	**162,386**
Proceeds from disposal of non-current assets		24,373	6,405
Payments to acquire property, plant and equipment, and intangible assets		–118,537	–91,007
Proceeds from current financial assets		–	237,000
Payments from non-current financial assets		–86	–640
Proceeds from non-current financial assets		–	4,098
Interest income		5,226	4,993
Dividend income		2,969	2,454
Payments to acquire subsidiaries and other businesses		–234,401	–106,995
Proceeds from sale of subsidiaries and other businesses		941	–
Cash flow from investing activities of continued operations		**–319,515**	**56,308**
Cash flow from investing activities of discontinued operations		–9,196	–5,600
Cash flow from investing activities		**–328,711**	**50,708**
Dividend payments		–152,812	–153,996
Payments for acquisition of treasury shares		–429,048	–
Payments from finance leases		–3,992	–3,853
Proceeds from finance loans		245,683	–
Proceeds from bond issue	6.4	–	–274,739
Repayments of borrower's note loans	6.4	–90,000	–
Repayments of finance loans		–152,840	–4,064
Interest payments		–15,188	–23,117
Cash flow from financing activities of continued operations		**–598,197**	**–459,769**
Cash flow from financing activities of discontinued operations		–76	–35
Cash flow from financing activities		**–598,273**	**–459,804**
Effect of exchange rate changes on cash and cash equivalents		–13,524	1,936
Change in unrestricted cash and cash equivalents		**–678,511**	**–244,774**
Unrestricted cash and cash equivalents at beginning of period		928,004	1,172,778
Unrestricted cash and cash equivalents at end of period	5.10	249,493	928,004
Restricted cash and cash equivalents	5.10	1,014	1,116
Cash and cash equivalents total		**250,507**	**929,120**

*) Including advanced payments received

Consolidated Statement of Changes in Equity
as of December 31, 2017

				Accumulated other comprehensive income					
(EUR thousand)	Issued capital	Capital reserves	Retained earnings	Translation of foreign operations	Result of available-for-sale financial assets	Result of cash flow hedges	**Equity attributable to shareholders of GEA Group AG**	Non-controlling interests	**Total**
Balance at Jan. 1, 2016 (192,495,476 shares)	**520,376**	**1,217,861**	**962,515**	**144,527**	**–234**	**–1,416**	**2,843,629**	**570**	**2,844,199**
Profit for the period	–	–	284,555	–	–	–	**284,555**	20	**284,575**
Other comprehensive income	–	–	–25,262	45,435	–233	898	**20,838**	–	**20,838**
Total comprehensive income	–	–	259,293	45,435	–233	898	**305,393**	20	**305,413**
Purchase of treasury shares	–	–	–	–	–	–	**–**	–	**–**
Dividend payment by GEA Group Aktiengesellschaft	–	–	–153,996	–	–	–	**–153,996**	–	**–153,996**
Changes in combined Group	–	–	–	–	–	–	**–**	–	**–**
Change in non-controlling interests	–	–	–	–	–	–	**–**	–12	**–12**
Balance at Dec. 31, 2016 (192,495,476 shares)	**520,376**	**1,217,861**	**1,067,812**	**189,962**	**–467**	**–518**	**2,995,026**	**578**	**2,995,604**
Profit for the period	–	–	243,274	–	–	–	**243,274**	40	**243,314**
Other comprehensive income	–	–	–4,257	–151,213	–35	518	**–154,987**	–	**–154,987**
Total comprehensive income	–	–	239,017	–151,213	–35	518	**88,287**	40	**88,327**
Purchase of treasury shares	–31,004	–	–400,193	–	–	–	**–431,197**	–	**–431,197**
Dividend payment by GEA Group Aktiengesellschaft	–	–	–152,812	–	–	–	**–152,812**	–	**–152,812**
Changes in combined Group	–	–	3,099	–	–	–	**3,099**	–	**3,099**
Change in non-controlling interests	–	–	–	–	–	–	**–**	573	**573**
Balance at Dec. 31, 2017 (186,337,459 shares)	**489,372**	**1,217,861**	**756,923**	**38,749**	**–502**	**–**	**2,502,403**	**1,191**	**2,503,594**

Notes to the Consolidated Financial Statements

1. Reporting Principles

1.1 Basis of presentation

The accompanying consolidated financial statements include GEA Group Aktiengesellschaft, Düsseldorf/Germany (entry HRB 65691 in the commercial register of the Local Court of Düsseldorf) and its subsidiaries, which together make up the GEA Group ("GEA" in short). GEA Group Aktiengesellschaft is a listed corporation. The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRSs) and related Interpretations issued by the International Accounting Standards Board (IASB), as adopted by the EU in compliance with Regulation (EC) No. 1606/2002 of the European Parliament and the Council on the application of international accounting standards. The additional provisions of section 315e of the HGB were also complied with.

The accompanying consolidated financial statements have been prepared in euros (EUR). All amounts, including the prior-year figures, are presented in thousands of euros (EUR thousand) except for the segment information. All amounts have been rounded using standard rounding rules. Adding together individual amounts may therefore result in differences in the order of EUR 1 thousand in certain cases.

To improve the clarity of presentation, various items in the consolidated balance sheet and income statement have been aggregated and are explained accordingly in the notes. Assets and liabilities are classified into current and non-current items. The income statement is prepared using the cost of sales method.

The cash flow statement is prepared using the indirect method for cash flow from operating activities and the direct method for cash flow from investing and financing activities.

The Executive Board of GEA Group Aktiengesellschaft prepared these consolidated financial statements on March 2, 2018 and released them for publication.

1.2 Accounting pronouncements applied for the first time

The accounting standards presented below were applied by GEA for the first time in the year under review:

Amendments to IAS 7 "Statements of Cash Flows" – issued by the IASB in January 2016
As part of its Disclosure Initiative, the International Accounting Standards Board (IASB) has published its amendments to IAS 7 "Statements of Cash Flows".

These require a company to disclose changes to such financial liabilities, the inflows and outflows thereof appear in the cash flow statement under cash flow from financing activities. The associated financial assets must also be included in the disclosures (e.g. financial assets from hedging transactions). In particular, cash-effective changes, changes resulting from the purchase or sale of companies, exchange-rate related changes, and changes in the fair value of assets must be reported. In order to fulfill disclosure obligations, a reconciliation account between the opening and closing balances will be incorporated in the notes to the consolidated financial statements. With regard to this change, GEA intends to apply the expedient admissible in the year in which the regulations are first applied and dispense with comparative figures from the previous year.

Furthermore, application of the amendments to IAS 7 have not had any significant effect on the presentation of the consolidated financial statements.

Amendments to IAS 12 "Income Taxes" – Recognition of Deferred Tax Assets for Unrealized Losses – issued by the IASB in January 2016

The amendments made to IAS 12 serve to clarify that write-downs to a lower market value of debt instruments measured at fair value resulting from a change in the market interest rate can give rise to deductible temporary differences. This expressly also applies to cases where the loss is not realized and in future, if held to maturity, will be reversed, as the debt instrument is amortized at the notional value. It does not matter whether or not the owner expects to hold the debt instrument until maturity, thereby realizing its full notional value.

In this context, it is also clarified that all deductible temporary differences must be assessed as a whole to establish whether sufficient taxable income can be generated in future in order to be able to use and recognize them. An independent assessment may only be made if and to the extent that the tax legislation distinguishes between different types of taxable profits. In addition, IAS 12 has added new rules and examples regarding the assessment of future taxable income for the accounting of deferred tax assets.

GEA has applied the amendments to IAS 12 retrospectively. Initial application of the amendments to IAS 12 have not significantly affected the consolidated financial statements.

Improvements to IFRSs 2014-2016 Cycle – amendments under the IASB's annual improvements project – published by the IASB in December 2016

The improvements result from the IASB's annual improvements process, which is designed to make minor amendments to standards and interpretations. They comprise minor amendments to three standards in total (IFRS 1, IFRS 12 and IAS 28).

The amendments to IFRS 12 must be applied for fiscal years beginning on or after January 1, 2017 and will not have any significant consequences for GEA.

1.3 Accounting pronouncements not yet applied

The accounting standards and interpretations, as well as amendments to existing standards and interpretations presented below, were issued but not yet required to be applied to the preparation of the IFRS consolidated financial statements as of December 31, 2017.

Unless otherwise stated, the new standards and interpretations have been endorsed by the EU. GEA will not be applying the new standards and interpretations prematurely.

GEA is currently examining the consequences of the revised accounting standards on the consolidated financial statements and will determine the date of initial application.

IFRS 9 "Financial Instruments" – issued by the IASB in July 2014

The IASB issued IFRS 9 "Financial Instruments" in November 2009, completing the first part of a three-phase project to replace IAS 39 "Financial Instruments: Recognition and Measurement". The new standard initially introduced uniform requirements on the measurement and classification of financial instruments. IFRS 9 was reissued in October 2010 to incorporate new requirements on accounting for financial liabilities. The requirements on accounting for financial liabilities and the derecognition of financial assets and liabilities were largely carried over unchanged from IAS 39. The amendments to IFRS 9 and IFRS 7 published in December 2011 changed the mandatory effective date of IFRS 9 and modified the relief from restating comparative periods and the associated disclosures in IFRS 7. The version of IFRS 9 issued in November 2013 amended the standard to include a new general hedge accounting model. In July 2014, the IASB issued the fourth and final version of IFRS 9, which now also includes the new requirements on the recognition of impairment losses and limited changes to the classification and measurement of financial assets. The final version superseded all previous versions of IFRS 9.

The main new requirements of IFRS 9 on the recognition and measurement of financial instruments are described below:

Classification and measurement of financial assets
In the future, there will only be two classification and measurement categories for financial assets: at amortized cost or at fair value. Financial assets at amortized cost comprise those financial assets that give rise solely to payments of principal and interest at specified dates and are also held within a business model for managing financial assets whose objective is to hold those financial assets and collect the associated contractual cash flows (cash flow criterion). All other financial assets are classified as at fair value. Under certain circumstances, a fair value option is available for financial assets falling under the first category on initial recognition, as at present.

Depending on the business model in which they are held, changes in financial assets belonging to the fair value category must be recognized in profit or loss, or in other comprehensive income. For other equity instruments that are carried at fair value through profit or loss and not held for sale, there is an optional right on initial application to carry changes in value in other comprehensive income; in this case, however, any dividend income from these assets must be recognized in profit or loss. Profits or losses carried in other comprehensive income are not reclassified to the income statement even when the relevant instruments are disposed of.

Existing factoring arrangements can mean that certain trade receivables are held as part of a business model, the objective thereof is to hold and sell financial assets. As such, these receivables must be measured at fair value. Changes in the value of financial assets such as these are carried in other comprehensive income. The corresponding trade receivables had a carrying amount of EUR 83 million as of the reporting date. GEA does not expect the initial measurement of these receivables at fair value to produce significant reporting differences compared with the current method of measurement at amortized cost in accordance with IAS 39.

In the past, certain investments made by GEA in the context of liquidity management qualified as cash equivalents pursuant to IAS 7 and were, therefore, carried at amortized cost in accordance with IAS 39. IFRS 9 stipulates that investments of this nature must be measured at fair value. Depending on the business model in which they are held, changes in the value of such investments must be recognized in profit or loss, or in other comprehensive income GEA did not hold any such investments as of the reporting date. Were investments of this nature to be carried out again in the future, measurement at fair value would produce only very minor reporting differences compared with measurement in accordance with IAS 39.

GEA's financial assets include a financial receivable relating to the former mining activities of Metallgesellschaft AG that was classified as an "available-for-sale financial asset" pursuant to IAS 39 and recognized at fair value through equity. The scheduled payments of the debtor – the operator of a copper mine – are influenced by the price of copper and other factors. As such, the cash flow criterion has not been met and, pursuant to IFRS 9, the receivable must be measured at fair value through profit or loss. As of the reporting date, the carrying amount of this receivable was EUR 8,526 thousand. The unrealized losses of EUR 722 thousand recognized in accumulated other comprehensive income will be reclassified to retained earnings during the initial application of IFRS 9. Otherwise, GEA is not expecting further material effects from initial application.

Accounting for financial liabilities

With regard to accounting for financial liabilities, the most important change relates to the presentation of changes in the value of financial liabilities designated as measurable at fair value. In future, the amount of the change relating to changes in own credit risk must be recognized in other comprehensive income, while the remaining amount of the change in fair value is recognized in profit or loss.

Hedge accounting

The introduction of the new general hedge accounting model is intended to align hedge accounting more closely with the risk management system. The new model opens up further options to apply hedge accounting: In particular, groups of hedged items that meet the qualifying criteria individually, as well as net positions and nil net positions, may now be designated in a hedging relationship. Generally, every financial instrument carried at fair value is suitable to be a hedged item.

New requirements are being introduced in relation to the effectiveness of hedging relationships; stipulation of the ranges for the measurement of effectiveness is being dispensed with, so that a retrospective effectiveness test no longer has to be performed. The prospective effectiveness test as well as recognition of any ineffectiveness continue to be required.

A hedging relationship may only be terminated when the defined conditions for this are met; this means that it is mandatory to continue hedging relationships if risk management objectives remain unchanged.

Enhanced disclosures are required in relation to the risk management strategy, the consequences of risk management on future cash flows, as well as the effects of hedge accounting on the financial statements.

Provided the conditions and qualitative characteristics for their formation continue to be met, hedging relationships do not have to be terminated as a result of the transition from IAS 39 to IFRS 9.

As of December 31, 2017, no cash flow hedges had been formed.

New impairment model

The new impairment model introduced by IFRS 9 is applicable to financial assets measured either at amortized cost or at fair value through equity.

Under the new model for determining impairment losses, not only incurred losses but also expected credit losses are recognized. Expected credit losses are required to be recognized either in the amount of the "12-month expected credit losses" – the present value of the expected credit losses resulting from the default events possible in the 12 months following the reporting date – or in the amount of the lifetime expected credit losses. The recognition of lifetime expected credit losses is required if the credit risk of the financial instruments concerned has increased significantly since initial recognition.

At GEA, significant increases in default risk are monitored via the ratings of external credit rating agencies and the performance of certain credit default swaps. The expected "12-month loss" and losses materializing over the entire residual term of the instrument (lifetime losses) are calculated using credit default swaps.

IFRS 9 states that the "simplified approach" must be applied to all trade receivables and contractual assets, i.e. that lifetime losses must be recognized as soon as they accrue. In the context of this simplified approach, GEA calculates expected credit defaults according to risk category, while taking historic default rates and a selection of macroeconomic indicators into account. With the simplified approach, an individual value adjustment is made when one or more events that adversely affect the debtor's financial standing have occurred.

The application of IFRS 9 has made a big difference to the way in which impairments are calculated, for instance when trade receivables are classified by risk category, historic credit defaults are calculated or updated, and forward-looking information is incorporated. Due to the need to incorporate forward-looking information into the calculation of expected credit losses, application of the standard will require additional discretionary judgments to be made.

Applying the simplified approach and based on current analyses, GEA expects to recognize impairments of around EUR 1 million as of January 1, 2018 on assets whose impairment losses are not recognized individually.

Transition requirements

IFRS 9 is required to be applied for fiscal years beginning on or after January 1, 2018; earlier application is permitted. GEA will apply IFRS 9 for the first time as of the fiscal year 2018.

GEA intends to apply the expedient admissible under IFRS 9 in the year of initial application and dispense with comparative figures from the previous year. Differences in the carrying amounts of the financial assets and liabilities arising from the application of IFRS 9 are presented in retained earnings as of January 1, 2018. When an entity chooses to apply this expedient, additional disclosures are required according to IFRS 7 to allow for assessment of the consequences of the first-time application.

Project status

Last year, GEA continued its analysis of the implications of IFRS 9 for the measurement of the company's net assets, financial position, and results of operations. Based on the findings, GEA does not believe that the new requirements under IFRS 9 will have a significant effect on the group's net assets, financial position, and results of operations. This preliminary assessment is based on the current status of the analysis.

IFRS 15 "Revenue from Contracts with Customers" – issued by the IASB in May 2014

The new standard pools the existing revenue recognition requirements and establishes a single revenue recognition model. IFRS 15 applies to the recognition of contracts with customers for the provision of services and the sale of goods and thus also covers the recognition of construction contracts, which were previously governed by IAS 11.

The new integrated revenue recognition model provides a five-step framework for determining the amount of revenue and the timing of revenue recognition:

1. Identification of the contract with the customer,
2. Identification of separate performance obligations,
3. Determination of the total transaction price,
4. Allocation of the transaction price to the separate performance obligations,
5. Recognition of revenue when a performance obligation is satisfied.

In addition, IFRS 15 introduces more extensive disclosures on revenue recognition.

IFRS 15 is required to be applied for fiscal years beginning on or after January 1, 2018. Either the "full retrospective" or the "modified retrospective" method will be used on initial adoption. IFRS 15 grants various practical expedients for both methods.

In April 2016, the IASB published its "Clarifications to IFRS 15 – Revenue from Contracts with Customers". These supplementary provisions deal with issues such as identifying separate performance obligations, distinguishing whether a company is operating as a principal or an agent towards its customer, and separating licenses. The clarifications also feature additional practical expedients with regard to the initial application of IFRS 15.

GEA intends to apply IFRS 15 and its clarifications for the first time as of the fiscal year 2018.

Transition requirements

GEA will apply the "modified retrospective approach" when applying IFRS 15 for the first time, i.e. IFRS 15 will be applied retrospectively to only the most current period presented in the financial statements, while the comparative period will be presented in accordance with IAS 11 or IAS 18. The above approach requires an entity to recognize the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of retained earnings at the date of initial application. GEA is using the practical expedients provided in this context and is applying IFRS 15 only to contracts that have yet to be fulfilled at the time of initial application.

Project status

GEA continued its analysis of the consequences of the new regulations throughout 2017 as part of a group-wide project, took steps to implement the necessary adjustments to processes and systems, and provided group companies with guidance on the transition to IFRS 15.

Comprising two phases, the project focused on the following areas:
The first involves a detailed analysis of the implications of IFRS 15 for the two Business Areas, Solutions and Equipment. In addition to ensuring that all factors had been considered, the analysis also assessed the materiality of the consequences of IFRS 15. The results of the analysis were verified in the individual divisions and then documented with regard to the initial application of IFRS 15. For the most part, the analysis phase had been completed by the end of the fiscal year. The analyses conducted in 2017 largely confirmed last year's anticipated impacts of the initial application of IFRS 15. Based on the previous analysis phase and depending on the findings made, GEA deliberated

on whether to exercise any of the practical expedients for the initial application of IFRS 15. In the second phase, necessary adjustments to the existing accounting processes and IT systems were made.

Based on the current findings, GEA does not believe that the requirements under IFRS 15 will have serious repercussions for the group's net assets, financial position, and results of operations.

On the basis of analyses conducted during the group-wide project, GEA has identified the following repercussions:

- According to IFRS 15, transfer of control is the key criterion for revenue recognition. The accounting treatment differs depending on whether control passes at a point in time or over time.

  Business Area Solutions: Here, GEA generates revenue largely on the basis of construction contracts. On the basis of analyses carried out so far, we expect that revenues from essentially customer-specific project contracts will continue to be recognized "over time" rather than at a point in time, as GEA will generally be creating an asset that has no alternative use and will be legally entitled to "remuneration plus margin" for good/services already provided. In the case of the generally immaterial customer-specific production orders for which revenue recognition "over time" pursuant to IFRS 15 is no longer admissible, revenue recognition will be deferred.

  Business Area Equipment: Here, GEA generates revenue principally from the sale of standardized, modularized equipment. On the basis of provisional analyses, the group is not expecting any implications in terms of the timing of revenue recognition, which generally – as in the past – will occur at a specific point in time, i.e. when the goods are delivered.

- Under IFRS 15, revenue recognition is no longer dependent solely on the timing of the transfer of the principal risks and rewards to the customer, but also on the point at which control is transferred. Depending on the terms and conditions of supply, however, transfer of control sometimes occurs after the transfer of the principal risks and rewards.

- IFRS 15 stipulates that costs arising from the acquisition of customer-specific project contracts have to be capitalized separately. In the future, such costs will not be taken into account when measuring the progress of a contract (stage of completion).

- Under IFRS 15 regulations on balance sheet presentation, advance payments must also be included when determining the contract balance on a contract-to-contract basis. As things currently stand, advance payments received are disclosed separately on the balance sheet pursuant to IAS 11 and IAS 18. The particular implications for GEA in this regard concern the need to incorporate advance payments on construction contracts in the account balances of such orders, which is currently not the case.

- IFRS 15 explicitly requires that due but not yet received advance payments from customers are carried on the balance sheet, and this will result in an increase in total assets and liabilities.

- In individual cases, the separation of performance obligations under IFRS 15 and allocation of the total transaction price to these obligations could lead to revenues being recognized later. With regard, however, to the timing of revenue recognition in the case of contracts to supply spare parts, it is the provision of the individual components that constitutes the performance obligation rather than the "stand-ready obligation".
- According to IFRS 15 requirements, the revenues recognizable under a customer contract with respect to variable elements of a consideration such as performance-based incentives, discounts, bulk rebates and contractual penalties need to be estimated with prudence.
- The presentation and disclosure requirements under IFRS 15 go beyond the provisions of the current standard. IFRS 15 requires extensive qualitative and quantitative disclosures on the classification of revenue, as well as on performance obligations, contract balances, the consideration that is expected to be paid, and on significant discretionary judgments. On the basis of this information, GEA has taken steps to adjust current in-house procedures, accounting processes and IT systems accordingly.

Due to the current heterogeneity within the system landscape, it was not possible to make a final assessment of the quantitative effects due to the transition to IFRS 15 by the end of the financial year. According to our plans, this will be completed during the first quarter of 2018.

IFRS 16 "Leases" – issued by the IASB in January 2016

The new lease accounting standard has introduced a single lessee accounting model in which all leases and the associated contractual rights and obligations are recorded on the balance sheet. This has eliminated the classification of leases as either operating leases or finance leases for a lessee, as so far required under IAS 17.

For every lease agreement, a liability corresponding to future lease payments must be recognized by the lessee, and a right-of-use asset capitalized at the present value of future lease payments, plus directly attributable costs. The lease payments include fixed payments, variable payments as long as these are index-based, expected payments based on residual value guarantees, and, where applicable, the exercise price of purchase options and penalties for the premature termination of lease agreements. During the term of the lease agreement, the lease liability is amortized using financial valuation methods in a similar way to that stipulated in the IAS 17 regulations governing finance leases. The right-of-use asset, however, is depreciated, resulting in higher expenditure at the beginning of the term of a lease agreement compared with the previous regulations. Accounting for short-term leases and leased assets of low value is simplified.

For lessors, on the other hand, the regulations of the new standard resemble those of the previous standard IAS 17. Leases continue to be classified either as finance or operating leases. Leases which essentially transfer all risks and rewards associated with ownership of the asset are classified as finance leases, while all other leases are classified as operating leases. The IAS 17 criteria have been adopted by IFRS 16 for classification purposes.

In addition, IFRS 16 contains a series of additional regulations regarding reporting and disclosures in the notes, as well as sale and leaseback transactions.

IFRS 16 replaces the current rules of IAS 17 "Leases" and the associated interpretations in IFRIC 4 "Determining whether an Arrangement contains a Lease, SIC 15 Operating Leases – Incentives", and SIC 27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease".

The new regulations must be applied for fiscal years beginning on or after January 1, 2019. Earlier application is permitted, as long as IFRS 15 is also applied.

Transition requirements
GEA will apply IFRS 16 for the first time as of the beginning of fiscal year 2019. GEA expects to apply the "modified retrospective approach" when applying IFRS 16 for the first time, i.e. IFRS 16 will be applied retrospectively to only the most current period presented in the financial statements, while the comparative period will be presented in accordance with the prior revenue regulations of IAS 17. GEA is currently analyzing the implications of the practical expedients and exemptions.

Project status
Throughout the 2017 fiscal year, GEA continued its assessment of the potential impacts of the new regulations on its consolidated financial statements as part of a group-wide project to implement IFRS 16.

The quantitative effects of the new standard will depend, among other things, on the transition method chosen, the extent to which the Group makes use of the practical expedients and recognition exemptions, and all additional leasing agreements GEA enters into up to the point of initial application.

GEA expects the application of IFRS 16 to lead to an increase in lease liabilities, with the usage rights to the leased objects ("right-of-use assets") recognized correspondingly on the assets side of the balance sheet. A significant proportion of these liabilities will be accounted for by obligations under real estate rental and lease agreements, which are classified as operating leases under the current provisions of IAS 17 (see section 8.2). Consequently, the implementation of an appropriate group-wide software solution for classifying and measuring future leasing agreements within GEA will be the prime focus of project activity during fiscal year 2018.

As things stand, GEA believes that the new requirements will increase its financial liabilities and reduce the equity ratio.

Amendments to IFRS 2 "Share-based Payment" – Classification and Measurement of Share-based Payment Transactions – published by the IASB in June 2016

The amendments to IFRS 2 serve to clarify the classification and measurement of share-based payment transactions. The clarifications address the issue of how vesting conditions affect the measurement of cash-settled, share-based payments, and how changes in the classification of certain share-based payment transactions should be accounted for on the balance sheet.

GEA does not expect the implementation of the amendments to IFRS 2 to materially affect its financial reporting.

The amendments will be required to be applied in fiscal years beginning on or after January 1, 2018; earlier application is permitted.

Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture – issued by the IASB in September 2014

The amendments address a known inconsistency between the requirements of IFRS 10 and those of IAS 28 (2011) in cases where assets are sold to or contributed by an associate or a joint venture. In the future, the gain or loss resulting from such a transaction will only be recognized in full if the asset sold or contributed is a business within the meaning of IFRS 3, regardless of whether the transaction is structured as a share deal or an asset deal. However, if the assets do not constitute a business, any gain or loss is recognized only in proportion to the investor's interest in the associate or joint venture.

GEA does not expect the implementation of the amendments to IFRS 10 and IAS 28 to materially affect its financial reporting.

In December 2015, the IASB issued an amendment to IFRS 15 deferring the timing of initial application. The reason for the postponement is that the IASB wants to take another look at certain transactions in the context of a research project on the equity method of accounting. Notwithstanding this deferral, early application of the amendments will be permitted once they have been endorsed by the EU, which is still outstanding.

Amendments to IAS 40 "Investment property" – Classification of Property under Construction – issued by the IASB in December 2016

The amendment to IAS 40 serves to clarify the cases in which property under construction or development begins or ceases to be classified as "investment property". Up to now, the classification of property under construction or development as investment property was not clearly regulated owing to the exhaustive nature of the list of standard cases giving rise to a change in use of a property. As this list is no longer explicitly exhaustive, property under construction can also fall under the corresponding classification regulation in the future.

GEA does not expect the implementation of the amendments to IFRS 40 to materially affect its financial reporting. Subject to its endorsement by the EU, the amendment will be required to be applied for fiscal years beginning on or after January 1, 2018; earlier application is permitted.

Improvements to IFRSs 2014-2016 Cycle – amendments under the IASB's annual improvements project – published by the IASB in December 2016

The improvements result from the IASB's annual improvements process, which is designed to make minor amendments to standards and interpretations. They comprise minor amendments to three standards in total (IFRS 1, IFRS 12 and IAS 28). GEA does not expect application of the improvements to materially affect its financial reporting.

The amendments to IFRS 12 will be required to be applied for fiscal years beginning on or after January 1, 2017. The amendments to IFRS 1 and IAS 28 are applicable to fiscal years beginning on or after January 1, 2018. In each case, earlier application is permitted.

IFRIC 22 "Foreign Currency Transactions and Advance Consideration" – issued by the IASB in December 2016

IFRIC 22 addresses an issue with regard to the application of IAS 21 "Effects of Changes in Foreign Exchange Rates". The interpretation clarifies the date that is to be used for determining the exchange rate for transactions that include the receipt or payment of advance consideration in a foreign currency. As such, the date of the transaction for the purpose of determining the exchange rate is the date of initial recognition of the asset or liability arising from the advance payment.

GEA does not expect the initial application of IFRIC 22 to materially affect its financial reporting. Subject to its endorsement by the EU, the interpretation will be required to be applied for fiscal years beginning on or after January 1, 2018; earlier application is permitted.

IFRIC 23 "Uncertainty over Income Tax Treatments" – published by the IASB in June 2017

How certain circumstances and transactions are ultimately treated for tax can depend on whether the relevant financial authority accepts the treatments an entity has used or plans to use in its income tax filing. IFRIC 23 supplements the provisions set out in IAS 12 "Income Taxes" by clarifying the accounting for uncertainties in income taxes with regard to certain circumstances and transactions.

GEA does not expect the initial application of IFRIC 23 to materially affect its financial reporting. Subject to endorsement by the EU, it is understood that these new regulations must be applied for fiscal years beginning on or after January 1, 2019. Earlier application is permitted.

Amendments to IFRS 9 "Financial Instruments" – Prepayment Features with Negative Compensation – issued by the IASB in October 2017

The IASB has published amendments to IFRS 9 in order to address concerns about how IFRS 9 classifies particular prepayable financial assets.
The existing IFRS 9 provisions on termination rights will be modified to allow such financial assets to be measured at amortized cost (or, depending on the business model, at fair value through equity) even in the case of negative compensation.

The amendment also serves to clarify an aspect of accounting for financial liabilities: in cases where a financial liability is restructured but not derecognized, its carrying amount must be adjusted immediately through profit and loss. Therefore, accounts may need to be amended retroactively if, in the past, the effective interest rate – rather than the amortized costs – was adjusted subsequent to a modification.

GEA does not expect the amendments to IFRS 9 to materially affect its financial reporting.

Subject to endorsement by the EU, the amendments to IFRS 9 are to be applied retrospectively for fiscal years beginning on or after January 1, 2019. Earlier application is permitted. Additional transitional requirements and corresponding disclosure obligations must be observed when the amendments are applied for the first time.

Amendments to IAS 28 "Investments in Associates and Joint Ventures" – Long-term Interests in Associates and Joint Ventures – issued by the IASB in October 2017

The amendment to IAS 28 clarifies an issue whereby IFRS 9 is applied to long-term interests in associates and joint ventures that form part of the net investment in that associate or joint venture, but are not equity-accounted.

GEA does not expect the amendments to IAS 28, which, subject to their endorsement by the EU, must be applied for fiscal years beginning on or after January 1, 2019, to affect its financial reporting.

Earlier application is permitted. Although the amendments are applicable with retroactive respect, the practical expedients for the transitional phase permit their adoption after the initial application of IFRS 9. In addition, expedients on the presentation of prior periods are available for companies that opt not to apply IFRS 9 in accordance with IFRS 4. Fully retroactive application is permitted if this is possible without the use of later findings.

Improvements to IFRSs 2015-2017 Cycle – amendments under the IASB's annual improvements project – published by the IASB in December 2017

The improvements result from the IASB's annual improvements process, which is designed to make minor amendments to standards and interpretations. They comprise minor amendments to four standards in all (IFRS 3, IFRS 11, IAS 12 and IAS 23).

The amendments to IFRS 3 and IFRS 11 clarify the accounting procedure that must be applied when an entity obtains control of a business that is a joint operation in which it previously held interests. The amendments to IAS 12 clarify that all income tax consequences of dividends (i.e. distribution of profits) should be recognized in profit or loss, regardless of how the tax arises.

The amendments to IAS 23 clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally. Thus, these borrowing costs become available again as "general borrowing" for determining the borrowing costs to be capitalized for another qualifying asset on the basis of the weighted average of all borrowing costs.

The improvements are not expected to have any material effect on the consolidated financial statements and are yet to be endorsed by the EU. Subject to this endorsement, the amendments will be required to be applied for fiscal years beginning on or after January 1, 2019. Earlier application is permitted.

Amendments to IAS 19 "Employee Benefits" – Plan Amendment, Curtailment or Settlement – published by the IASB in February 2018

The amendments concern the regulations governing amendments, curtailments and settlements of plans. According to IAS 19, if a plan amendment, curtailment or settlement occurs, it is now mandatory that the net liability arising from defined benefit pension plans be remeasured using the latest actuarial assumptions. The amendments further clarify that in such an event, it is mandatory that the current service cost and the net interest for the period after remeasurement are also determined using the latest assumptions used for the remeasurement.

GEA does not expect the implementation of the amendments to IAS 19 to materially affect its financial reporting.

Subject to endorsement by the EU, these new regulations are to be applied for fiscal years beginning on or after January 1, 2019. Earlier application is permitted.

2. Accounting Policies

2.1 Description of accounting policies

Basis of consolidation

GEA's consolidated financial statements include all significant companies that GEA Group Aktiengesellschaft directly or indirectly holds the majority of voting rights or otherwise directly or indirectly controls by holding, for example based on contractual arrangements. Control exists when GEA is exposed, or has rights, to variable returns from involvement with the investee on the one hand, and has the ability to affect those returns through its power over the investee on the other. Subsidiaries are consolidated from the date on which the group obtains control over them. They are deconsolidated from the date on which control is lost.

Acquired subsidiaries are accounted for using the purchase method. The consideration paid is measured on the basis of the fair value of the assets received, the liabilities assumed to the seller, and the equity instruments issued at the transaction date. The identifiable assets acquired and liabilities and contingent liabilities assumed in the business combination are recognized at their fair value at the transaction date, irrespective of any non-controlling interests. Any contingent consideration agreed is recognized at fair value at the acquisition date. Subsequent changes in fair value are recognized in profit or loss.

The excess of cost over the share of the fair value of the subsidiary's net assets acquired is recognized as goodwill. If, after a further examination, cost is lower than the share of the fair value of the subsidiary's acquired net assets measured at fair value, the difference is recognized as a gain in profit or loss.

Investments in subsidiaries, intragroup receivables, liabilities, and income and expenses are eliminated, as are profits and losses from intragroup transactions.

If consolidated subsidiaries have a different reporting date to the parent, they are included on the basis of interim financial statements as of December 31, 2017.

The consolidated group changed as follows in fiscal year 2017:

Number of companies	2017	2016
Consolidated group as of January 1	**219**	**222**
German companies (including GEA Group AG)	36	36
Foreign companies	183	186
Initial consolidation	9	7
Merger	–9	–7
Liquidation	–2	0
Deconsolidation	–2	–3
Consolidated group as of December 31	**215**	**219**
German companies (including GEA Group AG)	32	36
Foreign companies	183	183

A total of 48 subsidiaries (previous year: 47) were not consolidated since their effect on the group's net assets, financial position, and results of operations is not material even when viewed in the aggregate. Their consolidated revenue amounts to 0.1 percent (previous year: 0.1 percent) of the group's aggregate consolidated revenue, while their earnings account for 0.3 percent (previous year: 0.4 percent) of recognized earnings before tax of the complete group, and their equity accounts for 0.8 percent (previous year: 0.5 percent) of consolidated equity. The subsidiaries are measured at cost and recognized as other non-current financial assets, as their fair value cannot be determined with sufficient certainty.

A complete list of all subsidiaries, associates, and joint ventures can be found in section 12.4.

Changes in ownership interest

Changes in GEA's ownership interest in a subsidiary that do not result in obtaining or losing control are equity transactions. The carrying amounts of controlling and noncontrolling interests must be adjusted in such way that they reflect the changes in ownership interests in the subsidiaries. Any difference between the amount by which the noncontrolling interests are adjusted and the fair value of the consideration paid or received must be recognized directly in equity, and attributed to the owners of GEA.

Investments in associates and joint ventures

Entities over which a group company can exercise significant influence, i.e. it can participate in the investee's financial and operating policy decisions, are accounted for as associates. This generally relates to companies in which GEA directly or indirectly holds 20 to 50 percent of the voting rights.

Joint ventures are joint arrangements whereby the parties involved have joint control over the arrangement and rights to its net assets. Joint control exists when decisions about the relevant activities of the joint arrangement require the unanimous consent of GEA and the other parties that collectively control the arrangement.

Associates and joint ventures are accounted for using the equity method at the group's share of adjusted equity. They are initially recognized at cost. Any goodwill arising on acquisition is included in the carrying amount of the investment.

The group's share of the profit or loss of equity-accounted investments is recognized and presented separately in the income statement. The group's share of income and expenses recognized outside profit or loss is reported directly in other comprehensive income. If the group's share of an associate's or joint venture's loss exceeds the carrying amount of the net investment in the associate or joint venture, no further losses are recognized.

Where necessary, the accounting policies of associates and joint ventures are adjusted to comply with uniform group accounting principles.

As of the reporting date, one investment in associates (previous year: 1) and 5 investments in joint ventures (previous year: 5) were accounted for using the equity method.

Joint operations

Joint operations are joint arrangements whereby the parties involved have joint control over the arrangement and rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control exists when decisions about the relevant activities of the joint arrangement require the unanimous consent of GEA and the other parties that collectively control the arrangement.

The assets, liabilities, income, and expenses of joint operations are accounted for in proportion to GEA's interest in them in accordance with the relevant IFRSs. As of December 31, 2017, there were no joint operations in the consolidated financial statements.

Currency translation

The group companies prepare their annual financial statements on the basis of their respective functional currencies.

Foreign currency transactions entered into by companies included in the consolidated financial statements are translated into the functional currency at the exchange rate prevailing at the transaction date. Monetary assets and liabilities are translated at the applicable exchange rate at each reporting date. The exchange rate gains and losses resulting from these items are generally reported in the income statement under other income or expenses.

All financial statements of companies whose functional currencies differ from the reporting currency are translated into the reporting currency used in GEA's consolidated financial statements. The assets and liabilities of the companies included in the consolidated financial statements are translated at the middle rates prevailing at the reporting date. The income statements of these companies are translated at the average rates for the period under review. If these average rates are not a reasonable approximation of the actual transaction rates, the income statements are translated at the relevant transaction rates. Any translation differences are reported in equity under other comprehensive income and adjusted.

Goodwill from the acquisition of foreign subsidiaries is translated at the closing rate as an asset attributable to these companies.

Property, plant and equipment

Items of property, plant and equipment are carried at cost less cumulative depreciation and impairment losses, plus reversals of impairment losses.

Expenses for major regular maintenance are amortized over the remaining useful life of the asset concerned or over the period to the next maintenance date.

The carrying amount of items of property, plant, and equipment is reviewed if it is likely to have been impaired by events or changes in circumstances. An impairment test is performed by comparing the asset's carrying amount with its recoverable amount. The recoverable amount is defined as the higher of internal value in use and fair value less costs of disposal (net realizable value). Fair value is primarily determined on the basis of the current local market price for used machinery or commercial real estate. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized.

To assess impairment, assets are grouped at the lowest level for which separate cash flows can be identified. If the reason for the impairment subsequently ceases to apply, the impairment loss is reversed up to a maximum of historical cost, net of accumulated depreciation.

Leases

Leases are agreements that grant the right to use an asset for a defined period in return for a payment. Leases are accounted for as finance leases if substantially all the risks and rewards incidental to using the leased asset, and therefore beneficial ownership, are attributable to the lessee. As a result, the GEA companies that, as lessees, bear substantially all the risks and rewards associated with the leased asset, recognize the asset at the lower of fair value or the present value of minimum lease payments, and depreciate the asset in subsequent periods over the shorter of the lease term or the asset's estimated useful life. A corresponding liability is recognized, which is amortized in the following periods using the effective interest method. Payments to the lessor are divided into an interest and a principal repayment element, with the interest element being recognized in profit or loss over the lease term as a continuous interest payment on the residual lease liability. All other leases under which GEA is a lessee are treated as operating leases. In these cases, the lease payments are recognized as an expense using the straight-line method.

Lease transactions under which GEA companies are the lessor and substantially all the risks and rewards associated with the leased asset are transferred to the lessee are accounted for as sales and financing business. A receivable is reported in the amount of the net investment under the lease. The interest income subsequently generated is recognized in profit or loss. All other lease transactions under which the group is the lessor are treated as operating leases. In this case, the asset leased for use remains on the balance sheet and is depreciated. The lease payments are recognized as income using the straight-line method over the term of the lease.

Various companies included in the consolidated financial statements have sold and leased back items of property, plant and equipment in the past. Depending on the allocation of risk, these sale and leaseback transactions resulted in a finance lease or an operating lease. In the case of operating leases, the entire gain was recognized immediately if the asset was sold at fair value. If the asset was sold above its fair value, the difference between the selling price and fair value was deferred and recognized over the lease term.

Investment property

Property that is held to earn rentals or for capital appreciation is reported as investment property. In the case of property that is held partly to earn rentals and partly to produce or supply goods or services or for administrative purposes, the entire property is classified as investment property if the own use proportion is insignificant. This is assumed to be the case if the proportion is below 10 percent.

Cost is depreciated using the straight-line method over a period of between 10 and 50 years. The same measurement method is applied as for property, plant, and equipment.

Goodwill

Goodwill arising from business combinations is recognized as an intangible asset.

Goodwill is tested for impairment at segment level at least once a year at the end of the fiscal year, and if any of the cash-generating units with goodwill are showing signs of impairment. Operating segments in the form of the Business Areas were identified as cash-generating units with goodwill. For the purpose of impairment testing, the recoverable amount of a Business Area is compared with its carrying amount including the goodwill. The recoverable amount corresponds to the higher of internal value in use and fair value less costs of disposal. Fair value less costs to sell is the measure for the impairment of business units classified as "held for sale." If the carrying amount of the Business Area's assets exceeds the recoverable amount, an impairment loss in the amount of the difference is recognized in profit or loss.

An impairment loss initially reduces the carrying amount of goodwill. Any amount exceeding goodwill is allocated proportionately to the carrying amounts of non-current non-financial assets.

The value in use of the business units classified as continuing operations is calculated annually at the end of the fiscal year using the discounted cash flow method. It is only necessary to estimate a selling price for the business units classified as continuing operations if the value in use is less than the carrying amount.

Other intangible assets

Other intangible assets include both internally generated and purchased assets. Internally generated intangible assets comprise capitalized development costs. In addition to contract-based rights, purchased intangible assets mainly contain technologies, brand names, and customer relationships. Technologies, brand names, and customer relationships are usually acquired in connection with takeovers. Internally generated and purchased intangible assets are recognized at cost.

If the useful life of an intangible asset can be determined, the asset is amortized on a straight-line basis over its useful life. Intangible assets whose useful life cannot be determined are recognized at cost.

The carrying amount of an intangible asset is reviewed if it is likely to have been impaired by events or changes in circumstances. Intangible assets with an indefinite useful life are tested for impairment at least once a year. This requires the recoverable amount of the assets to be determined. The recoverable amount corresponds to the higher of internal value in use and fair value less costs to sell. If the carrying amount is higher than the recoverable amount, the asset is written down to the recoverable amount. Previously recognized impairment losses are reversed if the reasons for the impairment no longer apply. Impairment losses are reversed up to a maximum of the amortized historical cost.

Indefinite-lived intangible assets are also examined each year to determine whether the classification of the asset as indefinite-lived can be retained. Any change to a finite useful life is applied prospectively.

Other financial assets

Other financial assets include investments in unconsolidated subsidiaries and other equity investments, other securities, financial receivables (except trade receivables), and derivative financial instruments.

Shares in unconsolidated subsidiaries and other equity investments are allocated to the “available-for-sale financial assets” measurement category. They are measured at cost because the shares in these corporations are not traded in an active market and their fair value cannot be reliably measured. This is due to the significant margin of fluctuation for fair value measurement; the probabilities of the various estimates cannot be reliably determined within the margin of fluctuation. A reliable fair value can only be determined during sale negotiations. The group does not intend to sell these financial assets.

Securitized debt instruments that are intended to be held to maturity are allocated to the “held-to-maturity investments” measurement category and measured accordingly at amortized cost using the effective interest method. All other securities are measured at fair value and any fluctuations in value are recognized directly in other comprehensive income.

Financial receivables are allocated to the “loans and receivables” measurement category and measured at amortized cost using the effective interest method.

Derivative financial instruments are used exclusively for hedging purposes, in particular to hedge currency risk and to mitigate the risk of interest rate fluctuations resulting from financing transactions. They are always carried at fair value. If derivative financial instruments are not included in a designated hedging relationship, they are allocated to the “financial assets at fair value through profit or loss” measurement category, and their fair value changes are recognized through profit or loss. If the derivative financial instruments included in a recognized hedging relationship are used to hedge future cash flows, the fair value fluctuations are recognized in other comprehensive income.

Embedded financial derivatives are separated from their host contracts if certain qualifying criteria relating to their recognition and measurement are met.

Financial assets are recognized as soon as GEA receives a cash payment or is entitled to receive cash flows. In the case of regular way purchases of non-derivative financial assets, the settlement date, i.e. the delivery date of the financial assets, is decisive. Assets are derecognized as soon as the right to receive cash payments or other financial assets expires as a result of payment, waiver, statutory limitation, offsetting, or any other factor, or the right is transferred to another person, with the risks passing in full to the purchaser. In the case of regular way sales of non-derivative financial assets, the settlement date is taken to be the date of derecognition, in line with the principle used for recognition.

Items are originally recognized at fair value or, in the case of financial assets not measured at fair value, including directly attributable transaction costs.

Financial assets or groups of financial assets are tested for indications of impairment at each reporting date. Impairment losses are recognized in profit or loss. Financial assets are impaired if, following one or more events that occurred after initial recognition of the asset, there is objective evidence that the expected future cash flows have declined. Objective evidence of impairment may be, for example, significant financial difficulties of the debtor or payment default. In the case of financial assets measured at amortized cost (e.g., unquoted equity instruments), the impairment loss corresponds to the difference between the carrying amount of the financial instrument and the present value of the future cash flows discounted at the original effective interest rate.

If the reasons for impairment no longer apply, impairment losses on financial assets – with the exception of equity instruments – are reversed to income up to the amount of the amortized cost that would have applied if no impairment loss had been charged.

Recognized hedging relationships (hedge accounting)

At the time they are entered into, derivative financial instruments that are included in a recognized hedging relationship are designated either as a hedge against changes in the fair value of assets, liabilities, or firm commitments (fair value hedge) or as a hedge of future cash flows in connection with assets and liabilities (cash flow hedge).

In the case of an effective hedge of the risk of a change in fair value, the change in the fair value of both the derivative and the hedged item is recognized in the income statement. Changes in fair value offset each other in a perfect hedge. GEA does not currently apply hedge accounting for fair value hedges.

If derivatives are used to hedge future cash flows, the effective portion of the change in the derivative's fair value is recognized in other comprehensive income. The ineffective portion of the change in fair value is reported as a gain or loss. The item recognized in other comprehensive income arising from the effective portion of the change in fair value is recognized in the income statement as soon as the hedged item is settled. If settlement of the hedged item leads to the recognition of a non-financial asset, the changes in value previously recognized in other comprehensive income are offset against the cost of the non-financial asset. If, contrary to previous assumptions, the hedged transaction is not executed, the changes in value previously recognized in equity are reversed directly to profit or loss.

The group predominantly uses cash flow hedges to hedge interest rate risk. Especially with regard to currency translation risk, GEA also enters into hedging transactions in accordance with its risk management principles that offer economic hedges of existing risks, but do not meet the strict hedge accounting requirements of IAS 39. Currency forwards that are used to hedge currency risk arising from monetary assets and liabilities are not aggregated into a recognized hedging relationship. Effects arising from the translation of balance sheet items that are recognized in the income statement are largely offset by changes in the fair values of currency forwards that are also recognized in the income statement.

Deferred taxes

Deferred tax assets and liabilities are recognized for all temporary differences between the carrying amounts in the respective national tax accounts and those in the IFRS financial statements that are included in the consolidated financial statements. Deferred tax assets are also recognized for tax loss carryforwards. Deferred tax assets arising from deductible temporary differences and tax loss carryforwards are recognized only to the extent that there is likely to be sufficient taxable income available in future.

Deferred tax liabilities are not recognized on taxable temporary differences arising from investments in subsidiaries, associates, or joint ventures as long as the reversal of temporary differences is unlikely in the foreseeable future.

Inventories

Inventories are recognized at the lower of cost and net realizable value. Acquisition cost is calculated at average cost or using the first-in, first-out (FIFO) method. Production cost includes direct costs plus materials and production overheads, depreciation, and production-related administrative costs. Net realizable value is calculated as the estimated sale proceeds less costs incurred until completion, and selling expenses. Previously recognized impairment losses must be reversed if the reasons for the impairment no longer apply. Impairment losses are reversed up to a maximum of the amortized historical cost.

Trade receivables

Trade receivables include no interest component and are recognized in the balance sheet at their principal amount less appropriate allowances for bad debts.

Trade receivables that are sold to financial services companies under factoring agreements are derecognized once substantially all the risks and rewards have been transferred to the financial services company.

Construction contracts

Receivables and revenues from construction contracts are recognized using the percentage of completion (PoC) method.

The percentage of completion is determined using the cost-to-cost method, which is derived from the ratio of contract costs incurred to the total estimated contract costs. Contracts are measured at production cost plus a profit in proportion to the stage of completion. Losses on construction contracts are immediately recognized in full in the fiscal year in which they are identified, regardless of the stage of completion. If the contract costs incurred and the gains or losses recognized exceed the progress billings, the excess amount is capitalized and reported under “trade receivables”. If the progress payments received exceed the capitalized costs and recognized gains or losses at the reporting date, they are reported as a liability under “other liabilities.” Advance payments received on construction contracts are reported as a liability under the same item.

If the contract margin cannot be estimated reliably, revenue is recognized only in the amount of the contract costs incurred (zero-profit method). A profit is only recognized once the contract margin can be estimated reliably.

Payments for differences in the overall contract, claims, and premiums are included in the contract revenue insofar as these will probably result in revenue that is capable of being estimated reliably.

Cash and cash equivalents

Cash and cash equivalents comprise cash, demand deposits, and financial assets that can be converted into cash at any time and that are subject to only slight fluctuations in value. They are recognized at fair value.

Assets held for sale, liabilities held for sale, and discontinued operations

Non-current assets or groups of assets classified as "held for sale" within the meaning of IFRS 5 are recognized at the lower of carrying amount and fair value less costs to sell. Classification as "held for sale" is made when the carrying amount of a non-current asset or disposal group will be recovered principally through a sale transaction rather than through continuing use, and the criteria defined in IFRS 5 have been met overall. The corresponding assets as well as the liabilities of a disposal group are reported separately in the balance sheet as "assets held for sale" and "liabilities held for sale". On initial classification as held for sale, non-current assets or assets and liabilities of disposal groups are first measured in accordance with the applicable IFRSs. They are measured at the lower of their carrying amount and fair value less costs to sell, with disposal groups being measured as a whole. As the carrying amount of held-for-sale depreciable assets is principally realized by the disposal rather than the use of these assets, they are no longer depreciated once they have been reclassified.

If a disposal group represents a separate major line of business or geographical area of operation, it qualifies as a discontinued operation. The results of discontinued operations are reported separately in the income statement as profit or loss after tax from discontinued operations. In addition, the prior-year comparatives are adjusted in the income statement so that the results of these operations are also reported under discontinued operations. Cash flows from discontinued operations are reported separately in the cash flow statement; in this case as well the prior-year comparatives are adjusted accordingly. Revenue and expenditures from intragroup transactions are taken into account when presenting results from discontinued operations if they will continue to arise after the disposal of a discontinued operation.

As a general principle, the disclosures in the notes to the consolidated financial statements relate to the assets or liabilities recognized in the corresponding line items and to continuing operations. Where disclosures relate to GEA including assets held for sale, as well as the associated liabilities, and discontinued operations, this is indicated either by a statement that the disclosures refer to the complete group, or by another comment.

Subscribed capital

Ordinary shares are classified as equity. Treasury shares are deducted from the equity attributable to the shareholders of GEA Group Aktiengesellschaft.

Obligations under pension plans

Obligations under pension plans relate to post-employment benefit obligations. Defined benefit obligations are calculated using the projected unit credit method. The present value of these obligations reflects expected future salary and pension trends, since the entitlements earnable in the period up to the retirement age depend on these. Claims under supplementary healthcare benefit insurance are included in the actuarial measurement of assumptions made in respect of healthcare cost trends. The pension obligations are measured on the basis of actuarial reports by independent actuaries.

In order to provide these pension benefits, the company in some cases holds financial assets in long-term funds outside GEA and qualifying insurance policies. Insofar as the entitlements are funded by such external assets (plan assets), their fair value is offset against the present value of the defined benefit obligation. The resulting balance is reported under non-current employee benefit obligations or other non-current financial assets (net carrying amount).

Actuarial gains and losses from the remeasurement of the net carrying amount are recognized in other comprehensive income in the year in which they arise and reported in retained earnings after adjustment for tax effects. This also applies to the recognition of the difference between the actual returns on plan assets and the returns calculated using the discount factor. Costs from unwinding the discount on the net carrying amount are recognized in interest expenses; income is recognized in interest income. Current and past service cost for the period, as well as gains and losses from settlements, are recognized in the relevant function costs.

Other employee benefit obligations

Other employee benefit obligations comprise other long-term benefits and all short-term benefits. Short-term employee benefit obligations are expected to be settled in full no more than 12 months after completion of the service rendered. They include wages, salaries, social insurance contributions, paid vacation, and profit-sharing arrangements. They are recognized as an expense at the same time as the remunerated work or service is discharged. Any expenditure in excess of the payments already made is reported as a deferred liability at the reporting date. Other long-term employee benefits, such as jubilee payments or partial retirement arrangements, are recognized at the actuarial present value of the obligation at the reporting date. Securities are pledged to the beneficiaries to protect vested partial retirement credits against the employer's insolvency. The fair value of these securities is offset against the corresponding liability.

Also reported under other employee benefit obligations are liabilities in respect of severance payments and redundancy plans resulting from, among other things, obligations in connection with restructuring provisions.

Provisions

Provisions for uncertain liabilities are recognized where there is a legal or constructive obligation to a third party, a future outflow of resources is likely, and the expected settlement value can be estimated reliably. The present value of the settlement amount is recognized if the time value of money is material. Amounts are discounted at the market rates for the appropriate maturity and currency. Discount unwinding costs are reported in interest expense.

The cost at the time when reserve is recognized is reported in cost of sales when warranty of provisions are recognized. In all other cases, provisions are recognized when the product is accepted. The provision is measured on the basis of both the warranty cost actually incurred in the past and on the evaluated overall risk inherent in the system or product. Provisions are also recognized if a claim is made under a warranty and a loss is likely. Recourse claims against suppliers are capitalized if their services are subject to a warranty and it is highly likely that the claim can be enforced.

Provisions for expected losses from onerous contracts are recognized if the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs also include the unavoidable overheads needed to meet the obligations.

Financial liabilities

Financial liabilities comprise bonds, bank loans, and liabilities under finance leases. Initial recognition is at fair value, less transaction costs incurred. They are subsequently measured at amortized cost using the effective interest method. Liabilities under finance leases are initially measured at the lower of the fair value of the leased asset and the present value of minimum lease payments.

Other liabilities

The recognition and subsequent measurement of other liabilities is the same as for financial liabilities, with the exception of advance payments and the gross amount due to customers for contract work. Advance payments are stated at their principal amount. Please see the information provided on the recognition of construction contracts for the measurement of the gross amount due to customers for contract work.

Trade payables

Trade payables also include liabilities for goods received or services rendered that have not yet been invoiced, as there is only slight uncertainty as to the amount of the liability. Trade payables are recognized at fair value. This corresponds to the settlement amount in the case of liabilities due within one year.

Revenue recognition

Trade receivables that are sold to financial services companies under factoring agreements are derecognized once substantially all the risks and rewards have been transferred to the financial services company. This normally occurs when the goods are handed over to the customer. Revenue from services is recognized when the service is rendered. Revenue is measured at the fair value of the consideration received or to be received. Customer bonuses, discounts, or rebates reduce the amount of revenue recognized.

Revenue from construction contracts is generally recognized using the percentage-of-completion method under which revenue is recognized in accordance with the stage of completion. The percentage of completion is determined using the cost-to-cost method, which is derived from the ratio of contract costs incurred to the total estimated contract costs. Contract costs include direct costs plus materials and construction overheads, depreciation, production-related administrative costs, and such other costs that are specifically chargeable to the customer under the terms of the contract. Where a construction contract is performed over a long period and where the contract is largely financed by GEA, contract costs also include directly attributable borrowing costs. Conversely, income from the investment of advance payments received is offset against contract costs where this has a material influence on the contract margin. Adjustments are made for variations in contract work, claims, and incentive payments insofar as these will probably result in revenue that is capable of being reliably estimated.

In line with the percentage of completion method, construction contracts are measured as the contract costs incurred as of the reporting date plus the profit attributable to the proportion of work completed. Revenue recognized is reported under trade receivables, less progress billings. If the outcome of a construction contract cannot be reliably estimated, the probable recoverable revenue is recognized up to the amount of the costs incurred. Contract costs are recognized as an expense in the period in which they are incurred. If it is foreseeable that the total contract costs will exceed the contract revenue, the expected loss is recognized immediately as an expense.

Interest income is recognized ratably over the remaining maturity based on the effective interest rate and the amount of the remaining receivable. Dividend income on equity instruments is recognized if the right to receive payment is based on legally assertable claims.

Revenue from royalties is recognized in the period in which it arises in accordance with the underlying contracts.

Share-based payment

GEA has a share-based payment program under which selected managers are granted performance shares. The fair value of these rights is calculated at the grant date and allocated as an expense over the vesting period using the straight-line method; a corresponding provision is recognized. The provision is remeasured at each reporting date and at the payment date. Another share-based payment program is the long-term share price component anchored in the remuneration system for Executive Board members. Payment from this remuneration component is dependent on the performance of GEA shares compared with a benchmark index. The entitlement from the long-term share price component is measured at fair value at the reporting date.

Changes in the fair value of the provision for share-based payment programs are recognized as interest expense or income (see section 6.3.3).

Research and development

Research expenditures are recognized immediately as an expense. Development costs that are designed to significantly enhance a product or process are capitalized if completion of the product or process is technically and economically feasible, the development is marketable, the expenditures can be measured reliably, and adequate resources are available to complete the development project. All other development expenditures are recognized immediately as expenses. Capitalized development expenditures for completed projects are reported at cost less cumulative amortization and impairment losses. Capitalized development costs for intangible assets not yet available for use are tested for impairment once a year.

Development costs that are required under construction contracts are capitalized as part of the cost of the asset.

Government grants

Government grants are recognized at fair value, provided that the group meets the conditions necessary to receive the grant. Government grants to cover expenses are recognized over the period in which the costs for which the grants were awarded are incurred. Government grants for capital expenditure are deducted from the cost of purchasing the corresponding asset.

2.2 Estimates and management judgment

Preparation of financial statements requires management to make certain estimates and exercise judgment that may affect the company's assets, liabilities, provisions, and deferred tax assets and liabilities, as well as its income and expenses and contingent liabilities.

Factors that may cause amounts to fall below estimates might include a deterioration in the global economy, a substantial drop in demand from relevant customer industries, shifts between these industries with a negative impact on margins, movements in exchange rates and interest rates, as well as material litigation and changes in environmental or other legislation. Production errors, the loss of key customers, and rising borrowing costs may also adversely affect the group's future performance.

The recognition and measurement of the following assets and liabilities are in some cases based on management judgment. All assumptions represent the best of management's knowledge and belief in order to convey a true and fair view of the company's net assets, financial position, and results of operations. If actual circumstances subsequently differ from those forecast, this will affect the recognition and measurement of assets and liabilities. Depending on the item concerned, earnings may also be affected.

Basis of consolidation

Management judgment was applied in defining the basis of consolidation (see section 2.1), particularly with regard to assessing which subsidiaries to exclude from the consolidated financial statements on the basis of materiality.

Acquisitions

Goodwill is reported in the balance sheet as a result of acquisitions (see section 4). When an acquired company is initially consolidated, all its identifiable assets, liabilities, and contingent liabilities are recognized at their acquisition-date fair value. A basic problem is estimating these fair values. As a rule, land and buildings are measured on the basis of independent appraisals. If intangible assets are identified, their fair values are calculated using an appropriate measurement method. These measurements are made on the basis of assumptions by management with respect to the future value of the relevant assets and the discount rate. Obligations for contingent consideration are recognized on the basis of the current planning.

Goodwill

The group tests goodwill for impairment annually. The recoverable amounts calculated for this purpose for segments classified as continuing operations are determined based on value in use. Value in use is calculated using assumptions by management (see section 5.3).

Taxes

GEA operates in a large number of countries and is therefore subject to different tax jurisdictions. Calculating tax liabilities requires management to make various estimates. Management believes that it has made a reasonable estimate of tax uncertainties. However, no assurance can be given that the actual outcome of these uncertainties will correspond to the estimates made. Any deviations may have an impact on the level of tax liabilities or deferred taxes in the year of the decision.

When assessing the recoverability of deferred tax assets, management judges the extent to which realization of the deferred tax assets is sufficiently likely. The question of whether the deferred tax assets can actually be realized depends on whether sufficient future taxable income can be generated against which the temporary differences or tax loss carryforwards can be offset. Management therefore analyzes the times at which the deferred tax liabilities reverse, and expected future taxable income. Management forecasts whether deferred tax assets can be realized on the basis of expected future taxable income. Deferred tax assets decline if the estimate of planned taxable income decreases, if tax benefits available as a result of tax strategies are reduced, or if the amount or timing of future tax benefits is restricted by changes in the law (see section 7.8).

Measurement of assets held for sale, liabilities associated with assets held for sale, and classification of operations as discontinued

Assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell. Assumptions by management are taken into account when determining fair value less costs to sell. The classification as held for sale or the classification of activities as attributable to discontinued operations also require estimates by management. These estimates relate in particular to the question of whether the carrying amount of a non-current asset or a disposal group will be recovered principally through a sale transaction rather than through continuing use, and whether the criteria set out under IFRS 5 have been met overall.

Provisions and contingent liabilities

Changes in estimates of the probability of a present obligation or of an outflow of resources embodying economic benefits could mean that items previously classified as contingent liabilities must be reported as provisions, or that the amount of provisions must be adjusted (see section 6.2). This also applies in particular to environmental obligations.

Obligations under pension plans

The present value of pension obligations depends on actuarial assumptions. These assumptions comprise discount rates, expected wage and salary increases, as well as the pension increase rate and mortality rates. These assumptions could differ significantly from actual future outcomes as a result of changes in market and economic conditions, and could therefore have a material effect on the level of the obligation and the related expenses.

The discount rate used to measure the net carrying amount is calculated at the end of each year. This is the rate used to calculate the present value of future cash outflows expected to be required to settle the obligation. In order to calculate the discount rate, the group uses the interest rate on high-quality corporate bonds denominated in the same currency in which the benefits are paid and whose terms to maturity correspond to those of the pension obligations.

Other significant assumptions relating to pension obligations are partly based on market conditions (see section 6.3.1).

Trade receivables

Individual trade receivables are tested for indications of impairment at each reporting date. Impairment losses are recognized in profit or loss. An impairment is recognized if, following one or more events that occurred after initial recognition of the receivable, objective evidence points to that receivable being unrecoverable in all probability. Objective evidence of impairment may be, for example, significant financial difficulties of the debtor or default risk arising from maturity structures. The measurement of default risk arising from the maturity structure of individual receivables is based on estimates. The operating units continuously review the estimates and adjust them if required.

Construction contracts

The recognition of construction contracts using the percentage of completion method is based on management's estimates of the cost of such contracts. Changes in estimates or differences between the estimated cost and the actual cost have a direct effect on recognized earnings from construction contracts. The operating units continuously review the estimates and adjust them if required.

Litigation

In some cases, GEA companies are parties to litigation. The outcome of this litigation could have a material effect on the group's net assets, financial position, and results of operations. Management regularly analyzes current information on these legal disputes and recognizes provisions for probable obligations, including estimated legal costs. Both internal counsel and external lawyers are used to make this assessment. When deciding on the need to recognize provisions, management takes into account the probability of an unfavorable outcome and its ability to estimate the amount of the obligation with sufficient reliability. The filing of a suit or the formal assertion of a claim against a GEA company does not necessarily mean that a provision must be recognized for the related risk (see section 8.3).

3. Financial Risk Management

The Executive Board has put in place an effective set of guidelines to manage and hence largely limit or hedge financial risks throughout the group. The objectives with regard to protecting assets, eliminating gaps in security, and improving efficiency in identifying and analyzing risks are clearly defined, as are the relevant organizational structures, powers, and responsibilities. The guidelines are based on the principles of system security, the separation of functions, transparency, and immediate documentation. For further information, please see the discussion of the risk management system in the management report.

GEA is exposed to currency, interest rate, commodity price, credit, and liquidity risk in the course of its ordinary activities because it operates worldwide. Financial risk management aims to reduce this risk through the appropriate use of derivative and nonderivative hedging instruments.

Currency risk

Because GEA operates internationally, its cash flows are denominated not only in euros, but also in a number of other currencies, particularly U.S. dollars. Hedging the resulting currency risk is a key element of risk management.

The group guideline requires all group companies to hedge foreign currency items as they arise in order to fix prices on the basis of hedging rates. Currency risks are hedged for recognized hedged items, unrecognized firm commitments, and highly probable transactions. The hedging periods are determined by the maturity of the hedged items and are usually up to 12 months, but in exceptional cases may exceed that period significantly. Despite the hedging requirement, changes in exchange rates may affect sales opportunities outside the eurozone.

Affiliated group companies based in the eurozone are obliged to tender to GEA's central Treasury and Corporate Finance unit all outstanding exposures relating to transactions in goods and services in major transaction currencies. Most of these exposures are passed on directly to banks at matching maturities, depending on the hedging objective of the derivatives and the related accounting treatment. They may also be hedged as part of a portfolio. The hedging of financial transactions and transactions conducted by subsidiaries outside the eurozone is also coordinated with the central Treasury and Corporate Finance unit.

Interest rate risk

Because GEA operates worldwide, liquidity is raised and invested in the international money and capital markets in different currencies (but mainly in euros) and at different maturities. The resulting financial liabilities and investments are exposed to interest rate risk, which must be assessed and managed by central financial management. Derivative financial instruments may be used on a case-by-case basis to hedge interest rate risk and reduce the interest rate volatility and financing costs of the hedged items. Only the central Treasury and Corporate Finance unit is permitted to enter into such interest rate hedges.

All remaining interest rate derivatives matured in the course of the 2017 financial year. They were allocated to individual loans during their entire term and carried as cash flow hedges on the balance sheet. Overall, the interest expense from the loans and the allocated derivatives reported in the income statement reflects the fixed interest rate for the hedging relationship.

All remaining cross-currency swaps also matured or were redeemed prematurely in the course of 2017. The hedging instruments were used in connection with the financing of company acquisitions in Canada and the UK. Although they were recognized at fair value, they were not part of a documented hedging relationship with intragroup hedged items. The earnings effects arising from changes to currency parities that have occurred since the beginning of the cross-currency swaps, and the earnings effects due to the related intragroup receivables, do not match due to different calculation bases (forward rate relative to spot rate). The difference in value between hedged items (underlying) and hedging transactions as recognized in the profit/loss for the year amounted to EUR –141 thousand in fiscal year 2017 (previous year: EUR 264 thousand).

Commodity price risk

GEA requires various metals such as aluminum, copper, and steel, whose purchase prices can be subject to substantial fluctuations depending on the market situation. Long-term supply agreements have been entered into with various suppliers in order to hedge commodity price risk.

Credit risk

Financial instruments are exposed to credit risk in that the other party to the contract may fail to fulfill its obligations. The counterparty limit system used by GEA for financial management aims to continuously assess and manage counterparty default risk. A maximum risk limit has been defined for each counterparty, which in most cases is derived from the ratings from recognized credit rating agencies and credit default swaps (CDSs). Appropriate action is taken if the individual limit is exceeded.

The financial standing of potential customers is ascertained via an internal risk board procedure before orders are accepted. Active receivables management, including nonrecourse factoring and credit insurance, is also performed. In the case of export transactions, confirmed and unconfirmed letters of credit are used alongside sureties, guarantees, and cover notes, including from export credit agencies such as Euler Hermes. An addition to local monitoring by the subsidiary, GEA oversees the main credit risks at group management level so that any accumulation of risk can be better managed.

Since trade receivables are usually due from a large number of customers in different sectors and regions, there is no concentration of risk. Valuation allowances take account of specific credit risks.

So as to reduce the credit risk involved, derivative financial instruments are only entered into with reputable financial institutions.

The maximum exposure for the financial assets is limited to their carrying amount.

Liquidity risk

GEA is exposed to liquidity risk in that it may be unable to meet payment obligations because it has insufficient cash funds at its disposal. GEA is responsible for managing this risk. The funds are made available to the companies by group management. Cash flow from operating activities is the most important source of liquidity. Cash pools have been established in 17 countries in order to optimize borrowing and the use of cash funds within GEA. To achieve this, the cash pools automatically balance the accounts of the participating group companies every day by crediting or debiting a target account at GEA Group Aktiengesellschaft. This prevents separate cash investments and borrowings by these companies to a large extent. Any additional liquidity requirements are generally borrowed by the GEA Group Aktiengesellschaft, which also invests surplus liquidity.

The following tables show the undiscounted contractually agreed interest and principal payments for financial liabilities, including derivative financial instruments with negative fair values:

		Cash flows					
(EUR thousand)	Carrying amount	< 1 year	1-2 years	2-3 years	3-4 years	4-5 years	> 5 years
2017							
Trade payables	736,906	736,312	594	–	–	–	–
Borrower's note loan	–	–	–	–	–	–	–
Liabilities to banks	244,922	243,170	1,584	1,331	–	–	–
Liabilities under finance leases	6,561	3,906	1,157	729	1,356	–	–
Liabilities to investees	227	227	–	–	–	–	–
Currency derivatives not included in a recognized hedging relationship	11,107	656,431	6,263	–	–	–	–
Interest rate and cross-currency derivatives not included in a recognized hedging relationship	–	–	–	–	–	–	–
Interest rate and cross-currency derivatives included in a cash flow hedge	–	–	–	–	–	–	–
Other financial liabilities	108,980	77,693	27,591	8,966	120	120	5,197
2016							
Trade payables	624,817	623,882	935	–	–	–	–
Borrower's note loan	90,651	92,453	–	–	–	–	–
Liabilities to banks	55,845	52,587	2,062	1,372	5	–	–
Liabilities under finance leases	9,982	3,752	4,517	967	607	1,356	–
Liabilities to investees	130	130	–	–	–	–	–
Currency derivatives not included in a recognized hedging relationship	15,603	884,049	12,177	667	–	–	–
Interest rate and cross-currency derivatives not included in a recognized hedging relationship	2,704	23,035	–	–	–	–	–
Interest rate and cross-currency derivatives included in a cash flow hedge	1,042	1,041	–	–	–	–	–
Other financial liabilities	141,913	96,803	39,323	11,488	7,881	–	–

All financial liabilities outstanding as of December 31, 2017, are included in the above table on the basis of expected contractual cash flows. Projected figures for future new liabilities are not taken into account. Foreign currency amounts are translated at the closing rates. In the case of financial liabilities that can be repaid at any time, it is assumed that they will be repaid within one year.

Payments for derivative financial instruments totaling EUR 662,694 thousand (previous year: EUR 920,969 thousand) were partially offset by payments received from these instruments of EUR 654,059 thousand (previous year: EUR 901,654 thousand).

As of December 31, 2017, the group held cash credit lines of EUR 949,155 thousand (previous year: EUR 855,664 thousand), EUR 244,922 thousand thereof has been utilized (previous year: EUR 146,496 thousand). The cash credit lines are composed of the following items:

(EUR thousand)	Maturity	12/31/2017 approved	12/31/2017 utilized	12/31/2016 approved	12/31/2016 utilized
Bilateral credit lines including accured interests	until further notice	299,155	244,922	65,664	6,496
Syndicated credit line ("Club Deal")	August 2022	650,000	–	650,000	–
Borrower's note loan	September 2017	–	–	90,000	90,000
European Investment Bank	July 2017	–	–	50,000	50,000
Total		**949,155**	**244,922**	**855,664**	**146,496**

The maturities of financial liabilities are explained in section 6.4.

The borrower's note loan placed on September 19, 2017 was redeemed on time.

To ensure long-term group financing, GEA Group Aktiengesellschaft took advantage of the second option to extend the Club Deal, prolonging it until August 2022. The loan does not feature any further prolongation option.

As of December 31, 2017, guarantee lines for the performance of contracts, advance payments, and warranty obligations of EUR 1,361,235 thousand were available to the group as a whole (previous year: EUR 1,265,468 thousand), EUR 524,185 thousand thereof has been utilized (previous year: EUR 475,220 thousand). The guarantees are generally payable at first demand. As is generally the case for this type of order collateral and financing instrument, GEA Group Aktiengesellschaft drew on guarantees only in extremely rare cases in recent years.

As of December 31, 2017, EUR 16,054 thousand (previous year: EUR 20,149 thousand) of bank guarantees under GEA Group Aktiengesellschaft credit lines were granted to customers of the GEA Heat Exchangers Segment (HX), which was sold as of October 31, 2014, to collateralize the segment's contractual obligations. The purchaser of the GEA HX segment has granted bank guarantees of EUR 4,816 thousand (previous year: EUR 6,055 thousand) in favor of GEA Group Aktiengesellschaft to cover the unlikely event of default.

In addition, GEA Group Aktiengesellschaft has issued group guarantees of EUR 49,082 thousand (previous year: EUR 50,769 thousand) to collateralize the GEA HX segment's contractual obligations. To hedge the risk of claims being made under the guarantees, GEA Group Aktiengesellschaft has received bank guarantees from the purchaser of the GEA HX segment in the amount of EUR 15,001 thousand (previous year: EUR 15,329 thousand).

As of the year-end, EUR 84 thousand (previous year: EUR 84 thousand) of bank guarantees under GEA Group Aktiengesellschaft credit lines and EUR 90,205 thousand (previous year: EUR 102,631 thousand) of group guarantees were granted to Lurgi AG's customers to collateralize that company's contractual obligations in the unlikely event of default.

Future payments from operating leases are reported separately under other financial liabilities (see section 8.2).

Foreign currency sensitivity analysis

GEA companies are always exposed to foreign currency risk if their cash flows are denominated in a currency other than their own functional currency. As a general principle, foreign currency risks must be hedged using appropriate financial instruments so that fluctuations arising from the hedged item (underlying) and the hedging transaction are neutralized over their duration.

The foreign currency risk presented in the sensitivity analysis results from the following transactions:

- From currency derivatives used to hedge previously unrecognized hedged items, i.e. for contractually agreed or expected transactions:
  If the hedge has been effected for economic reasons and is not included in a documented hedging relationship, a corresponding currency risk exposure will have a direct effect on earnings. Where currency derivative is included in a hedging relationship in the form of cash flow hedges, they are subject to equity-related currency rate risk. No currency derivative was designated as cash flow hedges as of December 31, 2017.
- From unhedged foreign currency transactions:
  The translation of foreign currency receivables or liabilities at the closing rate has a direct effect on earnings.

The currency pairs in which the major part of the foreign currency cash flows is settled are included as relevant risk variables in the foreign currency sensitivity analysis. The following table shows the sensitivity of a 10 percent increase or decrease in the euro from the perspective of the group:

(EUR thousand)		Nominal amount	Profit/loss for the year	
Base currency	Foreign currency		2017	
			+10%	–10%
EUR	USD	522,393	–999	1,247
EUR	SGD	105,968	–1,557	1,903
EUR	GBP	104,126	–2,080	2,542
EUR	INR	36,083	–1,659	2,028
EUR	ZAR	35,284	1,820	–2,224
EUR	ARS	16,607	–760	928

(EUR thousand)		Nominal amount	Profit/loss for the year	
Base currency	Foreign currency		2016	
			+10%	–10%
EUR	USD	571,170	2,724	–3,329
EUR	GBP	115,516	–1,123	1,372
EUR	ZAR	44,402	2,540	–3,104
EUR	CNY	43,853	–729	891
EUR	CAD	29,723	2,065	–2,524
EUR	PLN	29,383	–1,118	1,367

The nominal amount relates to all contractually agreed foreign currency cash flows as of the reporting date, which are translated into euros at the closing rate.

Interest rate sensitivity analysis

The interest rate sensitivity analysis presents the effects of changes in market interest rates on interest income and expenses, and equity. The sensitivity analyses are based on the following assumptions:

- Nonderivative fixed-rate financial instruments are exposed to on-balance-sheet interest rate risk only if they are measured at fair value. GEA measures such financial instruments at amortized cost.
- Nonderivative variable-rate financial instruments whose interest payments are not included as hedged items in a hedging relationship that is recognized as a cash flow hedge are subject to interest rate risk in the income statement.
- Interest rate derivatives included in a hedging relationship that is recognized as a cash flow hedge are subject to equity-related interest rate risk in the amount of the effective portion of the hedging relationship.
- Interest rate derivatives not included in a hedging relationship that is recognized as a cash flow hedge are subject to interest rate risk in the income statement.
- Currency derivatives are not subject to material interest rate risk and therefore have no effect on interest rate sensitivity.

The sensitivity analysis assumes a linear shift in the yield curves for all currencies of +100 or –100 basis points as of the reporting date. This results in the following effects for the simulated scenarios:

	12/31/2017		12/31/2016	
(EUR thousand)	+ 100 basis points	– 100 basis points	+ 100 basis points	– 100 basis points
Interest rate risk recognized in equity	–	–	251	–254
Interest rate risk recognized in profit or loss	–45	45	130	–133

The calculation is based on a net volume of EUR 7,020 thousand (previous year: EUR 78,263 thousand).

Capital management

GEA Group Aktiengesellschaft's key financial objective is to sustainably increase its enterprise value in the interests of investors, employees, customers, and suppliers, while safeguarding and securing the group's solvency at all times.

Improving profitability and, as a result, increasing the return on capital employed therefore takes priority in all business decisions. Our strict focus on contract margin quality is also derived from this. Equally, external growth through potential acquisitions is viewed from the perspective of this goal.

Capital management, in the form of generating sufficient liquidity reserves, plays a crucial role in the pursuit of these enterprise goals. Not only does it ensure GEA's long-term existence, it also creates the entrepreneurial flexibility needed to enhance and update current business activities and to take advantage of strategic opportunities. It is achieved by managing liquidity reserves and available credit lines on an ongoing basis using short- and medium-term forecasts of future liquidity trends and borrowing requirements.

The group's financial management encompasses liquidity management, group financing, and the management of interest rate and exchange rate risks. GEA Group Aktiengesellschaft is home to GEA's central financial management operations, the latter being responsible for reducing financing costs as far as possible, optimizing interest rates for financial investments, minimizing counterparty credit risk, leveraging economies of scale, hedging interest rate and exchange rate risk exposures as effectively as possible, and ensuring that loan covenants are complied with. The goal of GEA's financing strategy is not only to be able to meet its payment obligations whenever they fall due, but also to ensure that sufficient cash reserves are always available in the form of credit lines, in addition to maintaining a strategic cash position. The centralized liquidity portfolio is managed mainly for capital preservation and risk reduction by diversifying the cash investments.

The capital structure is monitored regularly using various key financial indicators so as to optimize capital costs. Core indicators include the equity ratio and the net debt to equity ratio (gearing). Net debt for the complete group is calculated as follows:

(EUR thousand)	12/31/2017	12/31/2016
Liabilities to banks	–244,922	–55,845
Borrower's note loan	–	–90,651
Cash and cash equivalents	250,507	929,120
Net liquidity (+)/Net debt (–)	**5,585**	**782,624**
Equity	**2,503,594**	**2,995,604**
Equity ratio	**43.6%**	**49.0%**
Gearing	–0.2%	–26.1%

Net liquidity fell by EUR 777,039 thousand in the course of the fiscal year, closing at EUR 5,585 thousand on December 31, 2017.

Two international rating agencies, Moody's and Fitch, again rated GEA Group Aktiengesellschaft's ability to meet its financial obligations. The ratings for GEA are as follows:

	2017		2016	
Agency	Rating	Outlook	Rating	Outlook
Moody's	Baa2	stable	Baa2	stable
Fitch	BBB	stable	BBB	stable

GEA's investment grade rating in the "BBB" range ensures that it has good financing opportunities both with banks and directly on the capital markets. The current ratings reflect GEA's strong solvency and ensure access to the international financial markets.

4. Acquisitions

4.1 Companies acquired

In 2017, GEA acquired the following company by way of a share deal:

Business	Head office	Acquisition Date	Percentage of voting interest (%)	Consideration transferred (EUR thousand)
Pavan S.p.A.	Galliera Veneta, Padua (Italy)	November 30, 2017	100.0	253,574

On November 30, 2017, GEA completed the purchase of shares in the Italian corporate group Pavan and, in the process, acquired all shares of the group's parent company, Pavan S.p.A.

Pavan is a leading manufacturer and supplier of production lines and solutions for the manufacture of fresh and dried pasta, and extruded snacks. In addition, companies within the Pavan group produce plant and equipment for grain processing, and packaging machinery. As an established supplier in this area of industry, Pavan will join GEA's Business Area Equipment to form the "Pasta, Extrusion & Milling" product group. The acquisition is a measure of GEA's intent to expand its leading position in the field of sophisticated process engineering for the food industry.

The transaction costs for this acquisition amounted to EUR 4,727 thousand. The transaction costs associated with the acquisition are reported in other expenses.

4.2 Consideration paid

The consideration paid is composed as follows:

Business (EUR thousand)	Cash	Contingent consideration	**Total**
Pavan S.p.A.	253,574	–	**253,574**

4.3 Assets acquired and liabilities assumed

At the time of the acquisition, the following assets were acquired and liabilities assumed:

Fair value (EUR thousand)	Pavan S.p.A.
Property, plant and equipment	39,287
Intangible assets	109,566
Other non-current assets	33
Non-current assets	**148,886**
Inventories	28,364
Trade receivables	32,925
Other current assets	6,288
Cash and cash equivalents	19,521
Current assets	**87,098**
Total assets	**235,984**
Other non-current liabilities	111,999
Deferred taxes	31,162
Non-current liabilities	**143,161**
Trade payables	31,993
Income tax liabilities	14
Other current liabilities	45,647
Current liabilities	**77,654**
Total liabilities	**220,815**
Net assets acquired	**15,169**
thereof attributable to GEA Group AG	14,584
thereof attributable to non-controlling interests	586
Acquisition cost	253,574
Goodwill of GEA Group AG	238,990

The fair value and gross amount of the receivables acquired are calculated as follows:

Trade receivables (EUR thousand)	Gross amount	Contratual cash flows not expected to be collectable	Fair value
Pavan S.p.A.	33,070	-145	32,925

Purchase price allocation for Pavan with respect to the identification and measurement of the assets acquired and liabilities assumed is provisional. There is particular uncertainty regarding the identification and measurement of intangible assets.

The goodwill arising from the acquisition of EUR 238,990 thousand is attributable to the strengthening of GEA's general competitive position, advantages from expected synergies and future market developments, and the expertise of the workforce. It is not expected that any of the goodwill arising on acquisition will be tax deductible.

The proportion of noncontrolling interests is determined on the basis of its share in the identified assets and the assumed liabilities of Pavan.

4.4 Impact on consolidated revenue and consolidated profit

Since its acquisition, the Pavan corporate group has contributed to consolidated revenue and consolidated profit after tax as follows:

(EUR thousand)	Sales	Profit for the period
Pavan S.p.A.	13,845	–1,298
Total	**13,845**	**–1,298**

If the corporate group had been acquired as of January 1, 2017, consolidated revenue in the reporting period would have been EUR 4,743,609 thousand, and the corresponding consolidated profit after tax EUR 236,250 thousand.

4.5 Cash outflows

The acquisition of the Pavan corporate group resulted in the following cash outflows in 2017:

(EUR thousand)	2017
Consideration transferred	253,574
less contingent consideration	–
Purchase price paid	**253,574**
less cash acquired	–19,521
Net cash used in acquisition	**234,053**

In the course of the takeover, GEA prematurely redeemed external borrowings of EUR 102,464 thousand. Repayment of the loan gave rise to expenditure of EUR 376 thousand, thereof EUR 13 thousand was carried in other expenses and EUR 363 thousand in interest expenses.

Outflows of EUR 234,401 thousand from acquisitions were recognized in the cash flow statement for the fiscal year 2017.

5. Consolidated Balance Sheet Disclosures: Assets

5.1 Property, plant and equipment

Property, plant and equipment changed as follows:

(EUR thousand)	Land and buildings (owner-occupied)	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	**Total**
Jan. 1, 2016					
Cost	545,260	435,386	344,771	26,688	**1,352,105**
Cumulative depreciation and impairment losses	–250,318	–323,854	–266,271	–3,590	**–844,033**
Carrying amount	**294,942**	**111,532**	**78,500**	**23,098**	**508,072**
Changes in 2016					
Additions	7,793	9,605	18,663	24,891	**60,952**
Disposals	–19,307	–261	–2,429	–101	**–22,098**
Depreciation	–14,529	–21,963	–20,969	–92	**–57,553**
Impairment losses	–385	–395	–	–	**–780**
Acquisitions through business combinations	139	622	1,001	1	**1,763**
Currency translation	79	289	402	112	**882**
Other changes	498	4,415	812	–11,917	**–6,192**
Carrying amount at Dec. 31, 2016	**269,230**	**103,844**	**75,980**	**35,992**	**485,046**
Jan. 1, 2017					
Cost	525,064	442,452	353,075	39,602	**1,360,193**
Cumulative depreciation and impairment losses	–255,834	–338,608	–277,095	–3,610	**–875,147**
Carrying amount	**269,230**	**103,844**	**75,980**	**35,992**	**485,046**
Changes in 2017					
Additions	5,957	16,896	16,548	21,535	**60,936**
Disposals	–5,847	–996	–1,593	–2,378	**–10,814**
Depreciation	–15,568	–21,049	–20,103	–80	**–56,800**
Impairment losses	–452	–235	–159	–	**–846**
Acquisitions through business combinations	27,532	11,923	605	–	**40,060**
Currency translation	–5,450	–3,129	–1,416	–296	**–10,291**
Other changes	4,731	10,977	1,055	–22,606	**–5,843**
Carrying amount at Dec. 31, 2017	**280,133**	**118,231**	**70,917**	**32,167**	**501,448**
Dec. 31, 2017					
Cost	554,746	494,882	343,215	35,858	**1,428,701**
Cumulative depreciation and impairment losses	–274,613	–376,651	–272,298	–3,691	**–927,253**
Carrying amount	**280,133**	**118,231**	**70,917**	**32,167**	**501,448**

The other changes are primarily attributable to reclassifications from assets under construction to other items of property, plant, and equipment.

As in the previous year, items of property, plant, and equipment are depreciated on a straight-line basis using the relevant residual values and the following useful lives:

	Useful life in years
Buildings and parts of buildings	2 to 50
Technical equipment and machinery, other equipment	2 to 25
Operating and office equipment	2 to 40

The underlying residual values and useful lives are reviewed at each reporting date and adjusted if necessary.

Property, plant and equipment includes land and buildings, technical equipment and machinery, and office and operating equipment leased under finance leases:

(EUR thousand)	2017	2016
Cost - capitalized leased assets under finance leases	22,147	23,116
Cumulative depreciation and impairment losses	–11,752	–8,804
Carrying amount	**10,395**	**14,312**

EUR 10,159 thousand (previous year: EUR 13,667 thousand) of the carrying amount of the leased items of property, plant, and equipment relates to buildings. The leases for the buildings extend beyond 2020. The leases do not include extension options, escalation clauses, or the option to acquire the leased asset.

The corresponding lease liabilities are explained under financial liabilities (see section 6.4).

The carrying amount of property, plant, and equipment that serves as collateral for credit lines amounted to EUR 509 thousand as of the reporting date (previous year: EUR 535 thousand). Most of these assets relate to land and buildings.

5.2 Investment property

The following table shows the changes in investment property:

(EUR thousand)	Land	Buildings	Total
Jan. 1, 2016			
Cost	13,080	6,707	**19,787**
Cumulative depreciation and impairment losses	–6,387	–5,664	**–12,051**
Carrying amount	**6,693**	**1,043**	**7,736**
Changes in 2016			
Additions	–	–	**–**
Disposals	–535	–	**–535**
Depreciation	–	–74	**–74**
Reversal of impairment losses	1,940	–	**1,940**
Currency translation	–2	–	**–2**
Reclassification in held for sale	–5,403	–	**–5,403**
Carrying amount at Dec. 31, 2016	**2,693**	**969**	**3,662**
Jan. 1, 2017			
Cost	6,672	6,707	**13,379**
Cumulative depreciation and impairment losses	–3,979	–5,738	**–9,717**
Carrying amount	**2,693**	**969**	**3,662**
Changes in 2017			
Additions	141	–	**141**
Disposals	–815	–502	**–1,317**
Depreciation	–	–72	**–72**
Reversal of impairment losses	–	–	**–**
Currency translation	1	–	**1**
Reclassification in held for sale	–	–	**–**
Carrying amount at Dec. 31, 2017	**2,020**	**395**	**2,415**
Dec. 31, 2017			
Cost	5,708	6,028	**11,736**
Cumulative depreciation and impairment losses	–3,688	–5,633	**–9,321**
Carrying amount	**2,020**	**395**	**2,415**

The fair value of investment property is EUR 4,500 thousand (previous year: EUR 11,250 thousand). Since these fair values are calculated on the basis of comparable market-based prices that are determined internally, they are categorized within Level 2 of the fair value hierarchy.

The following amounts are reported in the income statement in connection with investment property:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Rental income	765	1,836
Operating expenses	257	950
thereof properties used to generate rental income	257	950
Total	**508**	**886**

5.3 Goodwill

The following table provides a breakdown of goodwill by Business Area (the group's operating segments) and changes in goodwill over time:

(EUR thousand)	BA Equipment	BA Solutions	Total
Carrying amount at Dec. 31, 2015	**879,059**	**552,456**	**1,431,515**
Additions	1,609	70,285	**71,894**
Disposals	–	–1,600	**–1,600**
Currency translation	2,957	863	**3,820**
Carrying amount at Dec. 31, 2016	**883,625**	**622,004**	**1,505,629**
Additions	239,338	–	**239,338**
Disposals	–	–657	**–657**
Currency translation	–11,473	–7,029	**–18,502**
Carrying amount at Dec. 31, 2017	**1,111,490**	**614,318**	**1,725,808**

The addition in financial year 2017 was mainly attributable to the acquisition of the Italian corporate group Pavan in the Business Area Equipment completed on November 30, 2017.

Impairment test

Goodwill recoverability was tested at the end of fiscal year 2017. The operating segments in the form of Business Areas were identified as cash-generating units with goodwill for the purpose of the year-end impairment test. The recoverable amounts for the Business Areas were compared with their carrying amounts, which included any goodwill allocated to them.

The recoverable amount of an operating segment is determined by calculating value in use using the discounted cash flow method. The cash flows used are the after-tax operating cash flows from the consolidated medium-term planning prepared by the Executive Board. Besides the budget for 2018, this covers a further two planning years. The corresponding planning values were extrapolated using a top-down approach. The Supervisory Board has taken note of the corresponding plans. Assumptions for the period beyond the planning horizon are based on the cash flows in the previous planning year, extrapolated using a uniform growth rate of 1.5 percent (previous year: 1.5 percent). The underlying growth rates do not exceed the average long-term growth rates for the markets in which the segments operate.

The planning assumes continued stable growth in the food and drink sales markets. This assumption is based on an expectation of growing demand for processed foods. Both GEA's Business Areas will profit from these underlying trends. Growth is also assumed for the other customer industries. These trends will also affect both Business Areas. In addition, planned growth for the individual Business Areas also takes account of actual past growth rates.

With regard to raw material prices, it is assumed that any increase can be offset by increased selling prices. Future acquisitions are not included in the planning process.

The total cost of capital assumed for discounting is based on a risk-free interest rate of 1.25 percent (previous year: 1.00 percent) and a market risk premium of 6.50 percent (previous year: 7.00 percent). In addition, beta factors derived from the respective peer group, a borrowing risk premium, as well as capital structure were taken into account for each segment. Segment-specific tax rates were also applied.

Cash flows for the individual segments are discounted using the following after-tax rates:

Discount rate (%)	12/31/2017	12/31/2016
BA Equipment	7.33	7.50
BA Solutions	6.54	6.58

The impairment tests conducted for the goodwill confirm its recoverability.

5.4 Other intangible assets

The carrying amount of intangible assets changed as follows:

(EUR thousand)	Market-related intangible assets	Customer-related intangible assets	Contract-based intangible assets	Technology-based intangible assets	Internally generated intangible assets	**Total**
Jan. 1, 2016						
Cost	107,487	181,803	108,713	155,008	144,959	**697,970**
Cumulative amortization and impairment losses	–18,902	–94,194	–79,951	–78,829	–43,735	**–315,611**
Carrying amount	**88,585**	**87,609**	**28,762**	**76,179**	**101,224**	**382,359**
Changes in 2016						
Additions	16	193	5,708	6,794	24,306	**37,017**
Disposals	–12	–202	–88	–89	–19	**–410**
Amortization	–257	–24,105	–7,614	–10,221	–16,559	**–58,756**
Impairment losses	–28	–133	–	–	–2,449	**–2,610**
Reversal of impairment losses	4,413	–	–	–	–	**4,413**
Acquisitions through business combinations	11,809	40,403	–	6,649	19	**58,880**
Currency translation	755	425	243	257	102	**1,782**
Other changes	–	–	310	2,148	3,668	**6,126**
Carrying amount at Dec. 31, 2016	**105,281**	**104,190**	**27,321**	**81,717**	**110,292**	**428,801**
Jan. 1, 2017						
Cost	120,194	223,133	111,900	170,431	179,387	**805,045**
Cumulative amortization and impairment losses	–14,913	–118,943	–84,579	–88,714	–69,095	**–376,244**
Carrying amount	**105,281**	**104,190**	**27,321**	**81,717**	**110,292**	**428,801**
Changes in 2017						
Additions	–	–	15,648	2,144	43,922	**61,714**
Disposals	–	–	–174	–7	–773	**–954**
Amortization	–313	–21,404	–9,254	–8,818	–19,532	**–59,321**
Impairment losses	–370	–	–9	–476	–	**–855**
Reversal of impairment losses	–	–	–	–	–	**–**
Acquisitions through business combinations	9,631	80,957	125	18,816	–	**109,529**
Currency translation	–1,960	–693	–321	–1,505	–386	**–4,865**
Other changes	25	5	542	–4,426	9,649	**5,795**
Carrying amount at Dec. 31, 2017	**112,294**	**163,055**	**33,878**	**87,445**	**143,172**	**539,844**
Dec. 31, 2017						
Cost	127,646	301,170	123,566	168,558	240,949	**961,889**
Cumulative amortization and impairment losses	–15,352	–138,115	–89,688	–81,113	–97,777	**–422,045**
Carrying amount	**112,294**	**163,055**	**33,878**	**87,445**	**143,172**	**539,844**

The additions to internally generated intangible assets are primarily attributable to the Business Area Equipment and to the Global Corporate Center. In the former, costs relating to developments in automated milking, in particular, were capitalized. The additions in the Global Corporate Center are largely the result of the Customer Relationship Management System (OneGEA CRM) and the Human Capital Management System (Workday), which were both launched in mid-2017.

Intangible assets with finite useful lives are amortized on a straight-line basis using the following useful lives:

	Useful life in years
Market-related intangible assets	1 to 20
Customer-related intangible assets	1 to 15
Contract-based intangible assets	1 to 20
Technology-based intangible assets	1 to 25

Amortization of intangible assets attributable to the complete group in the amount of EUR 59,321 thousand in fiscal year 2017 (previous year: EUR 58,756 thousand) is reported in cost of sales and, where this relates to discontinued operations, in profit or loss from discontinued operations.

Market-related intangible assets amounting to EUR 110,220 thousand (previous year: EUR 102,886 thousand) are not amortized because their useful life cannot be determined. These assets are company and product names of the acquired companies. These are established brands in their respective sectors and will continue to be used indefinitely after the company in question has been acquired.

The carrying amount of intangible assets with indefinite useful lives is broken down as follows:

	12/31/2017		12/31/2016	
Segment	Carrying amount (EUR thousand)	Proportion of total carrying amount (%)	Carrying amount (EUR thousand)	Proportion of total carrying amount (%)
BA Equipment	50,797	46.1	42,163	41.0
BA Solutions	59,423	53.9	60,723	59.0
Total	**110,220**	**100.0**	**102,886**	**100.0**

These brands are tested for impairment at least once a year. For this purpose, their fair value less costs to sell is first determined using the relief from royalty method. Under this approach, the value of a brand is calculated on the basis of the future royalties that GEA would have to pay if it had to license the brands from third parties. The brand-related revenue is multiplied by the estimated license fee installments. The brand-related revenue is derived from the medium-term planning prepared by the Executive Board. The Supervisory Board has taken note of the corresponding plans for 2018. The assumed license fee installments generally correspond to those of the initial measurement. The savings calculated in this way are then discounted using a brand-specific after-tax discount rate. Valuation is based on the following assumptions:

(in %)	12/31/2017	12/31/2016
Discount rate	6.55 – 7.87	6.19 – 8.37
Royalty rate	0.50 – 3.00	0.50 – 3.00

If a brand's fair value less costs of disposal is less than its carrying amount, the brand is tested for impairment on the basis of the recoverable amount of the cash-generating unit to which it belongs.

The impairment test performed at the end of the year produced impairment losses in the amount of EUR 370 thousand (previous year: impairment losses of EUR 28 thousand, reversal of impairment losses of EUR 4,413 thousand) attributable to the Business Area Solutions (previous year: impairment losses and reversals of such losses were also attributable to the Business Area Equipment).

5.5 Equity-accounted investments

The relevant figures for equity-accounted investments are based on the most recently available annual financial statements.

The respective carrying amounts and the share of the profit of equity-accounted investments are insignificant in relation to the group's total assets and profit.

Associates

Equity-accounted associates are reported at a carrying amount of EUR 67 thousand as of December 31, 2017 (previous year: EUR 6 thousand).

The share of the profit or loss of equity-accounted associates is as follows:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Profit/loss from continuing operations	56	82
Total profit/loss	**56**	**82**

Joint ventures

Equity-accounted joint ventures are reported at a carrying amount of EUR 14,347 thousand as of December 31, 2017 (previous year: EUR 15,923 thousand).

The share of the profit or loss of equity-accounted joint ventures is as follows:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Profit/loss from coninuing operations	2,042	2,988
Total profit/loss	**2,042**	**2,988**

5.6 Other financial assets

Other financial assets are composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Investments in unconsolidated subsidiaries and other equity investments	21,175	22,568
Other securities	8,525	9,098
Derivative financial instruments	37	99
Miscellaneous other financial assets	8,986	6,889
Other noncurrent financial assets	**38,723**	**38,654**
Derivative financial instruments	3,915	3,317
Miscellaneous other financial assets	176,727	162,625
Other current financial assets	**180,642**	**165,942**
Total	**219,365**	**204,596**

Derivative financial instruments

Derivative financial instruments are explained in section 6.8.

Miscellaneous other financial assets

Miscellaneous other financial assets with a carrying amount of EUR 185,713 thousand (previous year: EUR 169,514 thousand) were recognized as of the reporting date. They are broken down into noncurrent and current assets as follows:

(EUR thousand)	12/31/2017	12/31/2016
Other receivables from unconsolidated subsidiaries	200	34
Other receivables from equity investments	729	429
Receivables from tax authorities	883	456
Sundry miscellaneous other financial assets	7,174	5,970
Other noncurrent financial assets	**8,986**	**6,889**
Other receivables from unconsolidated subsidiaries	4,263	6,883
Other receivables from equity investments	8,407	15,753
Other receivables from tax authorities	58,312	60,668
Sundry miscellaneous other financial assets	105,745	79,321
Other current financial assets	**176,727**	**162,625**
Total	**185,713**	**169,514**

Other receivables from tax authorities primarily comprise VAT receivables.

Miscellaneous other financial assets include prepaid expenses totaling EUR 32,735 thousand (previous year: EUR 25,913 thousand).

The maturity structure of miscellaneous other financial assets is as follows:

(EUR thousand)		12/31/2017	12/31/2016
Carrying amount before impairment losses		**116,145**	**87,304**
Impairment losses		3,226	2,013
Carrying amount		**112,919**	**85,291**
thereof not overdue at the reporting date		111,482	83,503
thereof past due at reporting date		1,437	1,788
	less than 30 days	1,262	758
	between 31 and 60 days	16	337
	between 61 and 90 days	26	152
	between 91 and 180 days	–	90
	between 181 and 360 days	–	131
	more than 360 days	133	320

5.7 Inventories

Inventories are composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Raw materials, consumables, and supplies	147,768	129,293
Work in progress	124,098	107,811
Assets for third parties under construction	18,914	23,194
Finished goods and merchandise	290,704	291,165
Advance payments	78,096	59,942
Total	**659,580**	**611,405**

Inventories of EUR 2,816 million were recognized as an expense in fiscal year 2017 (previous year: EUR 2,763 million). Impairment losses on inventories were EUR 20,262 thousand in the reporting period (previous year: EUR 15,783 thousand). Impairment losses on inventories in previous years amounting to EUR 3,879 thousand (previous year: EUR 2,305 thousand) were reversed due to increased market prices. The reversals were recognized in cost of sales.

5.8 Trade receivables

Trade receivables are composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Trade receivables	926,750	929,388
thereof from third parties	904,886	913,587
thereof from unconsolidated subsidiaries	21,864	15,801
Gross amount due from customers for contract work	465,243	461,009
Total	**1,391,993**	**1,390,397**

Trade receivables include receivables of EUR 6,519 thousand (previous year: EUR 7,244 thousand) that will not be realized until more than one year after the reporting date. Bad debt allowances on trade receivables totaled EUR 58,408 thousand (previous year: EUR 49,371 thousand).

The maturity structure of trade receivables – with the exception of receivables from unconsolidated subsidiaries – is as follows:

(EUR thousand)		12/31/2017	12/31/2016
Carrying amount before impairment losses		**963,294**	**962,958**
Impairment losses		58,408	49,371
Carrying amount		**904,886**	**913,587**
thereof not overdue at the reporting date		587,246	618,555
thereof past due at reporting date		317,640	295,032
	less than 30 days	115,573	108,555
	between 31 and 60 days	45,600	52,563
	between 61 and 90 days	24,908	22,582
	between 91 and 180 days	49,082	44,216
	between 181 and 360 days	46,207	38,084
	more than 360 days	36,270	29,032

Construction contracts

The gross amount due from and to customers for contract work is composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Capitalized production cost of construction contracts	3,200,714	2,875,083
plus net gain from construction contracts	538,854	549,758
less anticipated losses	26,901	20,379
less progress billings	3,617,473	3,301,326
Total	**95,194**	**103,136**
Gross amount due from customers for contract work (included in trade receivables)	465,243	461,009
Gross amount due to customers for contract work (included in other liabilities)	–370,049	–357,873
Total	**95,194**	**103,136**

Advance payments received on construction contracts amounted to EUR 74,936 thousand as of December 31, 2017 (previous year: EUR 62,425 thousand). Customer retention money amounted to EUR 13,919 thousand (previous year: EUR 12,124 thousand). Revenue of EUR 2,252,316 thousand (previous year: EUR 2,212,385 thousand) was generated from construction contracts in the reporting period.

5.9 Income tax receivables

Income tax receivables amounted to EUR 30,738 thousand at the reporting date (previous year: EUR 25,832 thousand). As in the previous year, the full amount is due within one year.

5.10 Cash and cash equivalents

Cash and cash equivalents were composed of the following items at the reporting date:

(EUR thousand)	12/31/2017	12/31/2016
Unrestricted cash	249,493	928,004
Restricted cash	1,014	1,116
Total	**250,507**	**929,120**

Cash and cash equivalents comprise cash funds and overnight deposits. Restricted cash mainly consists of bank deposits.

During the year, the standard market interest rate for short-term bank deposits in the eurozone lay between 0.0 and 0.1 percent (previous year: between 0.0 and 0.4 percent). The average interest rate as of the end of the year is 0.0 percent (previous year: 0.1 percent).

5.11 Assets held for sale

Assets held for sale are reported at a carrying amount of EUR 0 thousand as of December 31, 2017 (previous year: EUR 5,403 thousand). The land in Frankfurt not required for operating purposes that was carried under "assets held for sale" in the previous year as it had no further use was disposed of in 2017.

6. Consolidated Balance Sheet Disclosures: Equity and Liabilities

6.1 Equity

Subscribed capital

The subscribed capital of GEA Group Aktiengesellschaft was unchanged compared with the previous year at EUR 520,376 thousand as of December 31, 2017. As in the previous year, the shares are composed of 192,495,476 no-par value bearer shares. All the shares are fully paid up. The issued capital of EUR 489,372 thousand corresponds to the subscribed capital of EUR 520,376 thousand minus the nominal value of the repurchased shares of EUR 31,004 thousand.

As in the previous year, the shares have a notional value of EUR 2.70 each (rounded).

All shares convey the same rights. Shareholders are entitled to receive dividends as declared and are entitled to one vote per share at the Annual General Meeting. Treasury shares held by the company on the day of the Annual General Meeting do not carry voting rights and are not eligible for dividends.

Treasury shares

Under a resolution adopted by the Annual General Meeting on April 16, 2015, GEA Group Aktiengesellschaft is authorized to purchase own shares up to a total of 10 percent of the share capital in accordance with section 71(1) no. 8 AktG. GEA Group Aktiengesellschaft exercised its right under the above-mentioned authorization and, on February 6, 2017, announced its intention to initiate a share buyback program to run until February 28, 2018 at the latest. The program was concluded on February 6, 2018 Between March 8, 2017 and December 31, 2017, a total of 11,468,732 no-par value shares representing EUR 31,003,587 of the company's share capital were repurchased through the initiative. This corresponds to around 5.96 percent of GEA Group Aktiengesellschaft's share capital. The total value of the shares purchased in financial year 2017 for the purpose of withdrawal in the future was EUR 429,047 thousand. Transaction costs for the buyback scheme amounting to EUR 2,150 thousand were carried directly in equity.

Authorized capital

(EUR thousand)	Annual General Meeting resolution	Expiring on	Amount (EUR thousand)
Authorized Capital I	April 20, 2017	April 19, 2022	77,000
Authorized Capital II	April 16, 2015	April 15, 2020	130,000
Authorized Capital III	April 16, 2015	April 15, 2020	52,000
Total			**259,000**

In the case of the **Authorized Capital I** and in accordance with Article 4(3) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 77 million by issuing new no-par value shares against cash contributions until April 19, 2022 (Authorized Capital I) and, in accordance with Article 5(4) of the Articles of Association, to define a starting date for profit rights in this case that differs from the date stipulated by law. The authorization may be exercised fully or in partial amounts, on one or several occasions. Shareholders are generally entitled to subscribe to the new shares. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). The Executive Board is authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) insofar as this is necessary to eliminate fractional amounts, and/or (ii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations. Furthermore, the Executive Board is authorized, with the approval of the Supervisory Board, to stipulate the further details of capital increases from Authorized Capital I and the terms and conditions of the share issue.

In the case of the **Authorized Capital II** and in accordance with Article 4(4) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital, wholly or in part, by up to EUR 130 million by issuing new no-par value shares against cash and/or non-cash contributions on one or more occasions until April 15, 2020 (Authorized Capital II) and, in accordance with Article 5(4) of the Articles of Association, to define a starting date for profit rights in this case that differs from the date stipulated by law. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). The Executive Board is authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights in the case of capital increases against noncash contributions for the purpose of business combinations or the acquisition of companies, parts of companies, or equity interests in companies or other assets. The Executive Board is further authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) in order to implement a so-called scrip dividend where the shareholders of GEA Group Aktiengesellschaft are given the option of contributing their dividend entitlement either wholly or partially to the Company as a noncash contribution in return for the granting of new shares, (ii) insofar as it is necessary to eliminate fractional amounts, and (iii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations. The total proportionate amount of GEA Group Aktiengesellschaft's share capital allocable to shares issued against cash and/or noncash contributions under disapplication of shareholders' preemptive rights must not exceed 10 percent of the company's share capital at the time when the resolution was adopted by the Annual General Meeting. Finally, the Executive Board is authorized, with the approval of the Supervisory Board, to stipulate the further details of the capital increases from Authorized Capital II and the terms and conditions of the share issue.

In the case of the **Authorized Capital III** and in accordance with Article 4(5) of the Articles of Association, the Executive Board is authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 52 million by issuing new no-par value shares against cash contributions on one or more occasions until April 15, 2020 (Authorized Capital III) and, in accordance with Article 5(4) of the Articles of Association, to define a starting date for profit rights in this case that differs from the date stipulated by law. The statutory subscription right may also be granted by the new shares being underwritten by one or more banks with the obligation of offering them to the shareholders for subscription (indirect subscription right). The Executive Board is authorized, with the approval of the Supervisory Board, to exclude shareholders' subscription rights if the issue price of the new shares is not significantly lower than the stock exchange price for company shares of the same kind at the time of setting the issue price. In line with the modalities of this disapplication of preemptive rights, the shares issued in accordance with section 203(1) and section 186(3) no. 4 of the AktG (German Stock Corporation Act) may not exceed 10 percent of the share capital of the company either at the time at which this authorization takes effect or at the time at which it is exercised (upper limit). The upper limit of 10 percent shall be reduced by the proportionate amount of the share capital allocable to shares (i) issued during the term of the Authorized Capital III under disapplication of preemptive rights in accordance with section 71(1) no. 8 sentence 5, and Section 186(3) sentence 4 of the AktG (German Stock Corporation Act) or (ii) issued to service convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the company, as long as the convertible or option bonds have been issued during the term of the Authorized Capital III under disapplication of preemptive rights in accordance with section 186(3) sentence of the 4 AktG. The Executive Board is further authorized, with the approval of the Supervisory Board, to disapply shareholders' preemptive rights (i) insofar as it is necessary to eliminate fractional amounts, and (ii) in order to grant the creditors of convertible or option bonds with option or conversion privileges or obligations issued by GEA Group Aktiengesellschaft or a subordinate group company of the Company a right to subscribe to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after fulfilling conversion obligations. Finally, the Executive Board is authorized, with the approval of the Supervisory Board, to stipulate the further details of the capital increases from Authorized Capital III and the terms and conditions of the share issue.

Contingent capital

(EUR thousand)	12/31/2017	12/31/2016
Bonds with warrants and convertible bonds according Annual General Meeting resolution 16. April 2015	51,904	51,904
Total	**51,904**	**51,904**

Under a resolution adopted by the Annual General Meeting on April 16, 2015, the share capital was contingently increased by up to EUR 51,903,633.82, comprising up to 19,200,000 million bearer shares (Article 4(6) of the Articles of Association, Contingent Capital 2015). The contingent capital increase will only be implemented to the extent that the holders of conversion or option privileges from convertible bonds or option bonds, profit participation rights or profit participating bonds or a combination of these instruments issued against cash contributions by GEA Group Aktiengesellschaft or a subordinate group company of the Company on the basis of the authorization by the Annual General Meeting resolution dated April 16, 2015 exercise their conversion or option privileges, or, if they are obliged to convert or exercise options, satisfy their obligation to convert or exercise options, and if no cash settlement is granted or own shares or shares of another listed company are used in settlement. New shares will be issued at the conversion or option price to be determined in each case in accordance with the authorizing resolution referred to above. The new shares bear dividend rights from the beginning of the fiscal year in which they were created as a result of the exercising of conversion or option privileges or the fulfillment of conversion or option obligations. The Executive Board is authorized, with the approval of the Supervisory Board, to determine the further details of the implementation of the contingent capital increase.

As in the previous year, no bonds with warrants or convertible bonds were issued in fiscal year 2017.

Capital reserves

Capital reserves primarily reflect the effects from the business combination of the former Metallgesellschaft Aktiengesellschaft and the former GEA AG as well as premiums from issuing shares of the former Metallgesellschaft AG.

Capital reserves were unchanged compared with the previous year at EUR 1,217,861 thousand.

Retained earnings

The changes in retained earnings and net retained profits are reported in the statement of changes in equity. Actuarial gains and losses on the measurement of noncurrent employee benefit obligations are included in retained earnings. Moreover, netting of the treasury shares purchased for future withdrawal will result in a drop in retained earnings.

The distribution of profits is based on the annual financial statements of GEA Group Aktiengesellschaft prepared in accordance with the HGB.

Accumulated other comprehensive income

Changes in equity outside profit or loss are reported in accumulated other comprehensive income if they do not relate to capital transactions with shareholders. Other comprehensive income comprises the gains or losses on financial assets measured at fair value and recognized directly in equity, the effective portion of the change in fair value of derivatives designated as cash flow hedges, and exchange rate gains or losses from the translation of the financial statements of foreign subsidiaries.

Noncontrolling interests

Noncontrolling interests in GEA companies amounted to EUR 1,191 thousand (previous year: EUR 578 thousand). The change is mainly due to the acquisition of the Pavan corporate group.

6.2 Provisions

The following table shows the composition of and changes in provisions in 2017:

(EUR thousand)	Guarantees, warranties	Financial guarantee contracts	Litigation risks	Follow-up costs	Environmental protection, mining	Other provisions	Total
Balance at Jan. 1, 2017	**68,176**	**3,265**	**12,588**	**36,074**	**88,983**	**74,130**	**283,216**
thereof non-current	9,595	–	6,666	3,434	88,901	30,155	**138,751**
thereof current	58,581	3,265	5,922	32,640	82	43,975	**144,465**
Additions	35,563	–	2,828	11,010	850	77,004	**127,255**
Utilization	–19,934	–150	–3,447	–10,068	–2,848	–64,940	**–101,387**
Reversal	–20,557	–197	–1,355	–19,234	–507	–6,862	**–48,712**
Changes in consolidated group	525	–	–15	479	–	–178	**811**
Unwinding of discount	–	–	–	–	23,725	13	**23,738**
Enchange differences	–2,001	–1	–164	–435	–10	–1,859	**–4,470**
Balance at Dec. 31, 2017	**61,772**	**2,917**	**10,435**	**17,826**	**110,193**	**77,308**	**280,451**
thereof non-current	7,137	–	6,485	3,199	110,121	25,589	**152,531**
thereof current	54,635	2,917	3,950	14,627	72	51,719	**127,920**

Provisions for guarantees and warranties

Provisions for guarantees and warranties relate to warranty commitments for products and equipment. As is customary in the industry, the guarantees and warranties on which they are based are granted in connection with certain performance criteria relating to products or equipment (e.g., guaranteed output volume, quality of product manufactured). Warranties usually have a contractual term of between one and two years from the date on which the products or equipment are accepted. In addition to warranties explicitly agreed under contract, product liability rules apply in many sales countries and may also stipulate that the manufacturer is liable beyond the contractually defined term of the warranty. In some cases, recourse claims exist in the form of insurance refunds or subcontractor guarantees. The level of provisions is based on management’s best estimate. GEA expects to settle most of the provisions for guarantees and warranties in the coming year.

Provisions for financial guarantee contracts

Provisions for financial guarantee contracts comprise obligations under indemnification agreements as well as warranties and undertakings relating to the sale of business activities. The changes in these provisions in fiscal year 2017 are primarily due to the resolution of uncertainties relating to risks from the sale of the plant engineering activities. An outflow of all provisions set up for financial guarantee contracts is expected in fiscal year 2018.

Litigation risks

Provisions are recognized for risks arising from expected or pending litigation against GEA companies if it is believed that there is likely to be an unfavorable outcome to the proceedings. Assessments by counsel for the Company or legal experts were used to determine the likelihood of such litigation. The probable damages or sanctions have been recognized as a liability. The timing of cash outflows relating to provisions for litigation risks often cannot be reliably determined.

Follow-up costs

This item comprises the cost of residual work that is incurred after a contract has already been invoiced and the profit from the contract has been recognized. The amount of the expected cost is stated. Payments are made almost in their entirety in the following year.

Environmental protection, mining

This item mainly comprises provisions for the clean-up of pit water from past mining activities and for the clean-up of other instances of groundwater contamination. The law is still unclear as to the amount and duration of the company's obligation to clean up pit and ground water. These obligations are expected to extend to well beyond 2035.

Other provisions

Other provisions comprise provisions for a range of individual items. Around 67 percent of other provisions are expected to be settled in fiscal year 2018.

6.3 Employee benefit obligations

Employee benefit obligations comprise the following items:

(EUR thousand)	12/31/2017	12/31/2016
Obligations under pension plans and supplementary healthcare benefits	762,415	772,796
thereof defined benefit pension plans	746,245	755,496
thereof obligations under supplementary healthcare benefits	16,089	16,061
thereof defined contribution pension plans	81	1,239
Other employee benefit obligations	3,806	4,020
Partial retirement	13,569	13,187
Jubilee benefits	9,033	8,949
Redundancy plan and severance payments	866	2,531
Other non-current obligations to employees	5,027	6,169
Non-current employee benefit obligations	**794,716**	**807,652**
Redundancy plan and severance payments	14,501	33,716
Outstanding vacation, flexitime/overtime credits	58,224	59,315
Bonuses	58,594	72,864
Other current obligations to employees	15,752	15,529
Current employee benefit obligations	**147,071**	**181,424**
Total employee benefit obligations	**941,787**	**989,076**

The fall in current employee benefit obligations is largely due to outflows for severance payments in the context of the "Fit for 2020" initiative (see section 7.4). As of December 31, 2017, the corresponding obligations with regard to severance payments and redundancy packages amounted to EUR 10,567 thousand (previous year: EUR 33,925 thousand).

6.3.1 Obligations under defined benefit pension plans and supplementary healthcare benefits

Wherever possible, defined benefit pension obligations and obligations under supplementary healthcare benefits are disclosed below in the aggregate and explained together.

All obligations were actuarially valued as of December 31, 2017, and as of December 31, 2016.

Defined benefit pension plans

GEA employees are offered various benefit options, mainly in the form of defined benefit and defined contribution pension plans.

Defined benefit pension plan obligations exist in Germany and, outside of Germany, mainly in the U.S.A. and the United Kingdom. In addition, other foreign companies have typical country-specific pension plans that are funded in part by plan assets. Benefits and investments correspond to the country-specific economic environment and requirements.

GEA views granting pension benefits as an opportunity to foster employee loyalty and engagement. It is therefore a standard feature of the remuneration concept and has an employee contribution component, where this is appropriate. In connection with this, GEA monitors developments on the human resources market and regularly checks that the benefits it grants are appropriate and in line with the market.

GEA does not believe that the pension obligations pose any risks over and above the customary extent and the general risks described.

Pension benefits in Germany

In Germany, GEA grants old-age, disability, and survivors' benefits to many of its employees. New employees are generally only granted benefits that are partly funded by employee contributions.

As part of the general benefits provided, all employees have the opportunity to voluntarily defer part of their compensation. Under this arrangement, an agreed amount of their salary plus an employer contribution of up to 100 percent of the deferred amount is converted into a pension benefit. A corresponding collective bargaining agreement was entered into in 2002 and revised in 2008. In this case, the post-retirement benefits are adjusted by 1 percent each year.

According to GEA's new executive pension scheme executives are granted benefits in form of an asset-backed defined benefit plan. The plan assets are managed under a Contractual Trust Arrangement (CTA) and invested in mixed funds. The size of the employer's contributions to the plan assets depends on the size of the fixed salaries of the beneficiaries. Beneficiaries can also contribute from their own income by means of deferred compensation. The beneficiaries are then entitled to the net earnings generated by the plan assets. There is also a notional premium guarantee.

In addition to the currently open benefit plans, there are a number of historical pension plans in the company. These plans are generally closed to new employees, but are maintained unchanged for employees who were members at the time the plan was closed. These include obligations under "Bochumer Verband" and "Essener Verband" as well as obligations established independently by their predecessors. Entitlements also exist from the earlier executive pension scheme which has been closed to new members since the end of the fiscal year 2014. Post-retirement benefits from the earlier executive pension scheme are adjusted by 1 percent each year.

The pension obligations are partly funded by pension liability insurances.

Pension benefits outside Germany

Pension benefits outside Germany mainly exist in the U.S.A and the United Kingdom.

In the U.S.A., there are pension obligations from various pension plans that were closed in succession up to December 31, 2000. No further benefits are earned from a defined benefit pension plan for periods of service after the respective closure date. Old-age and survivors' benefits accrued at the closure date of the respective plan were fixed on the basis of pensionable income at the closure date. Benefits may be paid out in the form of annuities or lump-sum payments. Existing pension obligations are partly funded by plan assets. The assets are held separately from the company in an external trust. The companies have appointed independent trustees in accordance with statutory provisions to manage the funding of obligations and the investment of assets according to the company's specifications. Any funding deficit is established annually in accordance with legal requirements and spread over a fixed time period if required. The statutory basis for minimum funding was last amended in 2012 by the Moving Ahead for Progress in the 21st Century Act (MAP–21).

In the United Kingdom, there are pension obligations from two UK pension plans, one thereof has been closed for a number of years and applies exclusively to former employees. The second plan is closed to new employees, but continues to provide old-age and survivors' benefits to the currently active participants based on pensionable income in the year before the employment relationship ends; these benefits are funded by salary-dependent employee contributions to plan assets. The accrued entitlements and current benefits in the United Kingdom are adjusted in accordance with statutory requirements on the basis of inflation. Pension obligations from both plans are partly funded by plan assets. The companies appointed independent trustees in accordance with statutory provisions to manage the funding of obligations and the investment of assets according to the company's specifications. Company pension plans are valued every three years in accordance with legal requirements, and any deficit is established. If the plan is underfunded, the trustee prepares a funding plan to regulate the funding of the deficit, taking account of the actuary's recommendation and the type and circumstances of the respective plan.

Supplementary healthcare benefits

In addition to occupational pension benefits, certain retired employees are granted health insurance subsidies. New entitlements to health insurance subsidies are no longer granted in Germany. There are now only a few employees with such benefits in active employment. Existing obligations from supplementary healthcare plans are not funded by plan assets. GEA does not see these benefits posing a particular risk due to the low level of the obligations.

Obligations under supplementary healthcare benefits relate mainly to Germany.

Provisions and funded status

The changes in the present value of the defined benefit obligation, the plan assets, and the provisions were as follows:

	12/31/2017		12/31/2016	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Present value of defined benefit obligation at beginning of fiscal year	**740,509**	**174,644**	**715,252**	**174,318**
Current service cost	10,917	3,073	11,770	3,180
Interest Cost from discounting unwinding on obligations	12,271	4,443	13,957	5,563
Employee contributions	–	445	–	531
Remeasurement of present value of obligation	–693	1,984	31,627	8,241
Actuarial gains (losses) from changes in demographic assumptions	–	–2,051	–	–1,330
Actuarial gains (losses) resulting from changes in financial assumptions	–	4,545	32,547	9,744
Actuarial gains (losses) resulting from experience adjustments	–693	–510	–920	–173
Past service cost	1,382	–265	–634	–753
Gains and losses from settlements	–	–270	–	1,509
Past service cost and gains and losses from settlements that occur together	–	–	595	–
Payments without settlements	–31,659	–7,896	–31,391	–8,658
Payments in respect of any settlements	–	–15,817	–	–11,618
Transfer of assets	–166	–	–668	–
Changes in combined group due to acquisitions	–	8,071	–	2,907
Other changes in combined group	238	–516	–	213
Currency translation	–	–12,223	–	–789
Present value of defined benefit obligation at end of fiscal year	**732,799**	**155,673**	**740,509**	**174,644**
Fair value of plan assets at beginning of the fiscal year	**27,080**	**116,754**	**22,807**	**125,808**
Interest income on plan assets	403	2,891	450	3,491
Employer contributions	4,742	4,552	5,197	4,074
Employee contributions	–	445	–	531
Remeasurement: return from plan assets in excess/ shortage of interest income	58	2,188	19	3,362
Payments without settlements	–1,025	–6,529	–873	–7,413
Payments in respect of any settlements	–	–15,817	–	–11,618
Transfer of assets	–	–	–521	–
Changes in combined group due to acquisitions	–	532	–	–
Other changes in combined group	–	–676	–	–
Currency translation	–	–8,227	–	–1,481
Fair value of plan assets at the end of fiscal year	**31,258**	**96,113**	**27,080**	**116,754**
Net carrying amount	**701,541**	**59,560**	**713,429**	**57,890**
thereof net asset	–	1,280	–	238
thereof net liability	701,541	60,840	713,429	58,128

The net carrying amount of obligations under defined benefit pension plans and supplementary healthcare benefits changed as follows in fiscal years 2017 and 2016:

	12/31/2017		12/31/2016	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Net carrying amount at beginning of fiscal year	**713,429**	**57,890**	**692,445**	**48,510**
Changes through profit or loss	24,167	4,090	25,238	6,008
Current service cost	10,917	3,073	11,770	3,180
Past service cost	1,382	–265	–634	–753
Gains and losses on settlements	–	–270	–	1,509
Concurrent past service cost and gains and losses on settlements	–	–	595	–
Net interest on net defined benefit liability	11,868	1,552	13,507	2,072
Changes through OCI	–751	–204	31,608	4,879
Return from plan assets in excess interest income	–58	–2,188	–19	–3,362
Actuarial gains (losses) from changes in demographic assumptions	–	–2,051	–	–1,330
Actuarial gains (losses) resulting from changes in financial assumptions	–	4,545	32,547	9,744
Actuarial gains (losses) resulting from experience adjustments	–693	–510	–920	–173
Cash-effective changes	–35,376	–5,919	–35,715	–5,319
Employer contributions	–4,742	–4,552	–5,197	–4,074
Payments without settlements	–30,634	–1,367	–30,518	–1,245
Other changes	72	3,703	–147	3,812
Transfer of assets	–166	–	–147	–
Changes in combined group due to acquisitions	–	7,539	–	2,907
Other changes in combined group	238	160	–	213
Currency translation	–	–3,996	–	692
Funded status/ Net carrying amount	**701,541**	**59,560**	**713,429**	**57,890**

The following overview shows the net carrying amount broken down into plans with and without plan assets:

	12/31/2017		12/31/2016	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Present value of funded obligations	167,270	136,569	193,507	158,351
Fair value of plan assets	31,258	96,113	27,080	116,754
Funded status/Net carrying amount of funded obligations	**136,012**	**40,456**	**166,427**	**41,597**
Present value of unfunded obligations	565,529	19,104	547,002	16,293
Funded status/Net carrying amount of unfunded obligations	**565,529**	**19,104**	**547,002**	**16,293**
Funded status/Net carrying amount	**701,541**	**59,560**	**713,429**	**57,890**

As in the previous year, no asset ceiling in accordance with IAS 19.64 (b) applies. In addition, there are no reimbursement claims within the meaning of IAS 19.116.

The following overview shows the present value of the defined benefit obligation broken down into active employees, former employees with terminated vested benefits, and benefit recipients:

	12/31/2017		12/31/2016	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Active employees	227,596	70,090	226,077	72,025
Vested terminated employees	115,559	32,761	117,135	42,775
Pensioners	389,644	52,822	397,297	59,844
Total	**732,799**	**155,673**	**740,509**	**174,644**

Plan assets

The plan assets used to cover the pension obligations were as follows at the respective reporting dates:

	12/31/2017		12/31/2016	
(Percent)	Germany	Other countries	Germany	Other countries
Quoted prices in active markets	26.0	76.7	17.6	66.1
Equity instruments	0.7	30.8	0.8	25.8
Debt instruments	1.5	39.7	2.2	35.7
Real estate	0.0	0.1	0.0	0.1
Other	23.8	6.1	14.6	4.5
No quoted prices in active markets	74.0	23.3	82.4	33.9
Equity instruments	0.0	1.0	0.0	0.8
Debt instruments	0.0	0.7	0.0	0.6
Insurance	73.9	21.5	82.4	32.5
Other	0.1	0.1	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**

Particularly in Germany, GEA has decided to utilize the internal financing effect of the pension provisions and supplementary healthcare benefits and only to fund a relatively small proportion of the pension obligations using plan assets.

In the U.S.A. and the United Kingdom, a large proportion of the pension obligations is funded by plan assets in accordance with the legal framework. The above table shows how the plan assets have been invested. A proportion of both the German and foreign plan assets is managed by insurance companies in accordance with their specific investment guidelines. In Germany, this is the predominant form of investment for plan assets. Part of the plan assets of German pension plans is also managed by pension funds and an endowment fund, and is mainly invested in fixed-income securities and term deposits, with only a relatively small proportion invested in equities. The objective of these external investments is to ensure secure returns and preserve the value of the underlying assets in order to fund current and future pension benefits. There are currently no plans to change this investment strategy.

Assets invested in the capital markets are exposed to general capital market and investment risk. GEA is constantly monitoring market trends and has developed corresponding investment policies that adequately balance risk and income expectations, while taking the respective statutory and regulatory frameworks into account.

In fiscal year 2018, EUR 5,079 thousand is expected to be added to the plan assets of German pension plans and EUR 4,359 thousand to plans outside Germany.

The actual return on plan assets in 2017 was EUR 5,540 thousand (previous year: EUR 7,322 thousand).

Actuarial assumptions

As of the relevant reporting date, the following weighted actuarial assumptions were used to calculate the present value of the defined benefit obligations. These assumptions are used to calculate net pension expenses in the following year.

	12/31/2017		12/31/2016	
(Percent)	Germany	Other countries	Germany	Other countries
Discount factor	1.70	2.43	1.70	2.71
Inflation	1.70	1.19	1.70	1.12
derived: wage and salary growth rate	2.70	1.31	2.70	1.29
derived: pension growth rate	1.40	0.39	1.39	0.48
derived: growth rate in cost of health care benefits	3.45	–	3.45	–

The actuarial measurement factors for German plans are established by GEA in consultation with actuarial experts. The corresponding assumptions for plans outside Germany are determined taking into account country-specific conditions with the help of local experts in consultation with the global experts and GEA. The discount rate is established using a recognized method based on the return on high quality corporate bonds determined as of the reporting date, taking into account the currency and maturities of the underlying liabilities. For countries that do not have a liquid market in corporate bonds that are suitable for setting the discount rate, interest rates on government bonds are referred to instead to define the rate.

All other assumptions correspond to the long-term expectations of GEA. The nominal rate of wage and salary increases is calculated based on expected inflation and a real rate of increase. The rate of pension increases in Germany is also determined based on inflation, provided that the pension adjustments are determined in accordance with the rise in the cost of living. In addition, the financial position of the relevant company is also taken into account. If a firm pension adjustment commitment has been made, this is taken into account accordingly. Outside of Germany, the pension adjustment is also generally determined on the basis of inflation. The growth rate assumed for the costs of supplementary healthcare benefits in Germany equates to forecast inflation plus a growth rate based on historical data. Based on this data, the growth rate is not expected to change in the future.

As in the previous year, Klaus Heubeck's 2005G mortality tables were used as a basis for measuring all German plans as of December 31, 2017. On this basis, the life expectancy of a 65-year-old pensioner as of the reporting date is 19.44 years for men and 23.49 years for women (previous year: 19.30 years/23.36 years). Country-specific measurement bases were used for pension liabilities outside Germany.

The sensitivities presented below apply to the discount rate and inflation, which have been identified as actuarial assumptions that have a significant influence on GEA's benefit obligations. Since the wage and salary increase rate, the pension increase rate, and the growth rate in the cost of supplementary health benefits are derived from inflation, sensitivity to inflation was used to measure the sensitivity of these assumptions together. The same calculation methods were used for sensitivities as for the recognized provisions. The ranges used to compute the sensitivities of the assumptions are based on the changes that are deemed possible until the next reporting date, given historical experience. The meaningfulness of historical experience for forecasts of future outcomes and neglecting to update a number of assumptions simultaneously may represent limitations of these methods.

(EUR thousand)	2017	
Increase (+)/ Decrease (-) of DBO	Germany	Other countries
Increase of discount factor by 50 basis points	–52,665	–5,548
Decrease of inflation by 25 basis points	–15,877	–437

A one-year increase in life expectancy results in an increase of around 4 percent in the present value of the defined benefit obligations, on average.

Future cash flows

The following benefit payments are expected to be made under the German and foreign plans in the coming years:

(EUR thousand)	2018	2019	2020	2021	2022	2023 - 2027
German plans	32,655	32,138	31,883	31,830	31,634	155,378
Foreign plans	8,517	6,873	7,831	8,024	8,649	40,710

The average weighted duration of pension obligations and supplementary healthcare benefits is:

	12/31/2017		12/31/2016	
(Years)	Germany	Other countries	Germany	Other countries
Duration	15.7	13.4	15.8	13.6

6.3.2 Defined contribution pension plans

Various companies – especially in the U.S.A. and Scandinavia – operate defined contribution pension plans. Under these plans, the obligation does not lie with GEA, but with the respective pension funds. Contributions totaling EUR 13,638 thousand were made in fiscal year 2017 (previous year: EUR 17,550 thousand). Contributions of EUR 45,597 thousand were made to state pension insurance systems (previous year: EUR 44,427 thousand). These contributions are recognized as personnel expenses at the same time as the relevant service is rendered.

Two nationwide multi-employer pension plans in the Netherlands were recognized as defined contribution pension plans because the respective managers of the plans do not provide sufficient information to the participating companies on the amount of the obligation and of the plan assets for them to be recognized as defined benefit pension plans.

These plans are subject to a minimum asset/liability ration. In case this minimum is not met a recovery plan has to be submitted to the Dutch National Bank. Neither a surplus nor a deficit would result in additional payments from or into the plan for the participating companies. However, if the minimum funding level is not met, pension benefits may be reduced or future contributions to be paid by the participating companies may be increased.

The first multi-employer pension plan has around 160,000 beneficiaries, of whom around 400 belong to GEA. Contributions amounting to EUR 2,294 thousand (previous year: EUR 2,383 thousand) were made to this multi-employer pension plan in fiscal year 2017. Lower contributions are expected for fiscal year 2018 compared with the previous year.

The second multi-employer pension plan has around 1.2 million beneficiaries, of whom around 500 belong to GEA. Contributions amounting to EUR 3,292 thousand (previous year: EUR 3,178 thousand) were made to this plan in fiscal year 2017. Lower contributions are expected for fiscal year 2018 compared with the previous year.

6.3.3 Share-based payment

Income from share-based payments in fiscal year 2017 for the group as a whole totaled EUR 2,469 thousand (previous year: expenses of EUR 3,895 thousand). The carrying amount of liabilities arising from share-based payment transactions in the group as a whole amounted to EUR 1,280 thousand as of December 31, 2017 (previous year: EUR 4,407 thousand).

Performance Share Plan

Effective July 1, 2006, GEA Group Aktiengesellschaft launched a long-term remuneration program entitled "GEA Performance Share Plan", a cash-settled share-based payment plan for all first- and second-level managers below the Executive Board. Third-level managers were also eligible to participate starting with the third tranche of the program as of July 1, 2008. The goal of the GEA Performance Share Plan is to link managers' remuneration with the long-term success of the company and to align their interests with those of the shareholders.

Under the plan, participants are granted a defined number of Performance Shares at the beginning of the performance period. The number of Performance Shares allotted is determined by the participants' management level. To participate in the plan, managers must invest 20 percent of the amount of the allotted Performance Shares in shares of GEA Group Aktiengesellschaft. The personal investment must then be held for three years (performance period).

The performance of GEA Group Aktiengesellschaft's shares relative to the companies included in a benchmark index over the three-year performance period is measured on the basis of their total shareholder return (TSR). The MDAX® was used as the benchmark for the tranches issued in the years up to and including 2013. The benchmark for the tranches issued since 2014 is the STOXX® Europe TMI Industrial Engineering (TMI IE). This change in the benchmark index has harmonized the plan with the share-based payments for Executive Board members. TSR is a suitable indicator for investors to compare the performance and appeal of different companies. It measures the total percentage return that an investor earns from a share over a certain period. In addition to share price performance, dividends and adjustments such as share splits are included in the calculation of TSR. This method of comparison eliminates share price performance that is due to general market volatility and enables the effects of different profit retention strategies to be compared. The relative performance of GEA Group Aktiengesellschaft's shares determines the number of Performance Shares finally paid out (between 0 percent and 300 percent).

The Performance Shares are paid out once the three-year performance period has expired.

At that time, the performance of GEA Group Aktiengesellschaft's shares relative to the benchmark determines how many Performance Shares are paid out: If the performance of the company's shares equals the median in the TSR comparison, 50 percent of the Performance Shares are issued; if it reaches the third quartile, 100 percent of the Performance Shares are paid out. If GEA Group Aktiengesellschaft's shares outperform the benchmark index companies, 300 percent of the Performance Shares are issued. Other performance figures are interpolated between these values. The total amount paid out corresponds to the number of Performance Shares allotted to a participant multiplied by the average share price over the last quarter of the three-year performance period. Once the performance period has expired, participants may freely dispose of their personal investment in GEA Group Aktiengesellschaft shares.

The 2014 tranche expired on June 30, 2017. The TSR comparison over the three-year performance period resulted in a payout ratio of 0 percent (previous year: 2013 tranche, 64.96 percent). There was a payment of EUR 0 thousand (previous year: EUR 3,437 thousand) in fiscal year 2017.

The number of Performance Shares changed as follows in fiscal year 2017:

(Number of shares)	12/31/2016	Additions	Expired	Paid Out	Changes in consolidated group	12/31/2017
2013 tranche	–	–	–	–	–	–
2014 tranche	102,243	–	102,243	–	–	–
2015 tranche	89,273	–	6,321	–	–	82,952
2016 tranche	99,130	–	3,983	–	–	95,147
Total	**290,646**	**–**	**112,547**	**–**	**–**	**178,099**

The total income for the group as a whole for fiscal year 2017 amounted to EUR 2,644 thousand (previous year: expense of EUR 3,338 thousand), taking into account the fair value as of December 31, 2017 of EUR 0.01 (previous year: EUR 14.65) for the 2015 tranche, EUR 0.85 (previous year: EUR 15.15) for the 2016 tranche, and EUR 0 (previous year: EUR 27.03) for the 2014 tranche (previous year: 2013 tranche) at the payment date.

The fair value of the Performance Shares is determined using a Monte Carlo simulation. The following valuation assumptions are applied:

	2017		2016		
Tranche	2015 tranche	2016 tranche	2014 tranche	2015 tranche	2016 tranche
Share price (arithmetic mean) (EUR)	41,62	50,85	39,57	38,95	38,23
Dividend yield (in %)	2,12	2,12	2,22	2,22	2,22
Risk free interest (in %)	–0,742	–0,686	–0,892	–0,814	–0,788
Volatility GEA share (in %)	21,94	21,94	34,98	34,98	34,98

As the payout ratio of GEA Group Aktiengesellschaft's Performance Shares is linked to the MDAX or TMI IE, the volatilities of all MDAX or TMI IE shares and their correlations to GEA Group Aktiengesellschaft shares are also calculated. The calculation of volatilities and correlations is based on historical market data. Risk-free interest rates were determined from German government bond yields.

Long-term share price component

The long-term share price component was introduced as part of the revision of the variable remuneration system for Executive Board members in fiscal year 2012. The payout from the long-term share price component is measured over a three-year performance period that includes the relevant fiscal year and the two subsequent years.

Performance is measured by comparing the performance of the GEA share price, adjusted for dividends, with the performance of the STOXX® Europe TMI Industrial Engineering (TMI IE) index over a three-year performance period. This comparison is computed on the basis of the respective arithmetic mean closing prices on the last 20 trading days preceding the start of the three-year performance period. 100 percent of the target is achieved if the performance of the arithmetic mean of the GEA share daily closing prices is equal to 100 percent of the corresponding TMI performance over the three-year performance period. In the event of outperformance greater than 100 percent, the amount paid out rises to a maximum of 300 percent of the target amount. If the increase in GEA's share price over the three-year period is less than 100 percent of the growth in the TMI IE, the amount payable is reduced accordingly down to a performance level of 75 percent. The degree of target achievement increases or decreases by 4 percent for each percentage point greater than or less than a performance level of 100 percent. The total degree of target achievement and thus the payout level for the long-term share price component is limited to 300 percent of this target amount (cap).

Starting from a target amount of EUR 2,012 thousand (previous year: EUR 1,885 thousand), the fair value of claims arising from the long-term share price component amounted to EUR 1,239 thousand* (previous year: EUR 1,722 thousand) as of the reporting date. The 2014 tranche was paid out in fiscal year 2017 at EUR 659 thousand* (previous year: EUR 1,224 thousand).

The fair value of the claims arising from the long-term share price component is determined using a Monte Carlo simulation. The following valuation assumptions are applied:

	2017		2016	
	2017 tranche	2016 tranche	2016 tranche	2015 tranche
Share price (arithmetic mean EUR)	39.01	40.99	42.25	41.41
STOXX TMI IE (arithmetic mean index points)	484.96	429.34	374.78	374.33
Risk-free interest (percent)	–0.639	–0.717	–0.804	–0.839
Volatility GEA share (percent)	21.94	21.94	34.98	34.98
Volatility STOXX TMI IE (percent)	12.06	12.06	18.14	18.14
Correlation between GEA share and STOXX TMI IE (percent)	48.35	48.35	41.63	41.63

The calculation of volatilities and correlation is based on historical market data. Risk-free interest rates were determined from German government bond yields.

*) Payment of the 2014 tranche as of 03/31/2018 was agreed for Dr. Stephan Petri, who left the Executive Board during the business year 2016 under review

6.4 Financial liabilities

Financial liabilities as of December 31, 2017, were composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Liabilities to banks	2,908	3,439
Liabilities under finance leases	2,990	6,542
Liabilities from derivatives	110	257
Noncurrent financial liabilities	**6,008**	**10,238**
Borrower's note loan	–	90,651
Liabilities to banks	242,014	52,406
Liabilities under finance leases	3,571	3,440
Liabilities from derivatives	10,997	19,092
Liabilities to equity investments	227	130
Current financial liabilities	**256,809**	**165,719**
Total financial liabilities	**262,817**	**175,957**

The financing of GEA as of December 31, 2017 consisted mainly of the following items:

(EUR thousand)	Carrying amount 12/31/2017	Carrying amount 12/31/2016	Notional value 12/31/2017	Fair value 12/31/2017	Maturity
Bilateral credit lines including accured interests	244,922	–	244,922	244,922	until further notice
Borrower's note loan	–	90,651	–	–	September 19, 2017
European Investment Bank	–	50,181	–	–	Partial repayment amounting to 100.000 T EUR on January 14, 2015; Remaining portion on July 14, 2017

Borrower's note loan

In 2012, GEA Group Aktiengesellschaft placed a borrower's note loan in the amount of EUR 90,000 thousand which is due to mature in September 2017 and has a fixed interest rate of 2.725 percent. The borrower's note loan was redeemed on schedule in September 2017.

Liabilities to banks

The maturities of liabilities to banks are as follows:

(EUR thousand)	12/31/2017	12/31/2016
< 1 year	242,014	52,406
1 – 2 years	1,578	2,062
2 – 3 years	1,330	1,372
3 – 4 years	–	5
Total	**244,922**	**55,845**

Current liabilities mainly concern the utilization of several bilateral credit lines.

The EUR 50,000 thousand loan from the European Investment Bank was repaid on schedule in July 2017. A further part of the loan amount EUR 100,000 thousand was repaid in advance in fiscal year 2015. The weighted average interest rate for this partial amount was fixed at 3.29 percent for the full term using two interest rate swaps.

GEA has undertaken in the loan agreements to comply with a certain covenant. Compliance with the covenant must be reviewed at the end of each quarter. The covenant was met as of December 31, 2017.

Transaction costs for the unused syndicated credit line (club deal) as of the end of the year are allocated on a straight-line basis over the term.

Other liabilities to banks in the eurozone bore interest rates of between 0.0 percent and 1.0 percent, depending on their maturity and financing purpose (previous year: between 0.5 percent and 1.0 percent). The group additionally had foreign currency liabilities in Indian rupees and South African rand that also attract the customary market interest rates of those countries of around 8.95 percent (previous year: 9.0 percent) and 10.25 percent (previous year: 0 percent), respectively.

Liabilities to banks totaling EUR 2,825 thousand (previous year: EUR 4,131 thousand) were secured.

Cash credit and guarantee credit lines

Including the syndicated credit line, the group as a whole had cash credit lines of EUR 949,155 thousand as of December 31, 2017 (previous year: EUR 855,664 thousand). Of this amount, cash credit lines of EUR 704,234 thousand (previous year: EUR 709,168 thousand) are unutilized (see section 3). In addition, guarantee credit lines for the performance of contracts, advance payments, and warranty obligations of EUR 1,361,235 thousand (previous year: EUR 1,265,468 thousand) were available to the group as a whole, thereof EUR 837,050 thousand (previous year: EUR 790,248 thousand) has not been utilized.

Liabilities under finance leases

The following table shows a breakdown of future payments under finance leases:

	Minimum lease payments		Interest		Present value of minimum lease payments	
(EUR thousand)	12/31/2017	12/31/2016	12/31/2017	12/31/2016	12/31/2017	12/31/2016
Not later than one year	3,906	3,752	335	312	3,571	3,440
Between one and five years	3,242	7,447	252	905	2,990	6,542
Total future payments under finance leases	**7,148**	**11,199**	**587**	**1,217**	**6,561**	**9,982**

Liabilities under finance leases relate mainly to land and buildings. The present value of minimum lease payments as of December 31, 2017, relating to leases for land and buildings amounted to EUR 6,445 thousand (previous year: EUR 9,729 thousand).

As the interest rates used in leases are constant, the fair value of lease liabilities may be exposed to interest rate risk. All leases comprise contractually agreed payments.

Liabilities under finance leases are effectively secured because the rights to the leased asset revert to the lessor if the terms and conditions of the lease are breached.

Derivative financial instruments

Derivative financial instruments are explained in section 6.8.

6.5 Trade payables

Trade payables were as follows as of December 31, 2017:

(EUR thousand)	12/31/2017	12/31/2016
Trade payables	736,906	624,817
thereof to unconsolidated companies	6,194	6,252

Trade payables of EUR 736,312 thousand (previous year: EUR 623,882 thousand) are due within one year. The balance of EUR 594 thousand (previous year: EUR 935 thousand) is due after more than one year.

Trade payables in the amount of EUR 16,837 thousand (previous year: EUR 19,628 thousand) are secured.

6.6 Income tax liabilities

Income tax liabilities relate to current taxes and amounted to EUR 28,489 (previous year: EUR 33,317 thousand).

6.7 Other liabilities

Other liabilities as of December 31, 2017, are composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Other noncurrent liabilities	**33,041**	**48,181**
Payments on account received in respect of orders and construction contracts	271,420	269,581
Gross amount due to customers for contract work	370,049	357,873
Other liabilities to unconsolidated subsidiaries	23,623	26,582
Liabilities from other taxes	37,016	60,189
Other liabilities	87,039	98,614
thereof social security	16,291	13,254
thereof other liabilities to employees	14,503	12,073
Other current liabilities	**789,147**	**812,839**
Total other liabilities	**822,188**	**861,020**

Payments on account received in respect of orders amounting to EUR 20,259 thousand (previous year: EUR 43,732 thousand) and other liabilities amounting to EUR 3,939 thousand (previous year: EUR 9,589 thousand) are secured.

The gross amount due to customers for contract work is the aggregate amount of orders whose progress billings exceed the capitalized cost plus the contract gains and losses recognized.

6.8 Financial instruments

The following tables provide an overview of the composition of financial instruments as of December 31, 2017, by class within the meaning of IFRS 7 as well as by measurement category. The tables also include financial assets and liabilities, as well as derivatives that are included in recognized hedging relationships but do not belong to any of the IAS 39 measurement categories.

		Measurement in accordance with IAS 39				
(EUR thousand)	Carrying amount 12/31/2017	Amortized cost	Fair value through profit or loss	Fair value recognized in other comprehensive income	Measurement in accordance with other IFRSs	Fair value 12/31/2017
Assets						
Trade receivables	1,391,993	926,750	–	–	465,243	1,391,993
thereof PoC receivables	465,243	–	–	–	465,243	465,243
Income tax receivables	30,738	–	–	–	30,738	30,738
Cash and cash equivalents	250,507	250,507	–	–	–	250,507
Other financial assets	219,365	114,958	3,952	8,525	91,930	219,365
By IAS 39 measurement category						
Loans and receivables	1,271,040	1,271,040	–	–	–	1,271,040
thereof cash and cash equivalents	250,507	250,507	–	–	–	250,507
thereof trade receivables	926,750	926,750	–	–	–	926,750
thereof other financial assets	93,783	93,783	–	–	–	93,783
Available-for-sale investments	29,700	21,175	–	8,525	–	29,700
Financial assets at fair value through profit or loss (derivatives not included in a recognized hedging relationship)	3,952	–	3,952	–	–	3,952
Liabilities						
Trade payables	736,906	736,906	–	–	–	736,906
Financial liabilities	262,817	245,149	11,107	–	6,561	262,817
thereof liabilities under finance leases	6,561	–	–	–	6,561	6,561
thereof derivatives included in hedging relationships	–	–	–	–	–	–
Income tax liabilities	28,489	–	–	–	28,489	28,489
Other liabilities	822,188	108,386	594	–	713,208	826,463
By IAS 39 measurement category						
Financial liabilities at amortized cost	1,090,441	1,090,441	–	–	–	1,094,716
thereof trade payables	736,906	736,906	–	–	–	736,906
thereof bonds and other securitized liabilities	–	–	–	–	–	–
thereof liabilities to banks	244,922	244,922	–	–	–	244,922
thereof loan liabilities to unconsolidated subsidiaries	227	227	–	–	–	227
thereof other liabilities to affiliated companies	23,623	23,623	–	–	–	23,623
thereof other liabilities	84,763	84,763	–	–	–	89,038
Financial liabilities at fair value through profit or loss (derivatives not included in a hedging relationship and contingent consideration)	11,701	–	11,701	–	–	11,701

(EUR thousand)	Carrying amount 12/31/2016	Measurement in accordance with IAS 39			Measurement in accordance with other IFRSs	Fair value 12/31/2016
		Amortized cost	Fair value through profit or loss	Fair value recognized in other comprehensive income		
Assets						
Trade receivables	1,390,397	929,388	–	–	461,009	1,390,397
thereof PoC receivables	461,009	–	–	–	461,009	461,009
Income tax receivables	25,832	–	–	–	25,832	25,832
Cash and cash equivalents	929,120	929,120	–	–	–	929,120
Other financial assets	204,596	105,045	3,416	9,098	87,037	204,596
By IAS 39 measurement category						
Loans and receivables	1,940,985	1,940,985	–	–	–	1,940,985
thereof cash and cash equivalents	929,120	929,120	–	–	–	929,120
thereof trade receivables	929,388	929,388	–	–	–	929,388
thereof other financial assets	82,477	82,477	–	–	–	82,477
Available-for-sale investments	31,666	22,568	–	9,098	–	31,666
Financial assets at fair value through profit or loss (derivatives not included in a recognized hedging relationship)	3,416	–	3,416	–	–	3,416
Liabilities						
Trade payables	624,817	624,817	–	–	–	624,817
Financial liabilities	175,957	146,626	18,307	1,042	9,982	177,866
thereof liabilities under finance leases	9,982	–	–	–	9,982	9,982
thereof derivatives included in hedging relationships	1,042	–	–	1,042	–	1,042
Income tax liabilities	33,317	–	–	–	33,317	33,317
Other liabilities	861,020	141,913	641	–	718,466	860,558
By IAS 39 measurement category						
Financial liabilities at amortized cost	913,062	913,062	–	–	–	914,803
thereof trade payables	624,817	624,817	–	–	–	624,817
thereof bonds and other securitized liabilities	90,651	90,651	–	–	–	92,456
thereof liabilities to banks	55,845	55,845	–	–	–	55,949
thereof loan liabilities to unconsolidated subsidiaries	130	130	–	–	–	130
thereof other liabilities to affiliated companies	26,582	26,582	–	–	–	26,582
thereof other liabilities	115,037	115,037	–	–	–	114,869
Financial liabilities at fair value through profit or loss (derivatives not included in a hedging relationship and contingent consideration)	18,948	–	18,948	–	–	18,948

The fair values of the financial instruments recognized under assets held for sale and liabilities held for sale are not presented separately as these cannot be ascertained accurately. The company does not intend to sell these financial instruments.

Financial assets and liabilities that are measured at fair value, or for which a fair value is disclosed in the notes to the consolidated financial statements, are required to be categorized according to the fair value hierarchy described in the following. Categorization within the levels of the fair value hierarchy is based on the measurement of the underlying inputs:

Level 1 inputs: quoted prices (unadjusted) in active markets for identical financial assets and liabilities.

Level 2 inputs: quoted market prices that are observable as direct (prices) or indirect (derived from prices) inputs used to measure fair value and that are not quoted prices as defined by Level 1.

Level 3 inputs: inputs that are not based on observable market data.

The following table shows the categorization of financial assets and financial liabilities into the three-level fair value hierarchy:

Recurring fair value measurements	12/31/2017				12/31/2016			
	Carrying	Fair value			Carrying	Fair value		
(EUR thousand)	amount	Level 1	Level 2	Level 3	amount	Level 1	Level 2	Level 3
Financial assets measured at fair value								
Derivatives not included in hedging relationships	3,952	–	3,952	–	3,416	–	3,416	–
Available-for-sale financial assets valued at fair value	8,525	–	–	8,525	9,098	–	–	9,098
Financial liabilities measured at fair value								
Derivatives included in hedging relationships	–	–	–	–	1,042	–	1,042	–
Derivatives not included in hedging relationships	11,107	–	11,107	–	18,307	–	18,307	–
Contingent consideration	594	–	–	594	641	–	–	641
Financial liabilities not measured at fair value								
Borrower's note loan	–	–	–	–	90,651	–	92,456	–
Liabilities to banks	244,922	–	244,922	–	55,845	–	55,949	–
Other financial liabilities	39,736	–	10,016	33,995	76,106	–	6,091	69,847

There were no transfers into or out of the levels of the fair value hierarchy in fiscal year 2017.

The fair value of derivatives is calculated using quoted exchange rates and yield curves observable in the market. Accordingly, these are categorized within Level 2 of the fair value hierarchy.

The fair value of borrower's note loans and liabilities to banks is measured on the basis of the yield curve, taking into account credit spreads. They are therefore categorized within Level 2 of the fair value hierarchy. The interest deferred as of the reporting date is included in the fair values.

The fair values of trade receivables, cash and cash equivalents, term deposits, and other financial receivables essentially correspond to the carrying amounts; this is due to the predominantly short remaining maturities.

Included in other financial liabilities is a contractual obligation undertaken in the context of a company acquisition. The fair value of this instrument is measured using contractual cashflows on the basis of the yield curve, taking into account credit spreads. Accordingly, these were categorized within Level 2 of the fair value hierarchy.

Certain other financial liabilities resulting from the sale of the GEA HX segment are categorized within Level 3 of the fair value hierarchy, since their fair value is measured on the basis of the present value of future cash outflows expected on the basis of contractual obligations associated with the sale.

Financial liabilities resulting from contingent purchase price considerations are assigned to Level 3 of the fair value hierarchy. The fair value of these liabilities is determined by means of present value calculations, taking into account various inputs that are not observable in the market, and that are based in particular on corporate planning, as specified in the respective purchase price clauses.

A receivable relating to the former raw material activities of Metallgesellschaft AG that had previously been written off was allocated to Level 3 of the fair value hierarchy; its fair value is determined by means of a present value calculation on the basis of the debtor's payment plan.

The following table shows the changes in fair value in fiscal year 2017:

(EUR thousand)	
Fair value 12/31/2016	**9,098**
Redemption	–113
Interest income	104
Currency translation	–511
Revaluation	–53
Fair value 12/31/2017	**8,525**

As the debtor operates a copper mine, its payment plan is influenced by the price of copper.

Unrealized losses recognized directly in equity for this financial instrument amounted to EUR –722 thousand as of the reporting date (previous year: EUR –669 thousand).

GEA Group Aktiengesellschaft has entered into netting agreements with banks under the German Master Agreement for Financial Derivatives Transactions. As a general rule, the amounts owed under such agreements by each counterparty from all outstanding transactions in the same currency on a single day are aggregated to a single net amount payable by one party to the other. In the event of a credit event, such as late payment, all outstanding transactions under the agreement will be terminated, the value on termination calculated, and one single net amount paid to settle all transactions.

The following table shows the financial assets and liabilities for which the group as a whole has entered into netting agreements:

(EUR thousand)	Gross amounts of financial assets/liabilties	Net amounts of financial assets/liabilties, presented in the balance sheet	Respective amounts not netted in the balance sheet	Net amounts
12/31/2017				
Receivables from derivatives	3,769	3,769	2,518	1,251
Liabilities from derivatives	10,755	10,755	2,518	8,237
12/31/2016				
Receivables from derivatives	3,186	3,186	3,158	28
Liabilities from derivatives	14,595	14,595	3,158	11,437

Nonderivative financial assets

The carrying amount of the trade receivables and other financial assets that are subject to the IAS 39 measurement requirements corresponds to their fair value. Assets allocated to the "available-for-sale financial assets" category are measured at amortized cost. These are shares in unconsolidated subsidiaries and other equity investments whose fair value cannot be determined reliably.

Nonderivative financial liabilities

The carrying amount of the trade payables and other current liabilities that are subject to the measurement rules of IAS 39 corresponds to their fair value. The fair value of fixed-rate liabilities is the present value of their expected future cash flows. They are discounted at the rates prevailing at the reporting date. The carrying amount of variable-rate liabilities corresponds to their fair value.

Derivative financial instruments

The fair value of currency forwards at the reporting date is calculated on the basis of the spot exchange rate, taking into account forward premiums and discounts corresponding to the relevant remaining maturities. Forward premiums and discounts are derived from yield curves observable at the reporting date. The fair value of currency options is calculated on the basis of recognized valuation models. Fair value is affected by the remaining term of the option, the current exchange rate, the volatility of the exchange rate, and the underlying yield curves.

The fair value of interest rate swaps and options is determined on the basis of discounted expected future cash flows. Market interest rates applicable to the remaining maturities of these financial instruments are used. Cross-currency swaps also include the exchange rates of the relevant foreign currencies in which the cash flows are generated.

GEA uses derivative financial instruments, including currency forwards, interest rate swaps, and cross-currency swaps. Derivative financial instruments serve to hedge foreign currency risk and interest rate risk for existing or planned underlying transactions.

The following table presents the notional values and fair values of the derivative financial instruments in use as of the reporting date. The notional value in foreign currency is translated at the closing rate.

	12/31/2017		12/31/2016	
(EUR thousand)	Notional value	Fair value	Notional value	Fair value
Assets				
Currency derivatives not included in a hedging relationship	436,734	3,952	209,064	3,373
Interest rate and cross-currency derivatives not included in a hedging relationship	–	–	6,424	43
Total	**436,734**	**3,952**	**215,488**	**3,416**
Liabilities				
Currency derivatives not included in a hedging relationship	655,983	11,107	889,525	15,603
Interest rate and cross-currency derivatives not included in a hedging relationship	–	–	21,744	2,704
Interest rate and cross-currency derivatives included in a cash flow hedge	–	–	50,000	1,042
Total	**655,983**	**11,107**	**961,269**	**19,349**

Derivative financial instruments included in recognized hedging relationships

In both the reporting year and the previous year, derivative financial instruments included in recognized hedging relationships served exclusively to hedge interest rate risks from long-term financing (cash flow hedges). In fiscal years 2017 and 2016, no derivatives for hedging foreign currency risks arising from future sale and procurement transactions were included in cash flow hedges, nor were any derivatives designated as fair-value hedges.

Derivatives are measured at fair value, which is split into an effective and an ineffective portion. The effective portion and any change in this amount are recognized in other comprehensive income until the hedged item is recognized in the balance sheet. The ineffective portion is recognized in the income statement. When the hedged item is recognized in the balance sheet, gains and losses recognized in equity are realized and the hedge is unwound. In the case of a sale transaction, the effective portion is recognized as revenue, whereas in the case of a procurement transaction the cost is adjusted accordingly. In the case of interest rate derivatives, the gains and losses recognized in equity are reversed to net interest income.

As of December 31, 2017, the complete group recognized gains of EUR 0 thousand (previous year: EUR 0 thousand) and losses of EUR 0 thousand (previous year: EUR 740 thousand) from currency and interest rate derivatives directly in equity.

Derivative financial instruments not included in recognized hedging relationships

If the criteria for recognizing a hedging relationship are not met, any change in fair value is recognized in the income statement.

Income and expenses

The measurement effects from financial instruments have largely been recognized in profit or loss. The following table shows net income from financial instruments, broken down by the IAS 39 measurement categories:

	12/31/2017			12/31/2016		
(EUR thousand)	Net income	thereof interest income/ expense	thereof impairment losses/ reversals of impairment losses	Net income	thereof interest income/ expense	thereof impairment losses/ reversals of impairment losses
Loans and receivables	95,223	6,665	–6,134	31,301	6,195	–4,067
Available-for-sale investments	10	–	–	1,769	89	–149
Financial assets/liabilities at fair value through profit or loss	–46,685	928	–	22,320	–437	–
Financial liabilities at amortized cost	–54,899	–7,820	–	–56,607	–15,998	–
Total	**–6,351**	**–227**	**–6,134**	**–1,217**	**–10,151**	**–4,216**

7. Consolidated Income Statement Disclosures

7.1 Revenue

Revenue is composed of the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
From construction contracts	2,252,316	2,212,385
From sale of goods and services	929,331	892,905
From service agreements	1,422,867	1,386,604
Total	**4,604,514**	**4,491,894**

7.2 Other income

Other income is composed of the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Exchange rate gains	263,147	247,214
Gains on the measurement of foreign currency derivatives	48,320	68,996
Rental and lease income	3,314	2,655
Income from payments received on reversals previously written off	3,812	3,011
Income from disposal of non-current assets	18,716	9,771
Income from compensation payments and cost reimbursements	1,623	2,635
Miscellaneous other income	40,686	48,994
Total	**379,618**	**383,276**

7.3 Other expenses

Other expenses are composed of the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Exchange rate losses	215,690	263,836
Losses on the measurement of foreign currency derivatives	95,933	46,239
Bad debt allowances on trade receivables	9,946	7,078
Restructuring expenses	46	3,560
Cost of money transfers and payment transactions	1,025	1,091
Losses on the disposal of non-current assets	1,033	1,157
Miscellaneous other expenses	22,884	29,451
Total	**346,557**	**352,412**

7.4 Restructuring expenses relating to the "Fit for 2020" project

The "Fit for 2020" project is a constituent part of GEA's strategic reorientation effort. It aims to bring about substantial savings and promote further growth by optimizing the company's organizational structure. For example, the development and manufacturing of products and the provision of process solutions have been bundled in two new business areas – Equipment and Solutions. This new structure with business areas of roughly equal size and strength promises greater operational synergies across technologies and applications, and helps achieve functional excellence by standardizing processes.

For GEA's customers this means one country organization per country as a central point of contact offering the entire product portfolio and all services on a local basis. The new structure was implemented in June 2015.

In fiscal year 2017, restructuring provisions amounting to EUR 0.5 million (previous year: EUR 2.0 million) were recorded for the "Fit for 2020" initiative. EUR 0.5 million of these provisions (previous year: EUR –1.5 million) was attributable to expenses for contractual and anticipated redundancy payments, while EUR 0 million (previous year: EUR 0.4 million) was for unscheduled writedowns on property, plant and equipment and on intangible assets.

Restructuring provisions are recognized insofar as the relevant criteria applicable in the individual countries or locations are met. This was the case toward the end of 2017 for the restructuring measures planned in the context of the "Fit for 2020" initiative. The restructuring provisions recognized as of December 31, 2017 amounted to EUR 10.7 million (previous year: EUR 34.9 million), thereof EUR 10.6 million (previous year: EUR 33.9 million) was attributable to obligations arising from contractual and anticipated severance payments (see section 6.3).

7.5 Presentation of selected income and expenses by cost type

Cost of materials

The cost of materials included in cost of sales increased by EUR 49,651 thousand in the reporting period to EUR 2,245,947 thousand (previous year: EUR 2,196,296 thousand). Cost of materials amounted to 48.7 percent of gross revenue and was therefore higher than the previous year's figure of 48.5 percent.

Personnel expenses

Personnel expenses increased by EUR 20,519 thousand in 2017 to EUR 1,295,527 thousand (previous year: EUR 1,275,008 thousand). The cost of unwinding the discount on expected pension obligations is not recognized under personnel expenses, but under financial and interest expenses. Personnel expenses include wages and salaries in the amount of EUR 1,058,663 thousand (previous year: EUR 1,044,818 thousand) as well as social security contributions and expenses for post-employment benefits of EUR 236,869 thousand (previous year: EUR 230,190 thousand). The ratio of personnel expenses to gross revenue thus fell to 28.1 percent (previous year: 28.2 percent).

Depreciation, amortization, and impairment losses

Depreciation, amortization, and impairment losses totaling EUR 117,894 thousand (previous year: EUR 119,640 thousand) were charged on property, plant, and equipment, investment property, and intangible assets in the reporting period. Depreciation, amortization, and impairment losses are largely included in cost of sales.

Impairment losses on nonderivative financial assets excluding trade receivables amounted to EUR 0 thousand in the reporting period (previous year: EUR 149 thousand). Of this amount, EUR 0 thousand (previous year: EUR 149 thousand) was attributable to noncurrent financial assets. Impairment losses on equity investments and marketable securities are contained in the financial expenses item. Inventories were written down by EUR 20,262 thousand (previous year: EUR 15,783 thousand). These impairment losses and the remaining impairment losses were recognized in cost of sales.

7.6 Financial and interest income

Financial income

Financial income is composed of income from profit transfers and investment income from other equity investments:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Income from profit transfer agreements	–	388
Income from other equity investments	803	115
thereof from unconsolidated subsidiaries	786	–
Total	**803**	**503**

Interest income

Interest and similar income is composed of the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Interest income on receivables, cash investments, and marketable securities	6,603	6,885
thereof from unconsolidated subsidiaries	153	350
Other interest income	1,294	972
Total	**7,897**	**7,857**

The following table shows the interest income on financial instruments broken down by the IAS 39 measurement categories, along with the interest income on assets measured in accordance with other pronouncements:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Loans and receivables	6,665	6,195
Available-for-sale investments	–	89
Financial assets at fair value through profit or loss	1,224	1,542
Financial assets not measured in accordance with IAS 39	8	31
Total	**7,897**	**7,857**

7.7 Financial and interest expenses

Financial expenses

Financial expenses for fiscal year 2017 amounted to EUR 1,176 thousand (previous year: EUR 271 thousand) and comprised impairment losses on equity investments in unconsolidated companies of EUR 0 thousand (previous year: EUR 149 thousand) and expenses from loss absorption of EUR 1,176 thousand (previous year: EUR 122 thousand).

Interest expense

Interest and similar expenses comprised the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Interest expenses on liabilities to banks	4,029	9,264
Interest cost from discount unwinding on pension and medical care obligations	13,235	15,373
Interest cost from discount unwinding on discounted provisions and other employee benefit obligations	8,179	8,417
Other interest expenses	4,684	11,622
thereof to unconsolidated subsidiaries	3	17
Total interest expenses	**30,127**	**44,676**

The following table shows the interest expenses on financial instruments broken down by the IAS 39 measurement categories, along with the interest expenses on liabilities measured in accordance with other pronouncements:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Financial liabilities at amortized cost	7,820	15,998
Financial liabilities at fair value through profit or loss	296	1,979
Financial liabilities not measured in accordance with IAS 39	22,011	26,699
Total	**30,127**	**44,676**

If finance can be allocated to a specific investment, the actual borrowing costs are capitalized as part of the cost of the investment. Where no direct relationship can be established, the average interest rate for group borrowings in the current period is used as the capitalization rate due to GEA's central financing function. This amounted to 2.8 percent in fiscal year 2017 (previous year: 4.6 percent). Interest income generated on advance payments and progress payments received reduces the cost of the asset. No material borrowing costs were capitalized in fiscal year 2017 or in the previous year.

In fiscal year 2017, expenses totaling EUR 1,025 thousand (previous year: EUR 1,091 thousand) were incurred for fees that were not included in the calculation of the effective interest rate.

7.8 Taxes on income

Income taxes for continuing operations are composed of the following items:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Current taxes	64,347	57,792
Germany	20,518	15,297
Other countries	43,829	42,495
Deferred taxes	66,260	23,836
thereof related to temporary dfferences	5,354	18,145
Total	**130,607**	**81,628**

The expected tax expense is calculated using the tax rate of 30.00 percent (previous year: 30.00 percent) applicable to German group companies. This includes an average trade tax rate of 14.17 percent (previous year: 14.17 percent) in addition to the uniform corporate income tax rate of 15.00 percent (previous year: 15.00 percent) and the solidarity surcharge of 0.825 percent (previous year: 0.825 percent). The following table shows a reconciliation of the expected tax rate to the effective tax rate of 36.41 percent (previous year: 23.31 percent):

	01/01/2017 – 12/31/2017		01/01/2016 – 12/31/2016	
	(EUR thousand)	(%)	(EUR thousand)	(%)
Profit before tax	**358,675**	**–**	**350,228**	**–**
Expected tax expense	107,603	30.00	105,068	30.00
Non-tax deductible expense	6,720	1.87	9,280	2.65
Tax-exempt income	–2,829	–0.79	–2,833	–0.81
Change in valuation allowances	–20.269	–5.65	–28,995	–8.28
Change in tax rates	44,498	12.41	–447	–0.12
Foreign tax rate differences	–8,952	–2.50	–2,233	–0.64
Other	3,836	1.07	1,788	0.51
Income tax and effective tax rate	**130,607**	**36.41**	**81,628**	**23.31**

The change in valuation allowances in the amount of EUR –20,269 thousand (previous year: EUR –28,995 thousand) is primarily due to a revised assessment of the recoverability of the deferred tax assets on tax loss carryforwards in the U.S.A. and Germany.

The foreign tax rate differences are due to different tax rates outside Germany in comparison to the German tax rate of 30.00 percent. The tax rates for foreign companies vary between 0.0 percent (UAE) and 40.91 percent (U.S.A.). The increase compared with the previous year was largely the result of GEA applying the new US tax rate to deferred tax income and expenses.

The other reconciliation effects include amongst others nondeductible withholding taxes, prior-period taxes, and other income taxes outside Germany.

Deferred tax assets and liabilities as of the reporting date can be broken down by maturity as follows:

(EUR thousand)	12/31/2017	12/31/2016
Current deferred tax assets	59,846	69,343
Non-current deferred tax assets	351,444	432,774
Total deferred tax assets	**411,290**	**502,117**
Current deferred tax liabilities	54,842	53,764
Non-current deferred tax liabilities	116,328	91,166
Total deferred tax liabilities	**171,170**	**144,930**
Net deferred tax assets	**240,120**	**357,187**

Deferred tax assets and liabilities as of December 31, 2017, and 2016, are composed of the following items:

	Deferred tax assets		Deferred tax liabilities	
(EUR thousand)	2017	2016	2017	2016
Property, plant and equipment	4,640	9,756	23,515	23,337
Goodwill	5,071	10,070	32,622	36,697
Other intangible assets	251	411	121,525	91,738
Other non-current financial assets	821	2,366	5,692	5,778
Non-current assets	**10,783**	**22,603**	**183,354**	**157,550**
Inventories	25,597	27,406	2,622	2,707
Trade receivables	5,055	5,922	54,574	52,930
Other current financial assets	4,278	3,270	10,795	13,654
Cash and cash equivalents	–	–	34	73
Current assets	**34,930**	**36,598**	**68,025**	**69,364**
Total assets	**45,713**	**59,201**	**251,379**	**226,914**
Non-current provisions	27,439	22,390	–	113
Non-current employee benefit obligations	122,519	130,571	776	736
Non-current financial liabilities	1,345	484	2,371	2,448
Other non-current liabilities	284	321	1,812	2,627
Non-current liabilities	**151,587**	**153,766**	**4,959**	**5,924**
Current provisions	21,164	25,514	2,200	2,442
Current employee benefit obligations	6,635	10,309	409	527
Current financial liabilities	7,823	8,724	847	1,280
Trade payables	5,424	6,519	519	5,209
Other current liabilities	8,542	7,467	1,694	1,765
Current liabilities	**49,588**	**58,533**	**5,669**	**11,223**
Total equity and liabilities	**201,175**	**212,299**	**10,628**	**17,147**
Valuation allowances on temporary differences	–1,621	–2,336	–	–
Deferred taxes on temporary differences	**245,267**	**269,164**	**262,007**	**244,061**
Tax loss carryforwards	731,335	982,584	–	–
Valuation allowances on tax loss carryforwards	–474,475	–650,500	–	–
Offsetting of deferred taxes	–90,837	–99,131	–90,837	–99,131
Recognized deferred taxes	**411,290**	**502,117**	**171,170**	**144,930**

In addition to changes of EUR –66,260 thousand recognized in profit or loss (previous year: EUR –23,836 thousand), changes in deferred taxes resulted mainly from changes of EUR –24,703 thousand (previous year: EUR 15,764 thousand) recognized in other comprehensive income, including currency translation effects of foreign operations. Furthermore, EUR 5,058 thousand was recognized in the tax result from discontinued operations. In the reporting period, further deferred taxes amounting to EUR –31,162 thousand (previous year: EUR –16,828 thousand) from initial consolidations were directly recorded in equity.

Changes in the deferred taxes recognized in profit or loss were largely the consequence of amendments to US corporate tax legislation (Tax Cuts and Jobs Act) passed in December 2017, which saw the rate of corporate tax in the USA cut from 35 percent to 21 percent on January 1, 2018. This, in particular, gave rise to expenditure of EUR 44,724 thousand from the remeasurement of deferred tax assets and liabilities in connection with GEA's US subsidiaries.

Deferred tax liabilities of EUR 1,398 thousand (previous year: EUR 1,708 thousand) were recognized as of December 31, 2017, for expected dividend payments from subsidiaries. In addition, as of December 31, 2017, deferred tax liabilities of EUR 964 thousand (previous year: EUR 913 thousand) were recognized for withholding taxes likely to be incurred.

No deferred taxes were recognized for taxable temporary differences arising from investments in subsidiaries in the amount of EUR 437,244 thousand (previous year: EUR 503,530 thousand) as of December 31, 2017, since the company is able to control their reversal and no reversals will be made in the foreseeable future.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to set off current tax assets against current tax liabilities and if the deferred taxes relate to income taxes levied by the same taxation authority.

As of December 31, 2017, GEA recognized deferred tax assets in the amount of EUR 256,860 thousand (previous year: EUR 332,084 thousand) on tax loss carryforwards:

(EUR thousand)	12/31/2017	12/31/2016
Deferred tax assets on domestic tax loss carryforwards:		
Corporate income tax	57,837	75,939
Trade tax	82,000	91,535
Deferred tax assets on foreign tax loss carryforwards	117,023	164,610
Total	**256,860**	**332,084**

The total amount of the deferred tax assets on tax loss carryforwards largely relates to the consolidated tax groups in Germany and the U.S.A.

No deferred tax assets were recognized for corporate income tax loss carryforwards in the amount of EUR 1,293,289 thousand (previous year: EUR 1,501,312 thousand) and trade tax loss carryforwards in the amount of EUR 788,905 thousand (previous year: EUR 825,937 thousand) as their utilization is not sufficiently certain. The tax loss carryforwards of the German companies can be carried forward for an indefinite period. Foreign tax loss carryforwards can generally only be utilized for a limited period. The significant tax loss carryforwards of the foreign companies are expected to expire in 2029.

7.9 Income on discontinued operations

Discontinued operations comprise the remaining risks from the 2014 sale of GEA Heat Exchangers and of the plant engineering activities in previous years, especially Lurgi and Lentjes, and the continued process of winding-up past discontinued operations, including individual legal disputes arising from them.

Profit from discontinued operations amounted to EUR 32.2 million in fiscal year 2017 (previous year: EUR 28.5 million) against expenses of EUR 22.0 million (previous year: EUR 25.3 million). The pre-tax profit from discontinued operations thus amounted to EUR 10.2 million (previous year: EUR 3.2 million). This mainly resulted from the development of residual risks in connection with businesses sold by GEA in previous years.

All told, profit after tax from these discontinued operations of EUR 15,246 thousand (previous year: EUR 15,975 thousand) had an impact on consolidated profit. This profit will be allocated in full to the shareholders of GEA Group Aktiengesellschaft. Tax income attributable to discontinued operations amounted to EUR 5,058 thousand (previous year: EUR 12,756 thousand).

7.10 Earnings per share

Earnings per share are calculated as follows:

(EUR thousand)	01/01/2017 – 12/31/2017	01/01/2016 – 12/31/2016
Profit for the period attributable to shareholders of GEA Group Aktiengesellschaft	243,274	284,555
thereof from continuing operations	228,028	268,580
thereof from discontinued operations	15,246	15,975
Weighted average number of shares outstanding (thousand)	186,337	192,495
Basic and diluted earnings per share (EUR)		
from profit for the period	1.31	1.48
thereof attributable to continuing operations	1.22	1.40
thereof attributable to discontinued operations	0.08	0.08

7.11 Appropriation of net profit

GEA Group Aktiengesellschaft reported net income for the fiscal year of EUR 235,259 thousand in accordance with the HGB (previous year: EUR 259,637 thousand). The Executive Board and the Supervisory Board of GEA Group Aktiengesellschaft have transferred the sum of EUR 83,000 thousand to other retained earnings (previous year: transfer of EUR 105,000 thousand). Including the profit brought forward of EUR 2,293 thousand (previous year: EUR 468 thousand), the net retained profits amounted to EUR 154,553 thousand (previous year: EUR 155,105 thousand).

The Executive Board and Supervisory Board will propose to the Annual General Meeting that the net retained profits be appropriated as follows:

Appropriation (EUR thousand)	2017	2016
Dividend payment to shareholders	153,418	152,812
Profit carried forward	1,135	2,293
Total	**154,553**	**155,105**

The dividend payment corresponds to the payment of a dividend of EUR 0.85 per share for a total of 180,492,172 shares (previous year: 192,495,476 shares). The dividend will be paid from the contribution account for tax purposes (section 27 of the Körperschaftsteuergesetz (KStG – German Corporate Income Tax Act)) and therefore without deduction of investment income tax and the solidarity surcharge. In the case of shareholders in Germany, the dividend is not subject to current taxation in the year of payment. The opinion of the German tax authorities (see also the Federal Ministry of Finance (BMF) circular dated 1/18/2016, para. 92) is that the payment of dividends from the contribution account for tax purposes constitutes a repayment of shareholder contributions, which results in a retrospective reduction in the cost of the shares. This can lead to the imposition of higher capital gains taxes if the shares are sold at a later date.

8. Contingent Liabilities, other Financial Obligations, Contingent Assets, and Litigation

8.1 Contingent liabilities

GEA has issued or instructed the issue of both bank and group guarantees in favor of customers or lenders. The obligations presented in the following table relate to contingent liabilities for which the primary debtor is not a consolidated company of the group as a whole.

	Bank guarantees		Group guarantees	
(EUR thousand)	2017	2016	2017	2016
Guarantees for prepayments	9,680	7,319	–	949
Warranties	1,516	762	382	496
Performance guarantees	15,969	21,136	135,356	148,317
Other declarations of liability	2,309	464	9,760	9,468
Total	**29,474**	**29,681**	**145,498**	**159,230**
thereof attributable to GEA Heat Exchangers	16,054	20,149	49,082	50,759
thereof attributable to Lurgi	84	84	90,205	102,631

A significant proportion of the bank guarantees and most of the group guarantees are attributable to the GEA Heat Exchangers segment which was sold on October 31, 2014, as well as to the operating activities of Lurgi which were disposed of in previous years (see section 3).

The other guarantees relate mainly to customers of unconsolidated companies and to banks. The beneficiaries are entitled to asset claims under the guarantees if the primary debtor fails to meet its contractual obligations, for example, in the case of late or defective delivery, noncompliance with warranted performance parameters, or failure to repay loans in accordance with the contractual requirements.

The guarantees include contingent liabilities of EUR 7,882 thousand resulting from joint ventures (previous year: EUR 3,551 thousand); there is no further liability above and beyond this.

All guarantees issued by or on the instructions of GEA Group Aktiengesellschaft are issued on behalf of and with recourse against the relevant primary debtor.

In addition to the liability risks resulting from bank and group guarantees, there are risks in particular from court, arbitration, or out-of-court disputes (see section 8.3) that could result in cash outflows.

8.2 Other financial obligations

The other financial obligations of the group as a whole as of December 31, 2017, are composed of the following items:

(EUR thousand)	12/31/2017	12/31/2016
Rental and lease obligations	114,950	107,816
Purchase commitments	173,687	103,283
Total	**288,637**	**211,099**

Rental and lease agreements

The obligations under rental and lease agreements of the group as a whole amount to EUR 114,950 thousand (previous year: EUR 107,816 thousand) and relate primarily to land and buildings, and to a lesser extent to technical equipment and machinery. The leases run until no later than 2031 (previous year: 2031). Payments are spread over future fiscal years as follows:

(EUR thousand)	12/31/2017	12/31/2016
Not later than one year	36,693	35,669
Between one and five years	66,818	57,551
Later than five years	11,439	14,596
Total	**114,950**	**107,816**

The expenses related to rental and lease agreements of the group as a whole in fiscal year 2017 amounted to EUR 57,255 thousand (previous year: EUR 53,702 thousand). Of this amount, EUR 9,591 thousand (previous year: EUR 10,047 thousand) was attributable to variable rents, which are primarily adjusted based on consumer price indexes. Subleases did not result in any income for the group as a whole in the fiscal year (previous year: EUR 93 thousand).

Sale and leaseback transactions relating to buildings resulted in future payments for the group as a whole of EUR 23,335 thousand at the reporting date (previous year: EUR 26,399 thousand).

Purchase commitments

EUR 162,950 thousand (previous year: EUR 97,709 thousand) of the purchase commitments is attributable to inventories.

8.3 Litigation

Dörries Scharmann AG insolvency proceedings

An action brought by the insolvency administrator of Dörries Scharmann AG against GEA Group Aktiengesellschaft is pending before the Higher Regional Appeal Court of Düsseldorf. The former Metallgesellschaft AG, the legal predecessor to GEA Group Aktiengesellschaft, held an interest in Schiess AG, which later became Dörries Scharmann AG. On the basis of that interest, the insolvency administrator has asserted various claims under company law, in particular for equity substitution, amounting to approximately EUR 18 million plus interest in the first instance. The District Court of Düsseldorf threw out the initial action brought by the insolvency administrator, who is now appealing that judgment. GEA Group Aktiengesellschaft considers the asserted claims to be unfounded and will continue to defend itself against all such demands.

General

Further legal proceedings or official investigations have been or may be instituted against GEA as a result of earlier business disposals and operating activities.

Adequate provisions have been recognized for all risks arising from both the legal disputes described above and other legal disputes being pursued by GEA in the course of its ordinary operating activities. However, the outcome of these proceedings cannot be predicted with any degree of certainty. It is therefore possible that the conclusion of the proceedings may result in income or expenses if the amounts that have been set aside for them are higher or lower than required.

9. Segment Reporting

9.1 Operating segments

GEA's business activities are divided into the following two business areas:

Business Area Equipment

The Business Area Equipment brings together all activities ranging from largely standardized to customer-specific equipment offerings. The products are mainly manufactured as part of series production on a standardized and modular basis. Typical products of the business area include separators, valves, pumps, homogenizers, and refrigeration equipment such as compressors. The portfolio of equipment includes process technology for food processing and packaging, and, since the takeover of the Italian Pavan group, extrusion and milling equipment. The product range also extends to dairy equipment, feeding systems, and slurry engineering.

Business Area Solutions

The Business Area Solutions brings together all Group activities that largely consist of marketing customer-specific and modular solutions, and projects. This business area tailors its products and services to the specific application or customer requirements. The offering mainly comprises the design and development of process solutions for the food and beverages, pharma, and chemical industries.

The control and administrative functions bundled in the Global Corporate Center and the Shared Service Center do not constitute independent operating segments. An outsourced Shared Service Center with two locations takes care of the standardized administrative processes, thus reducing the workload for the operating units. The expenses of the Global Corporate Center and of the Shared Service Center are allocated to the business areas wherever possible.

Activities that are not part of core business are not disclosed in the data of the business areas. This includes investment property held for sale, pension obligations, and liabilities related to discontinued operations.

(EUR million)	BA-E	BA-S	Others	Consolidation	GEA
01/01/2017 – 12/31/2017					
Order intake[1]	2,491.5	2,484.0	–	–224.7	**4,750.8**
External revenue	2,196.6	2,408.0	–	–	**4,604.5**
Intersegment revenue	174.5	33.6	–	–208.1	**–**
Total revenue	2,371.0	2,441.6	–	–208.1	**4,604.5**
Share of profit or loss of equity-accounted investments	1.2	0.4	0.2	–	**1.8**
Operating EBITDA[2]	389.3	161.3	12.5	0.5	**563.5**
as % of revenue	16.4	6.6	–	–	**12.2**
EBITDA	369.6	151.7	–23.0	0.5	**498.8**
Operating EBIT[2]	330.8	141.3	5.2	0.5	**477.8**
as % of revenue	14.0	5.8	–	–	**10.4**
EBIT	290.5	120.2	–30.4	0.6	**380.9**
as % of revenue	12.3	4.9	–	–	**8.3**
ROCE in %[3]	17.8	16.3	–	–	**15.6**
Interest income	3.3	7.8	16.5	–19.7	**7.9**
Interest expense	19.2	8.1	22.5	–19.7	**30.1**
Income taxes	52.9	19.2	59.7	–1.3	**130.6**
Profit or loss from discontinued operations	–	–	15.2	–	**15.2**
Segment assets	4,175.9	2,901.2	3,312.2	–4,641.8	**5,747.4**
Segment liabilities	1,988.4	1,677.0	2,361.2	–2,782.8	**3,243.8**
Carrying amount of equity-accounted investments	7.3	2.7	4.4	–	**14.4**
Working capital (reporting date)[4]	558.9	112.4	10.6	–8.1	**673.8**
Additions in property, plant, and equipment, intangible assets, and goodwill	452.9	31.7	27.2	–0.2	**511.7**
Depreciation and amortization	78.9	29.7	7.4	0.2	**116.2**
Impairment losses	–	1.7	–	–	**1.7**
Additions to provisions	138.5	122.8	47.0	3.0	**311.3**

(EUR million)	BA-E	BA-S	Others	Consolidation	GEA
01/01/2016 – 12/31/2016					
Order intake[1]	2,346.8	2,534.6	–	–207.8	**4,673.6**
External revenue	2,084.1	2,407.8	–	–	**4,491.9**
Intersegment revenue	178.1	17.9	–	–196.0	**–**
Total revenue	2,262.2	2,425.7	–	–196.0	**4,491.9**
Share of profit or loss of equity-accounted investments	1.5	1.0	0.6	–	**3.1**
Operating EBITDA[2]	383.5	183.5	–2.3	1.5	**566.3**
as % of revenue	17.0	7.6	–	–	**12.6**
EBITDA	371.8	163.3	–35.9	1.5	**500.6**
Operating EBIT[2]	326.0	164.3	–6.8	1.5	**485.0**
as % of revenue	14.4	6.8	–	–	**10.8**
EBIT	292.9	133.4	–40.9	1.7	**387.0**
as % of revenue	12.9	5.5	–	–	**8.6**
ROCE in %[3]	19.0	19.7	–	–	**16.9**
Interest income	2.5	6.3	17.1	–18.1	**7.9**
Interest expense	26.0	8.5	28.3	–18.1	**44.7**
Income taxes	47.0	24.7	10.3	–0.3	**81.6**
Profit or loss from discontinued operations	–	–1.7	18.6	–0.9	**16.0**
Segment assets	3,597.0	2,966.6	3,716.2	–4,171.9	**6,107.9**
Segment liabilities	1,607.1	1,712.1	2,123.5	–2,330.4	**3,112.3**
Carrying amount of equity-accounted investments	8.6	0.2	1.8	5.3	**15.9**
Working capital (reporting date)[4]	626.5	123.7	4.8	–5.0	**749.9**
Additions in property, plant, and equipment, intangible assets, and goodwill	63.5	155.0	16.3	–4.3	**230.5**
Depreciation and amortization	77.4	32.6	6.5	–0.1	**116.4**
Impairment losses	2.5	0.4	0.4	–	**3.3**
Additions to provisions	131.9	115.9	46.1	2.7	**296.6**

1) Unaudited supplemental information
2) Before effects of purchase price allocations and adjustments (see page 219 f.)
3) ROCE = EBIT/capital employed; EBIT and capital employed both calculated as the average for the last 12 months and before effects relating to goodwill from the acquisition of the former GEA AG by the former Metallgesellschaft AG in 1999; capital employed = non-current assets + working capital
4) Working capital = inventories + trade receivables – trade payables – advance payments received

Consolidation primarily comprises the elimination of investments in subsidiaries, intragroup receivables, liabilities, revenue, and interest income and expenses. Intersegment revenue is calculated using standard market prices.

Sales (EUR million)	2017	2016
Sales from construction contracts		
BA Equipment	433.6	372.4
BA Solutions	1,841.9	1,853.8
Consolidation	–23.1	–13.9
Total revenue from construction contracts	**2,252.3**	**2,212.4**
Sales components		
BA Equipment	1,012.4	1,006.1
BA Solutions	52.4	32.0
Consolidation	–135.4	–145.3
Total Sales components	**929.3**	**892.9**
Total Sales from service agreements		
BA Equipment	925.1	883.6
BA Solutions	547.3	539.9
Consolidation	–49.5	–36.9
Total revenue from service agreements	**1,422.9**	**1,386.6**
Total revenue	**4,604.5**	**4,491.9**

In the year under review, restructuring provisions amounting to EUR 0.5 million were recognized for the "Fit for 2020" initiative, thereof EUR 0.0 million was attributable to the Business Area Equipment and EUR 0.9 million to the Business Area Solutions. The remaining EUR –0.4 million was attributable to "Other companies".

In fiscal year 2016, the definition of the key indicators for the operating result as used by the management for controlling purposes has been elaborated in the context of the guidelines on alternative performance measures published by the European Securities and Markets Authority (ESMA) as follows: Thus, as in previous years, the figures for operating EBITDA and operating EBIT will be adjusted for items which, in the opinion of the management, do not reflect GEA's financial achievements in the period under review. This relates, on the one hand, to adjustments for purchase price allocation effects that were determined for all significant past acquisitions, and, on the other, to the adjustment of expenses for strategy projects. These include restructuring costs, expenses for external consultants, outlay on scheduled and completed company acquisitions, together with other material expenses and internal costs directly attributable to the projects.

The following strategic projects were underway in the period under review:

- "OneGEA Finance", which aims to align the financial information and management systems to the new fully functional OneGEA organization
- "Operational Excellence" to optimize engineering, production and procurement
- "IT Excellence" to standardize and outsource the IT platform as the basis for digital transformation
- "Digitalization" to develop GEA's digital product portfolio
- Projects to effect acquisitions

The indicators were also adjusted for ongoing expenses in respect of the now concluded "Fit for 2020" program.

In accordance with this definition, operating EBIT for 2017 was adjusted for expenses for strategy projects totaling EUR 63.4 million (previous year: EUR 68.3 million). EUR 17.9 million (previous year: EUR 55.8 million) of this total was attributable to ongoing expenses in respect of the "Fit for 2020" program, including implementation of the Shared Service Center. These expenses include restructuring expenses of EUR 0.5 million (previous year: EUR 2.0 million). The other expenses for the "Fit for 2020" project include outlay in connection with the implementation of the Shared Service Center, personnel expenses for project-related incentives, and travel costs.

In addition, the "OneGEA Finance" project was identified as a strategic project. For the most part, the EUR 16.0 million outlay (previous year: EUR 4.5 million) for this project consisted of external consultants' fees. Adjustments also included EUR 7.5 million (previous year: EUR 1.1 million) for the "Operational Excellence" project, EUR 11.2 million (previous year: EUR 0.0 million) for the "IT Excellence" project, and EUR 4.6 million (previous year: EUR 0.0 million) for the "Digitalization" project.

The other expenses for strategy projects amounting to EUR 6.6 million are attributable to scheduled and completed company acquisitions (previous year: EUR 3.7 million).

In accordance with the internal management system, the profitability of the two business areas is measured using earnings before interest, tax, depreciation and impairment losses/reversals of impairment (EBITDA), along with earnings before interest and tax (EBIT). These indicators correspond to the values shown in the income statement.

Impairment losses include all impairment losses on property, plant, and equipment, intangible assets, and investment property.

Reconciliation of operating EBITDA to EBIT (EUR million)	2017	2016	Change in %
Operating EBITDA*	**563.5**	**566.3**	**–0.5**
Depreciation of property, plant, and equipment, investment property, and amortization of intangible assets	–85.4	–83.1	–
Impairment losses and reversals of impairment losses on property, plant, and equipment, investment property, intangible assets, and goodwill	–0.4	1.9	–
Other impairment losses and reversals of impairment losses	–	–0.1	–
Operating EBIT*	**477.8**	**485.0**	**–1.5**
Depreciation and amortization on capitalization of purchase price allocation	–30.8	–33.3	–
Impairment losses and reversals on capitalization of purchase price allocation	–0.8	4.3	–
Realization of step-up amounts on inventories	–1.8	–0.6	–
Adjustments	–63.4	–68.3	–
EBIT	**380.9**	**387.0**	**–1.6**

*) Before effects of purchase price allocations and adjustments (see page 219 f.)

The following table shows the reconciliation of EBITDA to EBIT:

Reconciliation of EBITDA to EBIT (EUR million)	2017	2016
EBITDA	**498.8**	**500.6**
Depreciation of property, plant, and equipment, investment property, and amortization of intangible assets (see notes 5.1, 5.2, 5.4)	–116.2	–116.4
Impairment losses and reversals of impairment losses on property, plant, and equipment, investment property, intangible assets, and goodwill (see notes 5.1, 5.2, 5.3, 5.4)	–1.7	3.0
Impairment losses and reversals of impairment losses on non-current financial assets	–	–0.1
EBIT	**380.9**	**387.0**

The following table shows the reconciliation of working capital to total assets:

Reconciliation of working capital to total assets (EUR million)	12/31/2017	12/31/2016
Working capital (reporting date)	**673.8**	**749.9**
Working capital (reporting date) of Ruhr-Zink	–0.6	–0.4
Non-current assets	3,233.9	2,979.8
Income tax receivables	30.7	25.8
Other current financial assets	180.6	165.9
Cash and cash equivalents	250.5	929.1
Assets held for sale	–	5.4
plus trade payables	736.9	624.8
plus advance payments in respect of orders and construction contracts	271.4	269.6
plus gross amount due to customers for contract work	370.0	357.9
Total assets	**5,747.4**	**6,107.9**

9.2 Disclosures by geographic region

In the presentation of segment disclosures by geographic region, revenue is allocated by the destination of the goods or place of performance of the services, or by customer domicile. Assets are allocated by their location. The figures quoted relate to the group as a whole.

(EUR millions)	Germany	Asia Pacific	ACH & Eastern Europe	Western Europe, Middle East & Africa	North- and Central Eruope	Latin America	North America	**Total**
01/01/2017 – 12/31/2017								
External revenue	422.5	1,027.1	521.4	888.8	582.6	316.5	845.5	**4,604.5**
Non-current assets (property, plant and equipment, intangible assets, and investment property)	961.6	124.2	43.8	725.2	737.5	4.3	172.8	**2,769.5**
01/01/2016 – 12/31/2016								
External revenue	424.7	1,050.1	477.4	805.0	663.8	266.4	804.6	**4,491.9**
Non-current assets (property, plant and equipment, intangible assets, and investment property)	947.2	133.6	48.2	341.9	751.3	3.8	197.2	**2,423.1**

In the reporting period, revenue of EUR 739.8 million (previous year: EUR 725.6 million) was attributable to the United States of America and EUR 315.3 million (previous year: EUR 380.8 million) was attributable to the People's Republic of China. The carrying amounts of non-current assets (property, plant, and equipment, intangible assets, and investment property) in the Netherlands amounted to EUR 402.8 million (previous year: EUR 419.2 million) as of the reporting date, and in Italy to EUR 693.9 million (previous year: EUR 310.0 million). There are no relationships with individual customers whose revenue can be considered material in comparison to total group revenue.

10. Other Disclosures

10.1 Cash flow disclosures

Cash flow from operating activities in fiscal year 2017 included outflows of EUR 7,535 thousand (previous year: EUR 1,229 thousand) from other discontinued operations. Cash flow from investing activities of discontinued operations comprises cash flows in connection with operations sold in previous years.

The change in other operating assets and liabilities includes currency effects of EUR –57,937 thousand (previous year: EUR 19,320 thousand) arising from the financing of the cash flow from the operating activities of foreign subsidiaries.

Financial liabilities, the inflows and outflows thereof appear in the cash flow statement under cash flow from financing activities, changed as follows in fiscal year 2017:

(EUR thousand)	Balance at 1/1/2017	Cash flow from financing activities	Changes in consolidated group	Exchange rate differences	Changes in fair value	**Other changes**	Balance at 12/31/2017
Finance loans	3,439	–445	–	–86	–	**–**	2,908
Liabilities from finance leases	6,542	–4,124	–	–25	–	**597**	2,990
Noncurrent financial liabilities	**9,981**	**–4,569**	**–**	**–111**	**–**	**597**	**5,898**
Bonds and debentures issued	90,651	–90,000	–	–	–	**–651**	–
Finance loans	52,536	93,288	102,840	–417		**–6,006**	242,241
Liabilities from finance leases	3,440	132	–	–1	–	**–**	3,571
Current financial liabilities	**146,627**	**3,420**	**102,840**	**–418**	**–**	**–6,657**	**245,812**
Interest rate swap and forward exchange contracts used for hedging-liabilities	1,042	–	–	–	–1,042	**–**	–
Total	**157,650**	**–1,149**	**102,840**	**–529**	**–1,042**	**–6,060**	**251,710**

10.2 Government grants

Government grants related to income amounting to EUR 931 thousand were received in fiscal year 2017 (previous year: EUR 923 thousand). Of this amount, grants related to assets of EUR 263 thousand (previous year: EUR 211 thousand) were deducted from the carrying amounts of the assets concerned. In fiscal year 2017, expenses of EUR 405 thousand (previous year: EUR 394 thousand) were incurred for the potential repayment of grants received.

10.3 Related party disclosures

10.3.1 Related party transactions

Transactions between GEA Group Aktiengesellschaft and its consolidated subsidiaries have been eliminated in the course of consolidation. Revenue and expenses from transactions between continuing and discontinued operations were not eliminated if they will continue to be incurred following the disposal of the discontinued operation.

Transactions with unconsolidated subsidiaries and joint ventures mainly relate to regular deliveries of goods and services. Income and expenses from transactions between the group as a whole and these companies are composed of the following items:

(EUR thousand)	Revenue	Other income	Other expenses
01/01/2017 – 12/31/2017			
Unconsolidated subsidiaries	37,360	2,058	**7,875**
Joint ventures	13,733	–	–
Total	**51,093**	**2,058**	**7,875**
01/01/2016 – 12/31/2016			
Unconsolidated subsidiaries	38,657	1,846	**8,494**
Joint ventures	16,219	–	–
Total	**54,876**	**1,846**	**8,494**

Related party transactions resulted in the following outstanding items in the group as a whole as of December 31, 2017:

(EUR thousand)	Trade receivables	Trade payables	Other receivables	Other liabilities
12/31/2017				
Unconsolidated subsidiaries	17,778	6,184	10,583	23,208
Joint ventures	4,086	10	–	415
Total	**21,864**	**6,194**	**10,583**	**23,623**
thereof current	21,864	6,194	9,683	23,623
12/31/2016				
Unconsolidated subsidiaries	11,515	5,586	19,654	26,582
Joint ventures	4,286	666	–	–
Total	**15,801**	**6,252**	**19,654**	**26,582**
thereof current	15,428	6,252	19,220	26,443

The outstanding amounts will be settled by bank transfer and are unsecured.

10.3.2 Remuneration of the Executive Board and the Supervisory Board

The Executive Board and Supervisory Board of GEA Group Aktiengesellschaft received total remuneration of EUR 8,800 thousand in fiscal year 2017 (previous year: EUR 10,071 thousand). This is composed of the following components:

(EUR thousand)	2017	2016
Short-term employee benefits	7,156	7,318
Post-employment benefits	1,451	2,156
Share-based payments	193	597
Total	**8,800**	**10,071**

Former Executive Board members and their surviving dependents received remuneration from GEA amounting to EUR 4,552 thousand (previous year: EUR 6,892 thousand). Pension provisions were recognized for former Executive Board members and their surviving dependents in accordance with IFRSs totaling EUR 66,544 thousand (previous year: EUR 69,547 thousand).

In fiscal 2017, the expenses incurred for the Supervisory Board amounted to EUR 1,260 thousand (previous year: EUR 1,217 thousand).

Other information on the remuneration of the Executive Board and the Supervisory Board can be found in the remuneration report.

There were no other transactions by members of the Executive Board or Supervisory Board or their related parties in either the reporting or the comparative period.

11. Events after the End of the Reporting Period

11.1 Purchase of treasury shares

On February 6, 2018, GEA Group Aktiengesellschaft concluded its program to buy back shares with a total value of up to EUR 450 million. Between March 8, 2017 and February 6, 2018, 12,003,304 shares were purchased on the stock exchange, 534,572 in the period between January 1, 2018 and February 6, 2018. The total volume of shares repurchased through the initiative constituted 6.24 percent of the company's registered share capital. The average share price over the course of the buyback program was EUR 37.49. Regardless of when they are ultimately withdrawn, the repurchased shares are no longer eligible for dividends.

11.2 Acquisition

On January 3, 2018, GEA completed the purchase of shares in the Slovenian corporate group VIPOLL and, in the process, acquired all shares of the group's parent company, VIPOLL d.o.o. VIPOLL specializes in the production and supply of filling equipment for carbonated soft drinks, beer, and dairy products, and will be assigned to the Business Area Solutions. The VIPOLL takeover will strengthen GEA's "Beverages Application Center". The takeover will see GEA strengthen its market position as a full solution provider for the beverages industry, while expanding its portfolio of equipment for filling glass bottles, cans, as well as PET bottles for non-sensitive products.

The transaction costs for the acquisition amounted to EUR 243 thousand. The transaction costs associated with the acquisition are reported in other expenses.

Due to a price adjustment clause, the purchase price of EUR 19,924 thousand is a provisional figure.

As the VIPOLL takeover occurred after the reporting period, the company was not recognized on the balance sheet by the time the consolidated financial statements were published.

In addition, in January 2018, GEA fully acquired another business which, viewed individually, was relatively insignificant. The acquisition will, however, strengthen the Business Area Equipment's competitive position in its existing fields of business.

11.3 Borrower's note loan

On February 26, 2018, GEA Group Aktiengesellschaft issued a borrower's note loan with a volume of EUR 250,000 thousand. By introducing four separate tranches and maturities of five and seven years, each divided into a fixed and a variable-interest part, GEA succeeded in optimizing the structure of its funding model. The borrower's note loan was placed with institutional investors both at home and abroad. With the order book heavily oversubscribed, GEA was able to fix conditions at the lower end of the price scale and increase the issue volume originally planned.

12. Supplemental Disclosures in Accordance with Section 315e of the HGB

12.1 Declaration on the Corporate Governance Code

The Executive Board and the Supervisory Board issued an updated declaration of conformity in accordance with section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) on December 15, 2017, and made it permanently available to the shareholders on the Company's website.

12.2 Number of employees

The average number of employees during the year was as follows:

Average number of employees during the year*	2017	2016
DACH & Eastern Europe	6,352	6,375
North & Central Europe	2,936	2,957
Asia Pacific	2,906	2,911
Western Europe, Middle East & Africa	2,917	2,704
North America	1,746	1,743
Latin America	432	374
Continuing operations	**17,289**	**17,064**
DACH & Eastern Europe	1	1
Discontinued operations	**1**	**1**
Total	**17,290**	**17,065**

*} Full-time equivalents (FTEs) excluding vocational trainees and inactive employment contracts

The number of employees at the reporting date was as follows:

Employees at reporting date*	2017	2016
DACH & Eastern Europe	6,398	6,301
North & Central Europe	2,927	2,924
Asia Pacific	2,904	2,867
Western Europe, Middle East & Africa	3,401	2,727
North America	1,763	1,709
Latin America	471	409
Continuing operations	**17,863**	**16,937**
DACH & Eastern Europe	1	1
Discontinued operations	**1**	**1**
Total	**17,864**	**16,938**

*} Full-time equivalents (FTEs) excluding vocational trainees and inactive employment contracts

12.3 Audit and consulting fees

The fees charged worldwide by the auditors of the consolidated financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft, for fiscal year 2017 are broken down as follows:

(EUR thousand)	2017	2016
Audit	5,441	4,948
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	2,543	2,573
Other audit related services	179	87
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	170	15
Tax consulting services	830	1,171
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	–	54
Other services	382	2,275
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	188	2,078
Total	**6,832**	**8,481**
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	**2,901**	**4,720**

KPMG AG's audit fee mainly covers the auditing mandate in respect of GEA Group Aktiengesellschaft's consolidated financial statements and annual financial statements, including statutory extensions to the mandate and key audit areas agreed with the Supervisory Board, insofar as they form part of the annual audit.

Other assurance services relate to audits pursuant to IDW PS 980, the auditing of select financial indicators of the non-financial report with limited assurance pursuant to ISAE 3000, audits required by law or by contract such as EMIR audits pursuant to section 20 Wertpapierhandelsgesetz (WpHG – German Securities Trading Act), and covenant certification.

The other services relate to a quality control performed on a risk control matrix, and advisory work in connection with the initial adoption of the IFRS 9 accounting standard.

12.4 Investments

The following list shows all subsidiaries, associates, and joint ventures. With the exception of other equity investments within the meaning of section 313(2) No. 4 of the HGB, it does not contain investments in companies that GEA neither controls nor over which it can exercise significant influence.

	Head Office	Share (%)
Subsidiary		
Argentina		
GEA Farm Technologies Argentina S.R.L.	Buenos Aires	100.00
GEA Process Engineering S.A.	Buenos Aires	100.00
GEA Westfalia Separator Argentina S.A.	Buenos Aires	100.00
Australia		
Bock Australia Pty. Ltd.	Banksmeadow	100.00
Dairy Technology Services Pty. Ltd.	Kyabram	100.00
GEA Farm Technologies Australia Pty. Ltd.	Tullamarine	100.00
GEA Nu-Con Pty. Ltd.	Sutherland	100.00
GEA Process Engineering Pty. Ltd.	Blackburn	100.00
GEA Refrigeration Australia Pty. Ltd.	Carrum Downs	100.00
GEA Westfalia Separator Australia Pty. Ltd.	Thomastown	100.00
Austria		
GEA Austria GmbH	Plainfeld	100.00
GEA CEE GmbH	Vienna	100.00
Belgium		
GEA Farm Technologies Belgium N.V.	Kontich	100.00
GEA Process Engineering N.V.	Halle	100.00
GEA Westfalia Separator Belgium N.V.	Kontich	100.00
Brazil		
GEA Equipamentos e Soluções Ltda.	Jaguariúna	100.00
Bulgaria		
GEA EEC Bulgaria EOOD	Sofia	100.00
Canada		
GEA Canada Inc.	Saint John	100.00
GEA Farm Technologies Canada Inc.	Drummondville	100.00
GEA Mechanical Equipment Canada Inc.	Saint John	100.00
GEA Refrigeration Canada Inc.	Richmond	100.00
Chile		
GEA Farm Technologies Chile SpA	Osorno	100.00
GEA Food Solutions Chile Comercializadora Ltda.	Santiago de Chile	100.00
GEA Process Engineering Chile S.A.	Santiago de Chile	100.00
GEA Westfalia Separator Chile S.A.	Santiago de Chile	100.00
China		
Beijing Tetra Laval Food Machinery Co., Ltd. i.L.	Beijing	90.00
BOS (Shanghai) Flow Equipment Co.,Ltd.	Shanghai	100.00
GEA (Shanghai) Farm Technologies Co., Ltd.	Shanghai	100.00
GEA Bock Compressors (Hangzhou) Co., Ltd.	Hangzhou	100.00
GEA Food Solutions (Beijing) Co., Ltd.	Beijing	100.00
GEA Food Solutions Asia Co., Ltd.	Hong Kong	100.00
GEA Lyophil (Beijing) Ltd.	Beijing	100.00
GEA Mechanical Equipment (Tianjin) Co., Ltd.	Wuqing	100.00
GEA Process Engineering Asia Ltd.	Hong Kong	100.00
GEA Process Engineering China Limited	Shanghai	100.00
GEA Process Engineering China Ltd.	Shanghai	100.00
GEA Process Engineering Trading (Shanghai) Ltd.	Shanghai	100.00
GEA Refrigeration Hong Kong Ltd.	Hong Kong	100.00
GEA Refrigeration Technology (Suzhou) Co., Ltd.	Suzhou	100.00
GEA Westfalia Separator (China) Ltd.	Hong Kong	100.00
GEA Westfalia Separator (Tianjin) Co., Ltd.	Tianjin	100.00
Gbs Grain Machinery Manufacturing (Beijing) Co., Ltd.	Beijing	100.00
Nu-Con (Shanghai) Trading Co., Ltd.	Shanghai	100.00
Colombia		
GEA Andina S.A.S.	Medellin	100.00
Croatia		
GEA Farm Technologies Croatia d.o.o.	Dugo Selo	100.00

	Head Office	Share (%)
Czech Republic		
GEA Bock Czech s.r.o.	Stribro	100.00
GEA Czech Republic s.r.o.	Prague	100.00
GEA Farm Technologies CZ, spol. s.r.o.	Napajedla	100.00
GEA Food Solutions Czech s.r.o.	Prague	100.00
GEA Process Engineering s.r.o.	Brno	100.00
GEA Westfalia Separator CZ s.r.o.	Prague	100.00
Denmark		
GEA Farm Technologies Mullerup A/S	Ullerslev	100.00
GEA Food Solutions Denmark A/S	Slagelse	100.00
GEA Food Solutions International A/S	Slagelse	100.00
GEA Food Solutions Nordic A/S	Slagelse	100.00
GEA Process Engineering A/S	Soeborg	100.00
GEA Refrigeration Components (Nordic) A/S	Skanderborg	100.00
GEA Scan-Vibro A/S	Svendborg	100.00
GEA Westfalia Separator DK A/S	Skanderborg	100.00
Finland		
GEA Finland Oy	Helsinki	100.00
France		
GEA Farm Technologies France SAS	Château-Thierry	100.00
GEA Farm Technologies Japy SAS	Saint-Apollinaire	100.00
GEA Food Solutions France SAS	Beaucouzé	100.00
GEA Group Holding France SAS	Montigny le Bretonneux	100.00
GEA Process Engineering SAS	Saint-Quentin en Yvelines Cedex	100.00
GEA Refrigeration France SAS	Les Sorinières	100.00
GEA Tuchenhagen France	Hoenheim	100.00
GEA Westfalia Separator France	Château-Thierry	100.00
GEA Westfalia Separator Production France	Château-Thierry	100.00
Germany		
"SEMENOWSKY VAL" Immobilien-Verwaltungs-GmbH	Düsseldorf	100.00
Brückenbau Plauen GmbH	Frankfurt am Main	100.00
GEA AWP GmbH	Prenzlau	100.00
GEA Beteiligungsgesellschaft I mbH	Düsseldorf	100.00
GEA Beteiligungsgesellschaft II mbH	Düsseldorf	100.00
GEA Beteiligungsgesellschaft III mbH	Düsseldorf	100.00
GEA Bischoff GmbH	Essen	100.00
GEA Bock GmbH	Frickenhausen	100.00
GEA Brewery Systems GmbH	Kitzingen	100.00
GEA Diessel GmbH	Hildesheim	100.00
GEA Erste Kapitalbeteiligungen GmbH & Co. KG	Düsseldorf	100.00
GEA Farm Technologies GmbH	Bönen	100.00
GEA Food Solutions Germany GmbH	Biedenkopf-Wallau	100.00
GEA Germany GmbH	Oelde	100.00
GEA Group Holding GmbH	Düsseldorf	100.00
GEA Insurance Broker GmbH	Frankfurt am Main	100.00
GEA IT Services GmbH	Oelde	100.00
GEA Lyophil GmbH	Hürth	100.00
GEA Mechanical Equipment GmbH	Oelde	100.00
GEA Messo GmbH	Duisburg	100.00
GEA Real Estate GmbH	Frankfurt am Main	100.00
GEA Refrigeration Germany GmbH	Berlin	100.00
GEA Refrigeration Technologies GmbH	Düsseldorf	100.00
GEA Segment Management Holding GmbH	Düsseldorf	100.00
GEA TDS GmbH	Sarstedt	100.00
GEA Tuchenhagen GmbH	Büchen	100.00
GEA Verwaltungs AG	Düsseldorf	100.00
GEA Westfalia Separator Group GmbH	Oelde	100.00
GEA Wiegand GmbH	Ettlingen	100.00
Hilge International Verwaltungs GmbH	Bodenheim	100.00

	Head Office	Share (%)
Kupferbergbau Stadtberge zu Niedermarsberg GmbH	Lennestadt	100.00
LL Plant Engineering AG	Lennestadt	100.00
mg Altersversorgung GmbH	Düsseldorf	100.00
mg capital gmbh	Düsseldorf	100.00
MG Stahlhandel GmbH	Düsseldorf	100.00
Paul Pollrich GmbH	Düsseldorf	100.00
Ruhr-Zink GmbH	Frankfurt am Main	100.00
Sachtleben Bergbau Verwaltungsgesellschaft mit beschränkter Haftung	Lennestadt	100.00
Trennschmelz Altersversorgung GmbH	Düsseldorf	100.00
VDM-Hilfe GmbH	Frankfurt am Main	100.00
ZiAG Plant Engineering GmbH	Frankfurt am Main	100.00
Great Britain		
Breconcherry Ltd.	Bromyard	100.00
Dixie-Union (UK) Ltd.	Milton Keynes	100.00
GEA Barr-Rosin Ltd.	Maidenhead	100.00
GEA Eurotek Ltd.	Aylsham	100.00
GEA Farm Technologies (UK) Ltd.	Warminster	100.00
GEA Food Solutions UK & Ireland Ltd.	Milton Keynes	100.00
GEA Grenco Ltd.	Sittingbourne	100.00
GEA Group Holdings (UK) Ltd.	Eastleigh Hampshire	100.00
GEA Mechanical Equipment UK Ltd.	Milton Keynes	100.00
GEA Pharma Systems Ltd.	Eastleigh Hampshire	100.00
GEA Process Engineering Ltd.	Birchwood	100.00
GEA Refrigeration Components (UK) Ltd.	Ross-on-Wye	100.00
GEA Refrigeration UK Ltd.	London	100.00
Milfos UK Ltd.	Droitwich	100.00
Wolfking Ltd.	Milton Keynes	100.00
Greece		
GEA Westfalia Separator Hellas A.E.	Athens	100.00
Hungary		
GEA Process Engineering CEE Kft.	Budaörs	100.00
GEA Westfalia Separator Hungária Kft. i.L.	Budaörs	100.00
Iceland		
GEA Iceland ehf.	Reykjavik	100.00
India		
GEA Process Engineering (India) Pvt. Ltd.	Vadodara	100.00
GEA Refrigeration India Pvt. Ltd.	Vadodara	100.00
GEA Westfalia Separator India Pvt. Ltd.	New Delhi	100.00
LL Plant Engineering (India) Pvt. Ltd.	Mumbai Maharashtra	100.00
Indonesia		
GEA Westfalia Separator Indonesia, PT	Jakarta	100.00
PT. GEA Refrigeration Indonesia	Jakarta	100.00
Ireland		
GEA Farm Technologies (Ireland) Ltd.	Carrigtwohill	100.00
GEA Ireland Ltd.	Kildare	100.00
GEA Process Technologies Ireland Ltd.	Kildare	100.00
GEA Refrigeration Ireland Ltd.	Cavan	100.00
GEA Westfalia Separator Ireland Ltd.	Ballincollig	100.00
Italy		
CMT Costruzioni Meccaniche e Tecnologia S.p.A	Peveragno	100.00
Duecento S.r.l.	Galliera Veneta	100.00
GEA COMAS S.p.A.	Torrebelvicino	100.00
GEA Food Solutions Italy S.r.l.	Grumello del Monte	100.00
GEA Imaforni S.p.A	Colognola ai Colli	100.00
GEA Mechanical Equipment Italia S.p.A.	Parma	100.00
GEA Process Engineering S.p.A.	Segrate	100.00
GEA Procomac S.p.A.	Sala Baganza	100.00
GEA Refrigeration Italy S.p.A.	Castel Maggiore	100.00
Golfetto Sangati S.r.l.	Galliera Veneta	100.00

	Head Office	Share (%)
Pavan S.p.A.	Galliera Veneta	100.00
Pelacci S.R.L. i.L.	Sala Baganza	67.00
Pizeta S.r.l.	Galliera Veneta	80.81
Tecnel S.r.l.	Galliera Veneta	52.00
Veneta Alimenti Innovativi S.r.l.	Pieve D'Alpago	100.00
Japan		
GEA Food Solutions Japan K.K.	Tokyo	100.00
GEA Process Engineering Japan Ltd.	Tokyo	100.00
GEA Westfalia Separator Japan K.K.	Tokyo	100.00
Lithuania		
GEA Baltics UAB	Vilnius	100.00
Malaysia		
GEA Refrigeration Malaysia Sdn. Bhd.	Petaling Jaya	100.00
GEA Westfalia Separator (Malaysia) Sdn. Bhd.	Petaling Jaya	100.00
Nu-Con Systems Sdn. Bhd.	Shah Alam	100.00
Mexico		
Convenience Food Systems S.A. de C.V.	Mexico City	100.00
GEA Power Cooling de Mexico S. de R.L. de C.V.	Naucalpan de Juárez	100.00
GEA Process Engineering S.A. de C.V.	Mexico City	100.00
GEA Westfalia Separator Mexicana S.A. de C.V.	Cuernavaca	100.00
Morocco		
GEA Refrigeration Maghreb Sarlau i.L.	Casablanca	100.00
Netherlands		
BOS Homogenisers B.V.	Hilversum	100.00
Brouwers Equipment B.V.	Leeuwarden	100.00
GEA De Klokslag Automatisering B.V.	Bolsward	100.00
GEA De Klokslag Engineering B.V.	Bolsward	100.00
GEA De Klokslag Machinefabriek B.V.	Bolsward	100.00
GEA Dutch Holding B.V.	s-Hertogenbosch	100.00
GEA Farm Technologies Nederland B.V.	Leeuwarden	100.00
GEA Food Solutions B.V.	Bakel	100.00
GEA Food Solutions Bakel B.V.	Bakel	100.00
GEA Food Solutions International B.V.	Bakel	100.00
GEA Food Solutions Weert B.V.	Weert	100.00
GEA Niro PT B.V.	s-Hertogenbosch	100.00
GEA Process Engineering Nederland B.V.	Deventer	100.00
GEA Refrigeration Netherlands N.V.	s-Hertogenbosch	100.00
GEA Westfalia Separator Nederland B.V.	Cuijk	100.00
GEA Westfalia Separator Nederland Services B.V.	Cuijk	100.00
KET Marine International B.V.	Zevenbergen	100.00
Royal de Boer Stalinrichtingen B.V.	Leeuwarden	100.00
New Zealand		
Farmers Industries Ltd.	Mt. Maunganui South	100.00
GEA Avapac Ltd.	Hamilton	100.00
GEA Farm Technologies New Zealand Ltd.	Hamilton	100.00
GEA Milfos International Ltd.	Hamilton	100.00
GEA New Zealand Ltd.	Stratford	100.00
GEA Nu-Con Ltd.	Penrose, Auckland	100.00
GEA Process Engineering Ltd.	Penrose, Auckland	100.00
GEA Westfalia Separator NZ Ltd.	Mount Wellington	100.00
Nigeria		
GEA West Africa Ltd.	Lagos	100.00
Norway		
GEA Norway AS	Oslo	100.00
Panama		
GEA Central America S.A.	Panama City	100.00
Peru		
GEA Peruana SAC	Lima	100.00

	Head Office	Share (%)
Philipines		
GEA (Philippines) Inc.	Manila	100.00
GEA Process Engineering (Philippines) Inc.	Manila	100.00
GEA Westfalia Separator Phils. Inc.	Manila	100.00
Poland		
GEA Farm Technologies Sp. z o.o.	Bydgoszcz	100.00
GEA Food Solutions Poland Sp. z o.o.	Warsaw	100.00
GEA Process Engineering Sp. z o.o.	Warsaw	100.00
GEA Refrigeration Poland Sp. z o.o.	Gdynia	100.00
GEA Tuchenhagen Polska Sp. z o.o.	Koszalin	100.00
GEA Westfalia Separator Polska Sp. z o.o.	Warsaw	100.00
Romania		
GEA Farm Technologies România S.R.L.	Alba Iulia	100.00
GEA Refrigeration Romania S.R.L.	Cluj-Napoca	100.00
GEA Westfalia Separator Romania S.R.L.	Bucharest	100.00
Russian Federation		
GEA Food Solutions RUS ZAO	Moscow	100.00
GEA Process Engineering OOO	Moscow	100.00
GEA Services and Components OOO	Moscow	100.00
GEA Westfalia Separator CIS Ltd.	Moscow	100.00
OOO GEA Farm Technologies Rus	Moscow	100.00
OOO GEA Refrigeration RUS	Moscow	100.00
Wilarus OOO	Kolomna	100.00
Saudi Arabia		
GEA Arabia Ltd.	Riyadh	100.00
Singapore		
GEA Process Engineering Pte. Ltd.	Singapore	100.00
GEA Refrigeration Singapore Pte. Ltd.	Singapore	100.00
GEA Westfalia Separator (S.E.A.) Pte. Ltd.	Singapore	100.00
KET Marine Asia Pte. Ltd.	Singapore	100.00
Slowakia		
GEA Farm Technologies Slovakia spol. s.r.o.	Piestany	100.00
South Africa		
GEA Africa (Pty) Ltd.	Midrand	100.00
South Korea		
GEA Food Solutions Korea Co., Ltd.	Seoul	100.00
GEA Korea Ltd.	Seoul	100.00
Spain		
GEA Farm Technologies Ibérica S.L.	Alcobendas	100.00
GEA Process Engineering S.A.	Alcobendas	100.00
GEA Refrigeration Ibérica S.A.	Alcobendas	100.00
GEA Westfalia Separator Ibérica, S.A.	Alcobendas	100.00
Sweden		
GEA Exergy AB	Gothenburg	100.00
GEA Sweden AB	Mölndal	100.00
Switzerland		
GEA Aseptomag AG	Kirchberg	100.00
GEA Aseptomag Holding AG	Kirchberg	100.00
GEA Food Solutions Switzerland AG	Rothrist	100.00
GEA mts flowtec AG	Kirchberg	100.00
GEA Suisse AG	Kirchberg	100.00
GEA Systems Suisse AG	Liestal	100.00
GEA Venture Suisse AG	Kirchberg	100.00
Serbia		
GEA EEC Serbia d.o.o. Beograd (Zemun)	Belgrade	100.00
Taiwan		
GEA Process Engineering Taiwan Ltd.	Taipei	100.00

	Head Office	Share (%)
Thailand		
GEA (Thailand) Co., Ltd.	Bangkok	99.9994
CFS Asia Ltd.	Bangkok	99.9998
GEA Process Engineering (Thailand) Co., Ltd.	Bangkok	100.00
GEA Westfalia Separator (Thailand) Ltd.	Bangkok	97.30
Turkey		
GEA Farm Technologies Tarim Ekip.Mak.Kim. Tek.Dan.San.Tic.Ltd.Sti.	Izmir	100.00
GEA PROCESS MÜHENDISLIK MAKINE INSAAT TAAHÜT ITHALAT IHRACAT DANIS. SAN. VE TIC. LTD. STI.	Izmir	100.00
GEA Westfalia Separator Sanayi ve Ticaret Ltd. Sti.	Izmir	100.00
Ukraine		
DE GEA Westfalia Separator Ukraine	Kiev	100.00
GEA Food Solutions Ukraine LLC	Kiev	100.00
GEA Grasso TOV	Kiev	100.00
TOV GEA Ukraine	Bila Zerkva	100.00
Uruguay		
Balterin S.A.	Montevideo	100.00
USA		
GEA Farm Technologies, Inc.	Wilmington	100.00
GEA Food Solutions North America, Inc.	Frisco	100.00
GEA Mechanical Equipment US, Inc.	Wilmington	100.00
GEA North America, Inc.	Wilmington	100.00
GEA Systems North America LLC	Columbia	100.00
Niro Sterner, Inc.	Columbia	100.00
Pavan U.S.A., Inc.	Emigsville	100.00
United Arab Emirates		
GEA Middle East FZE	Dubai	100.00
PPME Middle East FZE i.L.	Dubai	100.00
Vietnam		
GEA Vietnam Co., Ltd.	Ho Chi Minh City	100.00

Associated Companies

Argentina		
IMAI S.A.	Buenos Aires	20.00
United Arab Emirates		
Technofrigo Abu Dhabi i.L.	Abu Dhabi	49.00

Joint ventures

Germany		
Merton Wohnprojekt GmbH	Frankfurt am Main	50.00
Japan		
GEA ORION Farm Technologies Co., Ltd.	Nagano	49.00
United Arab Emirates		
GRADE Grasso Adearest Ltd.	Dubai	50.00
GRADE Refrigeration LLC	Sharjah	49.00
Uruguay		
Crismil S.A.	Montevideo	49.00

Other equity investments under section 313(2) no. 4 of the HGB*

Brazil		
EPSA Empresa Paulista de Servicos Ambientais S.A.	Sao Paulo	47.50
Germany		
Bauverein Oelde GmbH	Oelde	35.50
India		
Indo Technofrigo Ltd. i.L.	Rajkot	49.00

*) With regard to the information pursuant to section 315e (1) in conjunction with section 313 (2) no. 4 HGB, we refer to the list of shareholdings in the notes to the separate financial statements of GEA AG.

12.5 Companies exempted in accordance with sections 264(3) and 264b of the HGB

The following German companies are exempted from the duty to comply with the supplementary accounting, audit, and publication provisions applicable to corporations and certain partnerships in accordance with sections 264(3) and 264b of the HGB:

GEA AWP GmbH, Prenzlau
GEA Bischoff GmbH, Essen
GEA Bock GmbH, Frickenhausen
GEA Brewery Systems GmbH, Kitzingen
GEA Diessel GmbH, Hildesheim
GEA Erste Kapitalbeteiligungen GmbH & Co. KG, Düsseldorf
GEA Farm Technologies GmbH, Bönen
GEA Food Solutions Germany GmbH, Biedenkopf-Wallau
GEA Germany GmbH, Oelde
GEA Group Holding GmbH, Düsseldorf
GEA Insurance Broker GmbH, Frankfurt am Main
GEA IT Services GmbH, Oelde
GEA Lyophil GmbH, Hürth
GEA Mechanical Equipment GmbH, Oelde
GEA Messo GmbH, Duisburg
GEA Real Estate GmbH, Frankfurt am Main
GEA Refrigeration Germany GmbH, Berlin
GEA Refrigeration Technologies GmbH, Düsseldorf
GEA TDS GmbH, Sarstedt
GEA Tuchenhagen GmbH, Büchen
GEA Westfalia Separator Group GmbH, Oelde
GEA Wiegand GmbH, Ettlingen
LL Plant Engineering AG, Lennestadt
mg Altersversorgung GmbH, Düsseldorf
mg capital gmbh, Düsseldorf
Paul Pollrich GmbH, Düsseldorf
ZiAG Plant Engineering GmbH, Frankfurt am Main

Düsseldorf, March 2, 2018

The Executive Board

Jürg Oleas   Dr. Helmut Schmale   Steffen Bersch   Niels Erik Olsen   Martine Snels

Independent Auditor's Report

To GEA Group Aktiengesellschaft

Report on the Audit of the Consolidated Financial Statements and of the Combined Group Management Report

Opinions

We have audited the consolidated financial statements of GEA Group Aktiengesellschaft, Düsseldorf, and its subsidiaries (the Group), which comprise the consolidated balance sheet as of December 31, 2017, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated cash flow statement for the financial year from January 1, 2017 to December 31, 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined group management report of GEA Group Aktiengesellschaft, Düsseldorf, for the financial year from January 1 to December 31, 2017. In accordance with the German legal requirements we have not audited the content of the non-financial statement and the corporate governance report including corporate governance statement which are included in the combined group management report sections "Non-financial statement – sustainability at GEA" and "Corporate governance report including corporate governance statement".

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2017, and of its financial performance for the financial year from January 1 to December 31, 2017, and
- the accompanying combined group management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined group management report does not cover the content of the non-financial statement and the corporate governance report including corporate governance statement mentioned above.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined group management report in accordance with Section 317 HGB and EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Revenue Recognition from construction contracts

Please refer to the explanatory notes on "accounting policies" under note 2 for the accounting policies applied. Information on revenue from construction contracts is provided under note 7.1 to the consolidated financial statements. Information on the gross amount due from customers for contract work and the gross amount due to customers for contract work is provided under notes 5.8 and 6.7, respectively.

THE FINANCIAL STATEMENT RISK

In financial year 2017, revenue in the amount of EUR 2,252.3 million was generated from construction contracts. As of the December 31, 2017 reporting date, the gross amount due from customers for contract work was EUR 465.2 million and the gross amount due to customers for contract work was EUR 370.0 million.

Contract revenue and realized results are recognized in accordance with the percentage of completion method pursuant to IAS 11 by reference to the stage of completion. This requires that the outcome of the construction contract can be reliably estimated. The stage of completion is determined as the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs (cost to cost method). When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

Determining the revenue from construction contracts that can be recognized is complex and requires estimates, especially with regard to the total contract cost to be estimated for establishing the stage of completion. The risk for the consolidated financial statements of GEA Group Aktiengesellschaft is that the revenue and the realized results of construction contracts are inaccurately allocated to financial years or that onerous construction contracts are not recognized in time.

OUR AUDIT APPROACH
We assessed the procedure for estimating contract costs, the method for determining stage of completion as well as the design and implementation of controls to ensure proper planning of the entire contract costs.

We performed the following audit procedures for construction contracts specifically selected on the basis of risk (list not exhaustive):

- interviewing GEA staff involved in the project, including on estimates of the overall contract costs, risks involved and status of the projects
- reconciling the actual cost allocated to the contracts with internal cost schedules and external documents
- critical review of assumptions used for estimates of total contract costs, also by analyzing project progress to date and any deviations from the budget
- assessment of the computational accuracy of the stage of completion determined as well as any losses anticipated and also the proper accounting treatment of construction contracts

OUR OBSERVATIONS
GEA's accounting treatment of construction contracts is appropriate. The assumptions used for the recognition of construction contracts are reasonable.

Impairment of trade receivables

Please refer to the explanatory notes on "accounting policies" under note 2 for the accounting policies applied. Information on trade receivables is provided under note 5.8 to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK
Trade receivables from third parties in the amount of EUR 904.9 million are reported in the consolidated financial statements of GEA Group Aktiengesellschaft as of December 31, 2017. Trade receivables from third parties that are past due but not impaired amounted to EUR 317.6 million as of December 31, 2017, of which EUR 36.3 million was overdue for more than 360 days.

The decision as to whether trade receivables are impaired due to anticipated uncollectibility requires judgment and depends on a number of assumptions regarding the ability and willingness of customers to pay. Indicators of uncollectibility that are considered are past due receivables, financial and economic difficulties of customers and also (expected) default on payment. The risk for the consolidated financial statements of GEA Group Aktiengesellschaft is that the impairment of trade receivables from third parties is recognized too late or not in the amount necessary.

OUR AUDIT APPROACH
We evaluated the process for monitoring past due trade receivables as well as the adequacy of implemented controls to ensure proper recognition of impairment losses. To this end, we verified for example that controls are in place enabling group entities to regularly identify and continuously monitor past due receivables.

We critically reviewed the impairment of a selection of past due trade receivables selected on the basis of risk and volume. For this purpose, we analyzed the development of past due receivables and impairment losses over the course of the year, compared them to historical experience with the debtors concerned, queried the responsible GEA staff regarding impairment and assessed internal as well as external documentation, such as correspondence between the Company and customers.

OUR OBSERVATIONS
The assumptions and estimates to assess the impairment of trade receivables are appropriate.

Impairment of deferred tax assets for unused tax loss carryforwards

Please refer to the explanatory notes on "accounting policies" under note 2 for the accounting policies applied. Information on deferred tax assets and liabilities is provided under note 7.8 to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK
Deferred tax assets for unused tax loss carryforwards in the amount of EUR 256.9 million are reported in the consolidated financial statements of GEA Group Aktiengesellschaft as of December 31, 2017.

For the measurement of deferred tax assets for unused tax loss carryforwards, the Executive Board has to assess to what extent it is probable that current deferred tax assets can be utilized in subsequent reporting periods. Utilizing these deferred tax assets requires that sufficient taxable income is generated in future periods. If, on the other hand, there is reasonable doubt about the future usability of the deferred tax assets determined, the deferred tax assets for unused tax loss carryforwards are not recognized or an impairment loss is recognized for deferred tax assets that have already been reported, if necessary.

The measurement of deferred tax assets and liabilities greatly depends on the assumptions of management (the Executive Board) about the operating performance of country units and the Group's tax planning and therefore is subject to considerable uncertainty, especially considering the multi-year planning horizon typically applied. Moreover, utilizing deferred tax assets also depends on the respective tax environment.

There is the risk for the consolidated financial statements that deferred tax assets for unused tax loss carryforwards are recognized which should be impaired due to insufficient future taxable income.

OUR AUDIT APPROACH
We involved our own tax specialists in the audit to assess these tax matters. First, we reconciled the loss carryforwards to the tax assessments and tax calculations for the current financial year.

In addition, we particularly assessed the deferred tax assets for unused tax loss carryforwards for impairment based on internal forecasts of future tax income prepared by the Company, and critically reviewed the underlying assumptions by taking into account expected market developments. In this regard, we especially compared the planned future taxable income to the (IFRS) budget acknowledged by the Company's Supervisory Board and critically reviewed any tax adjustments made. We also confirmed the accuracy of the Company's forecasts to date by comparing the budgets of previous financial years with actual profits generated at a later point in time and analyzing deviations.

OUR CONCLUSIONS
The assumptions of management for the measurement of deferred tax assets are reasonable overall.

Other Information

Management is responsible for the other information. The other information comprises:

- the non-financial statement and the corporate governance report including corporate governance statement, and
- the remaining parts of the annual report, with the exception of the audited consolidated financial statements and combined group management report and our auditor's report.

Our opinions on the consolidated financial statements and on the combined group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

In accordance with our engagement letter, we conducted a separate assurance engagement with regard to selected sustainability performance disclosures in the non-financial statement. Please refer to our assurance report dated February 27, 2018 for information on the nature, scope and findings of this assurance engagement.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Group Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the combined group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by management in the combined group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on April 20, 2017. We were engaged by the supervisory board on October 25, 2017. We have been the group auditor of GEA Group Aktiengesellschaft, Düsseldorf, without interruption since financial year 2011.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dr. Markus Zeimes.

Düsseldorf, March 6, 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Moesta	Dr. Zeimes
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Limited Assurance Report of the Independent Auditor regarding Selected Sustainability Performance Disclosures*

To the Supervisory Board of GEA Aktiengesellschaft, Düsseldorf

We have performed an independent limited assurance engagement on selected sustainability performance disclosures included in the Non-financial statement for the business year from January 1 to December 31, 2017, of GEA Aktiengesellschaft, Düsseldorf (hereinafter "GEA").

The following selected sustainability performance disclosures are included in the scope of the assurance engagement:

- GRI 305-1 – Direct greenhouse gas (GHG) emissions (scope 1)
- GRI 305-2 – Indirect greenhouse gas (GHG) emissions (scope 2)
- GRI 305-3 – Other indirect greenhouse gas (GHG) emissions (scope 3)
- GRI 403-2 – Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.

Selected sustainability performance disclosures included in the scope of our assurance engagement are marked in the complementary GRI-Index as well as the text with the following symbol: "✓".

Management's Responsibility

The legal representatives of GEA are responsible for the accurate preparation of the selected sustainability performance disclosures in accordance with the Reporting Criteria. GEA applies the principles and standard disclosures of the Global Reporting Initiative (GRI) Sustainability Reporting Standards as Reporting Criteria.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the selected sustainability performance disclosures and the use of assumptions and estimates for individual qualitative and quantitative disclosures which are reasonable under the circumstances. Furthermore, this responsibility includes designing, implementing and maintaining internal controls relevant for the preparation of the report in a way that is free of – intended or unintended – material misstatements.

Independence and Quality Assurance on the Part of the Auditing Firm

We are independent from the entity in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the national statutory provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

*) Our engagement applied to the German version of the Report 2017. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

Practitioner's Responsibility

Our responsibility is to express a conclusion on the selected sustainability performance disclosures based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" published by IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance of whether any matters have come to our attention that cause us to believe that the selected sustainability performance disclosures, for the business year from January 1 to December 31, 2017, mentioned above have not been prepared, in all material respects, in accordance with the Reporting Criteria. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement.

Within the scope of our engagement, we performed the following procedures:

- A risk analysis, including a media search, to identify relevant information on GEA's sustainability performance in the reporting period.
- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring the selected sustainability performance disclosures, including the consolidation of the data.
- Inquiries of personnel on the corporate level responsible for determining, carrying out internal control procedures and consolidating the data for the selected sustainability performance disclosures.
- Analytical evaluation of data and trends of quantitative disclosures, which are submitted by all sites for consolidation on the corporate level.
- Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on a sample at the site in Oelde.
- Evaluation of selected internal and external documentation.
- Assessment of the overall presentation of the selected sustainability performance disclosures in the Non-financial statement.

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the selected sustainability performance disclosures, for the business year from January 1 to December 31, 2017, are not prepared, in all material respects, in accordance with the Reporting Criteria.

Recommendation

Without affecting the conclusion presented above, we recommend the further formalization of systems, processes and internal controls for the determination of the indicators on energy and CO_2-emissions on corporate and site level.

Restriction of Use/Clause on General Engagement Terms

This assurance report is issued for the purposes of the Supervisory Board of GEA Aktiengesellschaft, Düsseldorf, only. We assume no responsibility with regard to any third parties.

Our assignment for the Supervisory Board of GEA Aktiengesellschaft, Düsseldorf, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer (German Public Auditors) and Wirtschaftsprüfungsgesellschaften (German Public Audit Firms) (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (Appendix 2) (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms having taken note of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the attached General Engagement Terms with respect to us.

Düsseldorf, February 27, 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft

Laue	Hell
Wirtschaftsprüfer	ppa.
[German Public Auditor]	

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the group, and the management report of the group, which has been combined with the management report of the Company, includes a fair review of the development and performance of the business and the position of the group, together with a description of the principal opportunities and risks associated with the expected development of the group.

Düsseldorf, March 2, 2018

The Executive Board

Jürg Oleas   Dr. Helmut Schmale   Steffen Bersch   Niels Erik Olsen   Martine Snels

Corporate Bodies and their Mandates

Executive Board

Jürg Oleas, Meerbusch (Germany)/Eich (Switzerland),
CEO – Chairman of the Executive Board

a) - LL Plant Engineering AG, Lennestadt, Germany,
Chairman of the Supervisory Board

b) - RUAG Holding AG, Bern, Switzerland,
Member of the Board of Directors
- Lafarge Holcim Ltd., Jona, Switzerland,
Member of the Board of Directors

Dr. Helmut Schmale, Bochum, Germany,
CFO – Chief Financial Officer

a) - LL Plant Engineering AG, Lennestadt, Germany,
Deputy Chairman of the Supervisory Board

Steffen Bersch, Münster, Germany,
Member of the Executive Board

a) - Thyssen'sche Handelsgesellschaft m.b.H., Mülheim, Germany,
Member of the Supervisory Board (since January 1, 2017)

Niels Erik Olsen, Hilleroed, Denmark,
Member of the Executive Board

b) - GEA Process Engineering A/S, Søborg, Denmark,
Chairman of the Supervisory Board
- Grundfos Holding A/S, Bjerringbro, Denmark,
Member of the Board of Directors

Martine Snels, Kalmthout, Belgium (since October 1, 2017),
Member of the Executive Board

Supervisory Board

Dr. Helmut Perlet, Munich, Germany,
Chairman of the Supervisory Board,

a) - Allianz SE, Munich, Germany,
Chairman of the Supervisory Board (until May 6, 2017)
- Commerzbank AG, Frankfurt am Main, Germany,
Member of the Supervisory Board

Kurt-Jürgen Löw, Ebernhahn, Germany,
Deputy Chairman of the Supervisory Board,
Chairman of the Works Council of
GEA Westfalia Separator Group GmbH

a) - GEA Westfalia Separator Group GmbH, Oelde, Germany,
Deputy Chairman of the Supervisory Board

Ahmad M. A. Bastaki, Safat, Kuwait,
Executive Director, Planning and Senior Management
Kuwait Investment Authority

Prof. Dr. Ing. Werner Bauer, Lutry, Switzerland,
Chairman of the Supervisory Board of Nestlé Deutschland AG
(until May 19, 2017)

a) - Nestlé Deutschland AG, Frankfurt am Main, Germany,
Chairman of the Supervisory Board (until May 19, 2017)
- Bertelsmann SE & Co. KGaA/Bertelsmann Management SE,
Gütersloh, Germany,
Deputy Chairman of the Supervisory Board (since May 12, 2017)

b) - Lonza S.A., Basel, Switzerland,
Member of the Board of Directors
- Givaudan S.A., Vernier, Switzerland,
Deputy Chairman of the Board of Directors
(since March 23, 2017)

Hartmut Eberlein, Gehrden, Germany,
Chairman of the Audit Committee of
GEA Group Aktiengesellschaft

Rainer Gröbel, Sulzbach/Ts., Germany,
Departmental Head, IG Metall, Management Board

a) - Schunk GmbH, Heuchelheim, Germany,
Deputy Chairman of the Supervisory Board

Michaela Hubert, Prichsenstadt, Germany,
Service Engineer
GEA Group Aktiengesellschaft

Michael Kämpfert, Düsseldorf, Germany,
Vice President HR DACH & EE
GEA Group Aktiengesellschaft

Eva-Maria Kerkemeier, Herne, Germany,
1. Authorized Representative of IG Metall Bochum-Herne, Germany

Brigitte Krönchen, Oelde, Germany,
Deputy Chairman of the Group Works Council of GEA Group Aktiengesellschaft

a) - GEA Farm Technologies GmbH, Bönen, Germany, Deputy Chairman of the Supervisory Board

Jean E. Spence, Wilmette/IL, USA,
Corporate Consultant, President, JES Consulting, LLC

Dr. Molly P. Zhang, Aurora/CO, USA,

b) - Cooper Standard Holdings Inc., Novi, Michigan, USA, Member of the Board of Directors (since May 18, 2017)
- XG Sciences, Inc., Lansing, Michigan, USA, Member of the Board of Directors (since May 23, 2017)
- Newmont Mining Corporation, Greenwood Village, Colorado, USA, Member of the Board of Directors (since July 19, 2017)

Supervisory Board committees of GEA Group Aktiengesellschaft (as of December 31, 2017)

Mediation Committee in accordance with section 27(3) of the Mitbestimmungsgesetz (MitbestG – German Co-determination Act)
Dr. Helmut Perlet, Chairman
Prof. Dr. Ing. Werner Bauer
Eva-Maria Kerkemeier
Kurt-Jürgen Löw

Presiding Committee
Dr. Helmut Perlet, Chairman
Ahmad M. A. Bastaki
Prof. Dr. Ing. Werner Bauer
Rainer Gröbel
Michaela Hubert
Kurt-Jürgen Löw

Audit Committee
Hartmut Eberlein, Chairman (financial expert within the meaning of section 100(5) of the Aktiengesetz (AktG – German Stock Corporation Act))
Michael Kämpfert
Brigitte Krönchen
Dr. Helmut Perlet

Nomination Committee
Dr. Helmut Perlet, Chairman
Ahmad M. A. Bastaki
Jean E. Spence

a) Membership of statutory German supervisory boards
b) Membership of comparable German or foreign supervisory bodies of business entities

Key Figures by Quarter*

	Q1 2017	Q1 2016	Q2 2017	Q2 2016	Q3 2017	Q3 2016	Q4 2017	Q4 2016	2017	2016	2015
Order intake (EUR million)											
BA Equipment	621.7	570.4	622.0	617.2	576.9	561.6	670.9	597.6	2,491.5	2,346.8	2,293.0
BA Solutions	564.1	622.2	671.5	658.6	531.2	568.5	717.1	685.3	2,484.0	2,534.6	2,495.6
GEA	1,136.0	1,144.3	1,241.1	1,222.1	1,056.7	1,083.9	1,317.0	1,223.3	4,750.8	4,673.6	4,590.1
Revenue (EUR million)											
BA Equipment	531.6	490.8	585.5	570.9	576.0	566.8	677.9	633.7	2,371.0	2,262.2	2,323.7
BA Solutions	520.7	495.5	601.7	633.7	608.6	585.0	710.5	711.6	2,441.6	2,425.7	2,475.2
GEA	1,003.9	941.2	1,138.5	1,156.9	1,130.7	1,100.8	1,331.4	1,293.0	4,604.5	4,491.9	4,599.3
EBITDA (EUR million)											
BA Equipment	67.4	72.4	93.1	88.5	85.1	88.6	124.0	122.2	369.6	371.8	308.8
BA Solutions	22.4	22.6	32.5	62.5	19.0	15.9	78.0	62.3	151.7	163.3	202.6
GEA	90.9	85.2	106.6	137.3	106.8	100.4	194.6	177.7	498.8	500.6	429.8
Operating EBITDA* (EUR million)											
BA Equipment	69.3	72.3	96.9	86.0	93.3	91.3	129.8	133.9	389.3	383.5	381.8
BA Solutions	23.6	26.5	35.1	61.7	21.4	18.5	81.1	76.7	161.3	183.5	255.3
GEA	96.4	93.9	122.4	145.2	120.5	112.7	224.1	214.5	563.5	566.3	621.0
Operating EBITDA-margin* (%)											
BA Equipment	13.0	14.7	16.5	15.1	16.2	16.1	19.2	21.1	16.4	17.0	16.4
BA Solutions	4.5	5.3	5.8	9.7	3.5	3.2	11.4	10.8	6.6	7.6	10.3
GEA	9.6	10.0	10.8	12.6	10.7	10.2	16.8	16.6	12.2	12.6	13.5

*) Before effects of purchase price allocations from revalued assets and liabilities and before one-offs

GRI Content Index

GEA's sustainability report for fiscal year 2017 is in line with the international Standards set by the Global Reporting Initiative (GRI). This report has been prepared in accordance with the GRI Standards: Core option. The sustainability report was submitted to the GRI Materiality Disclosures Service. GRI has confirmed the accuracy of the position of the Materiality Disclosures (Disclosures 102-40 to 102-49). KPMG AG Wirtschaftsprüfungsgesellschaft has provided limited assurance on selected information and figures related to the sustainability performance on the disclosures of Emissions and Occupational Health and Safety. The "International Standard on Assurance Engagements" (ISAE) 3000 was used as a basis for the engagement, see Disclosure 102-56. On January 25, 2018, the GRI withdrew the German translation of the Standards and recommended using the binding English version instead. GEA adjusted all translated passages that might give rise to misunderstandings.

GRI Standard		Disclosure	Page	Ommission/comment
GRI 101: Foundation 2016				

General Disclosures

Organizational profile

GRI 102: General Disclosures 2016	102-1	Name of the organization	21	
	102-2	Activities, brands, products, and services	3-11, 22 f.	
	102-3	Location of headquarters	256	
	102-4	Location of operations	24, 31	
	102-5	Ownership and legal form	122 f.	
	102-6	Markets served	38 f.	
	102-7	Scale of the organization	4-11, 31, 34-37, 122 f., 225 ff.	
	102-8	Information on employees and other workers	49	
	102-9	Supply chain	27 f., 89 f.	
	102-10	Significant changes to the organization and its supply chain	22, 27 f., 33	
	102-11	Precautionary Principle or approach	107-116	
	102-12	External initiatives	90, 96, 100, 102 f.	
	102-13	Membership and associations	102	

Strategy

GRI 102: General Disclosures 2016	102-14	Statement from the senior decision-maker	13	

Ethics and integrity

GRI 102: General Disclosures 2016	102-16	Values, principles, standards, and norms of behavior	58-65, 87-90	

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GRI Standard		Disclosure	Page	Omission/comment

Governance

GRI 102: General Disclosures 2016	102-18	Governance structure	21 f., 26, 61 f.	

Stakeholder engagement

GRI 102: General Disclosures 2016	102-40	List of stakeholder groups	104	
	102-41	Collective bargaining agreements	90	
	102-42	Identifying and selecting stakeholders	104	
	102-43	Approach to stakeholder engagement	105	
	102-44	Key topics and concerns raised	106	

Reporting practice

GRI 102: General Disclosures 2016	102-45	Entities included in the consolidated financial statements	103	
	102-46	Defining report content and topic Boundaries	103 f.	
	102-47	List of material topics	105	
	102-48	Restatements of information	103	
	102-49	Changes in reporting	106	
	102-50	Reporting period	21	
	102-51	Date of most recent report	21	Annual Report 2016 (January 1 – December 31, 2016)
	102-52	Reporting cycle	21	
	102-53	Contact point for questions regarding the report	254	
	102-54	Claims of reporting in accordance with the GRI Standards	82	
	102-55	GRI content index	249 f.	
	102-56	External assurance	103, 242-244	

Topic-specific disclosures: Economic topics

Economic Performance

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	82-84	
(no GRI disclosure available)		Profitability and liquidity	24-26, 46 f., 82	GEA specific disclosure: Cash flow driver margin as one of GEA's key performance indicators
GRI 201: Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	84-86, 116	In particular, the risks and opportunities include the availability of new, especially energy-efficient technologies and products to meet the challenges in connection with climate change or changes in customer behavior; this is why GEA reports innovation management performance indicators under this section. A system for calculating the financial implications of climate change for the organization is neither available nor planned.

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GRI Standard		Disclosure	Page	Omission/comment

Procurement

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	27 f.	
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	28	

Anti-corruption

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	87, 88 f.	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	89	
	205-2	Communication and training about anti-corruption policies and procedures	88	Available data include information on the number of individuals participating in e-learning courses (no further differentiation by employee category or region), training courses by topics and regions (excluding attendance figures) as well as preventive measures in relation to business partners (without quantity). The members of the governing body (Supervisory Board) are regularly informed about compliance topics including anti-corruption measures.

Topic-specific disclosures: Environmental topics

Emissions

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	95, 100 f.	
GRI 305: Emissions 2016 ✓	305-1	Direct (Scope 1) GHG emissions	100	Due to changes in classification and computation, the reference base of reporting sites was adjusted in 2017. Included in the reporting for 2017 are now only production sites, workshops and service locations as well as GEA Group Aktiengesellschaft as headquarters.
	305-2	Energy indirect (Scope 2) GHG emissions	100	
	305-3	Other indirect (Scope 3) GHG emissions)	101	Currently, this performance indicator merely subsumes reporting on business travel. In this context, GEA differentiates between air travel (global recording by GEA's travel agency), car rentals (rentals in Germany, with the exception of Sixt: EMEA rentals) as well as travel with Deutsche Bahn (bookings in Germany).

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GRI Standard		Disclosure	Page	Omission/comment

Supplier Environmental Assessment

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	89 f.	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	90	All supplier audits are reported. No differentiation between new and existing suppliers.

Topic-specific disclosures: Social topics

Labor/Management Relations

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	90 f.	
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	90	Regulated by law within the framework of parity codetermination in Germany.

Occupational Health and Safety

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	95, 97-99	
GRI 403: Occupational Health and Safety 2016	403-1	Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities	98	Currently not included in the reporting: type of injuries (only recorded at local level) as well as breakdown by region and gender for all employees; occupational diseases; information for all workers (excluding employees) whose work, or workplace, is controlled by the organization.

Training and Education

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	93	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	93	For data privacy reasons, the amount of time per employee spent on e-learning is not recorded..

Diversity and Equal Opportunity

GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	91 f.	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	92	Age groups for the members of the governing bodies are not reported.

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GRI Standard		Disclosure	Page	Omission/comment

Human Rights Assessment

GRI Standard		Disclosure	Page	Omission/comment
GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	87 f.	
GRI 412: Human Rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	88	The management approach manifests that the observance of human rights is the bedrock of the company's business policy. Internal audits also consider compliance aspects. For ensuring adherence to human rights, the company has installed a reporting system that is accessible to all employees and external third parties worldwide. Thus, it covers 100 percent of all business locations.

Supplier Social Assessment

GRI Standard		Disclosure	Page	Omission/comment
GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	89 f.	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	90	All supplier audits are reported. No differentiation between new and existing suppliers.

Socioeconomic Compliance

GRI Standard		Disclosure	Page	Omission/comment
GRI 103: Management Approach 2016	103-1 103-2 103-3	Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach.	89, 108 f., 110	
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	89	

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Financial Calendar

April 19, 2018	Annual General Meeting for 2017
May 4, 2018	Quarterly Statement for the period to March 31, 2018
July 30, 2018	Half-yearly Financial Report for the period to June 30, 2018
October 29, 2018	Quarterly Statement for the period to September 30, 2018

The GEA Stock: Key data

WKN	660 200
ISIN	DE0006602006
Reuters code	G1AG.DE
Bloomberg code	G1A.GR
Xetra	G1A.DE

American Depository Receipts (ADR)

CUSIP	361592108
Symbol	GEAGY
Sponsor	Deutsche Bank Trust Company Americas
ADR-Level	1
Ratio	1:1

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Note regarding the rounding of figures
Due to the commercial rounding of figures and percentages, small deviations may occur.

Note to the statement
This statement is the English translation of the original German version; in case of deviations between these two, the German version prevails.

engineering for
a better world

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GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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