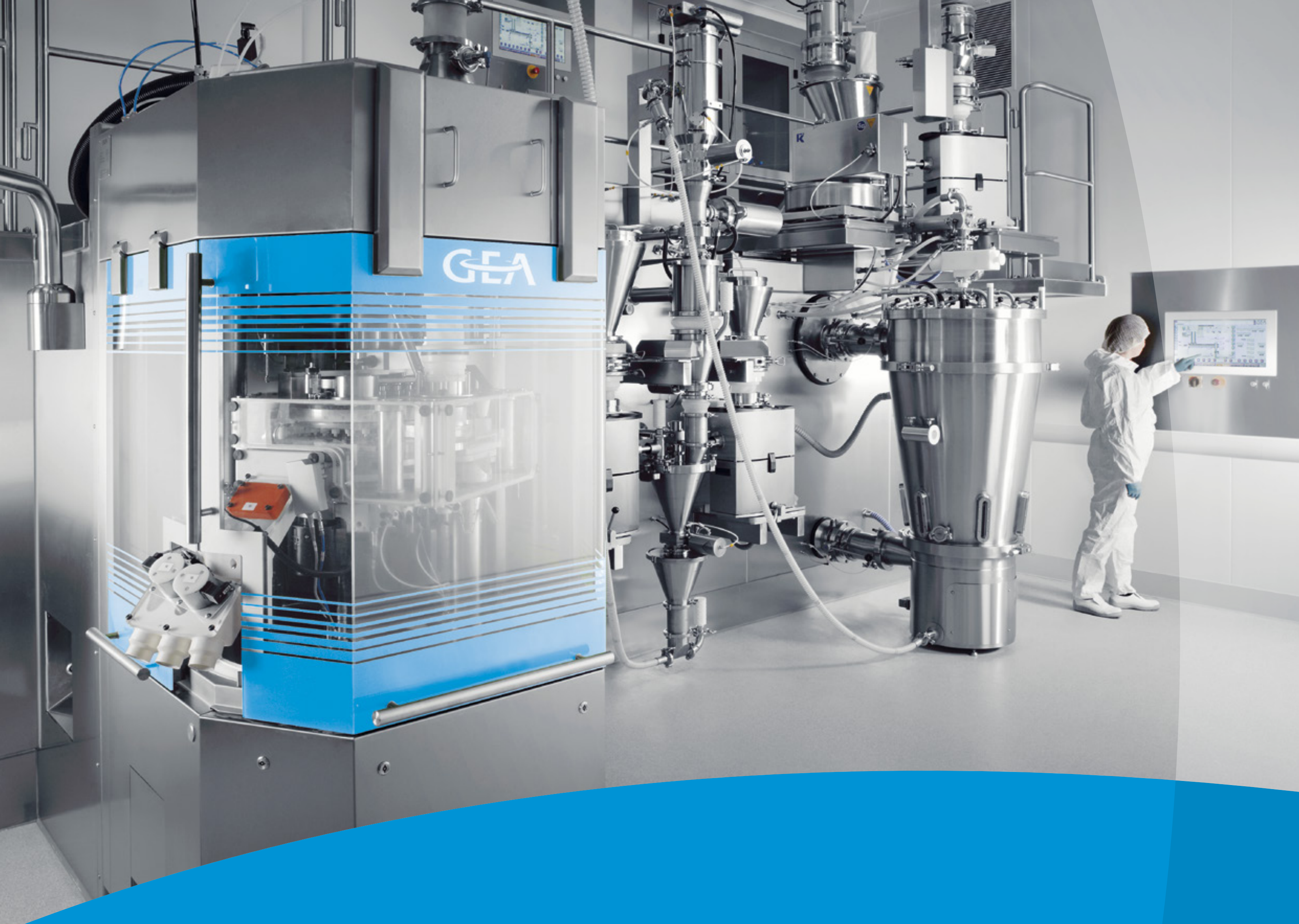


Annual Report 2016

engineering for a better world

gea.com

IFRS key figures of GEA

(EUR million)	2016	2015	Change in %
Results of operations			
Order intake	4,673.6	4,590.1	1.8
Revenue	4,491.9	4,599.3	–2.3
Operating EBITDA[1]	566.3	621.0	–8.8
as % of revenue	12.6	13.5	–
Operating EBIT[1]	485.0	538.8	–10.0
as % of revenue	10.8	11.7	–
EBIT	387.0	309.4	25.1
Net assets			
Working capital intensity in % (average of the last 12 months)	14.5	13.1	–
Net liquidity (+)/Net debt (–)	782.6	982.0	–20.3
Financial position			
Operating cash flow driver margin[2]	9.5	10.3	–
ROCE in % (goodwill adjusted)[3]	16.9	14.6	–
Full-time equivalents (reporting date)	16,937	17,533	–3.4
GEA Shares			
Earnings per share (EUR)	1.48	1.88	–21.4

1) Before effects of purchase price allocations and adjustments (see page 206 f.)
2) Cash flow driver = operating EBITDA – capital expenditure – change in working capital (average of the last 12 months)
3) Capital employed excluding goodwill from the acquisition of the former GEA AG by former Metallgesellschaft AG in 1999 (average of the last 12 months)

Contents

Cover image

GEA’s continuous tableting line ConsiGma™ is an award-winning multipurpose platform that has been designed to transfer powder into coated tablets in development, pilot, clinical and production volumes in a single integrated unit (see page 21).

GEA: “engineering for a better world”

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

In 2016, GEA generated consolidated revenues of about EUR 4.5 billion. The food and beverages sector, which is a long-term growth industry, accounted for around 70 percent. As of December 31, 2016, the group employed about 17,000 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 at a glance 2016

Order intake
EUR **4,674** million

Operating EBITDA
EUR **566** million

Operating EBITDA-margin
12.6%

Revenue
EUR **4,492** million

Earnings per share
EUR **1.48**

Jürg Oleas,
Chairman of the Executive Board
of GEA Group Aktiengesellschaft

Dear Shareholders

In the fiscal year 2016, GEA faced a multitude of challenges: On the one hand, the year was characterized by a demanding environment in the applications beverage and dairy production, with delays in project award – specifically in the dairy processing sector – exacerbating the negative effects while pharma, marine as well as oil & gas industries also suffered a fall in order intake. On the other hand, many of our customer industries enjoyed a sustained positive development. In particular, a strong double-digit growth in demand in the food and chemicals industries allowed us to more than make up for declining markets. Moreover, order intake in the emerging markets also experienced a disproportionately positive development.

Within our organization, we have further consolidated our new group structure and completed the "Fit for 2020" project including the transfer of administrative tasks to the Shared Service Center locations according to plan. Apart from that, our acquisition of Imaforni, one of the leading suppliers of sophisticated production lines and solutions for the pastry sector, allows us to significantly expand our market position in the baking industry.

Unfortunately, our September results indicated that we were no longer able to meet the targets set for the fiscal year 2016. For this reason, we adjusted our guidance for the fiscal year on October 19, 2016.

Owing to the remarkable efforts undertaken by our employees, we were able to further increase our order intake to EUR 4.7 billon by the end of the year, while our revenue declined to EUR 4.5 billion. Mainly due to decreasing volumes and cost overruns in connection with a small number of large projects, our operating result also went down to EUR 566 million, which was in line with the level forecasted in October 2016. Our operating EBITDA margin totaled 12.6 percent of revenue. Regarding our operating cash flow driver, we posted a ratio to revenue of 9.5 percent.

It is true that some of our key performance indicators failed to reach last year's record levels, but, the Executive Board and the Supervisory Board will propose that the shareholders at the Annual General Meeting yet again approve a dividend of EUR 0.80 per share for the fiscal year 2016. Thus, the payout would be equivalent to the all-time high distributed in the previous year.

Sustainability

For the first time, this year's sustainability report has been compiled in line with the guidelines set by the Global Reporting Initiative (GRI). By referring to this highly renowned international standard, we also want to provide the capital market, our customers, our employees as well as all other stakeholders of the group with a comprehensive report that includes the non-financial success factors.

"Engineering for a better world" represents our group's core value proposition and showcases the focus of GEA's activities in the field of sustainable management: Global megatrends like an increasing world population, urbanization, a growing middle class as well as a rising demand for high-quality food and beverages require more and more new, highly efficient and resource-friendly production processes. In this context, the customers of the industries served by us confront us with highly specific challenges in terms of permanent innovation accompanied by maximum reliability. As one of the major suppliers of process technology we are striving to meet their high standards each and every day.

Non-financial success factors like integrity, responsibility and diversity are deeply ingrained in GEA's corporate values. Each GEA employee is not only responsible for showing proper behavior, but she or he is also expected to go beyond that by constantly considering the economic, ecological and social implications of his or her actions. In the coming years, we will focus more closely on diversity while never relinquishing our efforts in the fields of occupational safety and health protection.

New group structure as a basis for further improvements

Due to our new organization that has resulted in a much higher level of coordination in terms of corporate activities, various countries posted disproportionately high growth rates in the fiscal year 2016. Apart from that, we were able to do a much better job of compensating for declining markets than in the past. Going forward, the stronger positioning of our overall portfolio as well as our reinforced service business will not only generate further profitable growth, but also drive customer loyalty.

Moreover, based on our new group structure, we were able to identify additional areas in which we will seek to further improve our performance in the medium run. For instance, by means of "One Engineering", we will ensure the best possible use of our engineering capabilities in addition to our efforts aimed at optimizing our procurement activities as well as the global manufacturing network. In doing so, we will further enhance our sustainable competitiveness.

Employees

After this challenging year, my fellow Executive Board members and I would like to express our special thanks to our employees for their outstanding commitment and performance. Our thanks expressly include the employee representative bodies. In recognition of their performance, our worldwide employees below senior management level will once again be awarded an extra bonus in the total amount of roughly EUR 4.3 million this year.

Share buyback program

In early February 2017, the Executive Board – with the consent of the Supervisory Board – decided to repurchase own shares in the amount of up to EUR 450 million over a period of twelve months as of March, 2017, with the purposes of retiring them. This decision in favor of a share buyback was taken for various reasons: As you know, we have held a high amount of cash since the divestiture of the heat exchangers segment in 2014. We have already used part of this cash for reducing our financial debts and for the purpose of making acquisitions. The latter included de Klokslag, Comas, Hilge and Imaforni that were a perfect fit with our ARTE framework, which focuses on applications, regions, technologies and functional excellence. At the same time, however, we did not pursue a multitude of further potential acquisitions because they simply failed to show this perfect fit. Nonetheless, the magnitude of the recently approved share buyback program will leave us with sufficient financial headroom in the future.

Outlook

In the foreseeable future, the macroeconomic uncertainties are not expected to abate and will, thus, also hold true for the current fiscal year. For this reason, it is difficult to foresee the future development of our individual markets. Most notably, upcoming and recent elections in important sales markets make it almost impossible to predict the future political environment and its implications for the economy. In addition, the current projections made by important food producers are more conservative than back in 2016.

In the current fiscal year 2017, we aim to achieve a moderate growth in revenue, an operating EBITDA range of EUR 620 million to 670 million, as well as an operating cash flow driver margin of between 8.5 and 9.5 percent. Yet this forecast will only apply if there is no further decline in global economic growth and if there are no substantial adverse currency effects. Furthermore, this outlook is based on the assumption that there will be no marked decline in demand in any of the relevant customer industries nor shifts between our customer industries that may negatively impact our margin.

This means that, in the current fiscal year, we are seeking to measure up to our previous revenue growth rates. By increasing profitability and retaining our focus on the generation of cash, we intend to create the financial scope required for implementing our strategic growth targets and further strengthening our company by advancing our competitive position.

Your

Jürg Oleas
Chairman of the Executive Board

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

Report of the Supervisory Board

During the fiscal year 2016, 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 at Committee meetings were presented at the respective following Supervisory Board meetings by the Chairmen of the Presiding and the Audit Committees 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 the “Fit for 2020” project and envisioned acquisitions, as well as matters relating to planning, business progress, risk exposure, risk management and compliance. In this context, the Chairman of the Supervisory Board was also regularly and promptly informed about the prospects of the group and its operational units, as well as further important developments and upcoming decisions. 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 the fiscal year 2016, the Supervisory Board held seven meetings. On these occasions, the Supervisory Board regularly discussed matters relating to the company’s business progress, its financial position, share price performance as well as the progress made in connection with the transformation of the group under the “Fit for 2020” project. Apart from that, the following key issues came up for discussion.

The key item on the agenda of the conference call Supervisory Board meeting held on February 3, 2016, was the early capital markets information.

Key issues addressed during the Supervisory Board meeting held on March 3, 2016, embraced the approval and adoption of the annual financial statements and the consolidated financial statements for the fiscal year 2015, including the appropriation of net earnings. Apart from that, the Supervisory Board dealt with Dr. Stephan Petri’s departure from the company, the extension of Jürg Oleas’ mandate and the renewal of his service contract, the final determination and weighting of the Executive Board members’ individual targets for the fiscal year 2016, the examination of efficiency recommended under the German Corporate Governance Code in relation to the activities of the Supervisory Board, as well as the motions for resolution on individual agenda items that were to be submitted to the 2016 Annual General Meeting. In addition, the Board extensively discussed the career advancement of women at GEA.

The meeting of the Supervisory Board held on April 20, 2016, mainly served the purpose of preparing the Annual General Meeting which took place immediately afterwards. Following the Annual General Meeting that had elected the new shareholder representatives to the Supervisory Board, the Supervisory Board gathered for its constitutive meeting.

Key issues raised during the meeting held on June 23, 2016, included a report on current M&A projects, lessons learned from the examination of efficiency with regard to cooperation at Supervisory Board level as well as recent changes in the German Capital Market Law as a result of the Market Abuse Regulation.

On September 20, 2016, the Supervisory Board met at GEA's site of Imaforni S.p.A. in Italy. Prior to the actual Supervisory Board meeting, the members of the Supervisory Board familiarized themselves with the region Western Europe, Middle East & Africa. On this occasion, the Board engaged in a lively discussion with the regional and country managers as well as further GEA managers. In the course of the following meeting, the Supervisory Board deliberated on the general process for succession planning and Executive Board appointments. Further key issues included innovation, the digitalization strategy, the global manufacturing footprint, the "One Engineering" project as well as the level of implementation in terms of Shared Services. Furthermore, the Supervisory Board examined the cash position and capital base of the group.

The meeting held on December 16, 2016, addressed the budget, medium-term planning as well as stock performance and capital market expectations. In addition, the Supervisory Board adopted the 2016 Declaration of Conformity in line with the German Corporate Governance Code. Further topics embraced the level of target achievement attained by the members of the Executive Board in 2016, as well as the Executive Board targets for the year 2017.

Work of the Committees

During the year under review, the number of Presiding Committee members was increased from four to six. In the course of the previous fiscal year, the Committee met on four occasions with a main focus on preparing the meetings of the Supervisory Board.

The Audit Committee 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 2016 quarterly financial statements and the annual financial statements in conjunction with the consolidated financial statements for 2015. Furthermore, the Committee's key activities included monitoring the accounting process, the effectiveness of the internal control, risk management and audit systems, compliance as well as the audit of the annual financial accounts. 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 including audit fees and ensured the required independence of the auditor.

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 at the Supervisory Board meetings following the respective Committee meetings.

Corporate Governance

The Supervisory Board is continuously monitoring the standards set out by the Corporate Governance Code. At its meeting on December 16, 2016, it discussed the recommendations and suggestions of the German Corporate Governance Code. 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. Further information on corporate governance can be found in the Corporate Governance Report (see page 50 ff.).

Annual financial statements and consolidated financial statements 2016

The 2016 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 the fiscal year 2016 were extensively discussed during the meeting of the Audit Committee on March 1, 2017, and on the occasion of the Supervisory Board meeting for balance sheet approval held on March 7, 2017. 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 7, 2017, and found that there were no objections to be raised. The Supervisory Board approved the 2016 consolidated financial statements, the 2016 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.

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

On April 20, 2016, the 2016 Annual General Meeting of GEA Group Aktiengesellschaft elected the new shareholder representatives to the company's Supervisory Board. Messrs. Ahmad Bastaki, Prof. Dr. Ing. Werner Bauer, Hartmut Eberlein and Dr. Helmut Perlet, as well as Ms. Jean E. Spence were re-elected for another five-year term of office. In addition, Ms. Dr. Molly P. Zhang was appointed to the Supervisory Board as a new member. Dr. Jürgen Heraeus, who had chaired the group's Supervisory Board since June 3, 2003, had not stood for re-election and resigned from the Supervisory Board.

During the constitutive meeting of the newly elected Supervisory Board that took place subsequent to the Annual General Meeting on April 20, 2016, Dr. Helmut Perlet was elected new Chairman of the Supervisory Board, with Mr. Reinhold Siegers being re-elected Deputy Chairman.

The employee representatives on the company's Supervisory Board were appointed by virtue of a court order issued by the Düsseldorf local court on April 4, 2016. The elections of the six employee representatives to the Supervisory Board of GEA Group Aktiengesellschaft were held in GEA's German companies on September 27 and 28, 2016. Messrs. Rainer Gröbel, Michael Kämpfert and Kurt-Jürgen Löw as well as Ms. Brigitte Krönchen and Ms. Eva-Maria Kerkemeier were re-elected for another five-year period of office. Mr. Reinhold Siegers had not stood for re-election on account of his impending retirement and resigned from the Supervisory Board. Ms. Michaela Hubert was newly elected to the Board.

On October 18, 2016, Mr. Kurt-Jürgen Löw was elected new Deputy Chairman of the Supervisory Board. He succeeded Reinhold Siegers who had held this position since 1998.

These personnel changes also affected the composition of the Presiding Committee, the Audit Committee, the Mediation Committee as well as the Nomination Committee.

On June 30, 2016, Dr. Stephan Petri left the Executive Board of GEA Group Aktiengesellschaft by mutual consent with the Supervisory Board. Dr. Petri's position on the Executive Board had become redundant and was abolished in the context of the operational realignment of the group. On July 1, 2016, Mr. Oleas assumed responsibility for the Legal & Compliance, Internal Audit and Human Resources departments, including the position of Labor Relations Director.

Mr. Jürg Oleas' term as Chairman of the Executive Board and Labor Relations Director was renewed for another three years with effect from January 1, 2017, until and including December 31, 2019.

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 for their personal commitment and dedication as well as their hard work throughout an exceptionally challenging fiscal year. Moreover, the Supervisory Board wishes to thank the former Supervisory Board Chairman, Dr. Jürgen Heraeus, and the former Deputy Chairman of the Supervisory Board, Mr. Reinhold Siegers, for their great commitment and dedication, as well as many years of trusting and fruitful cooperation at Supervisory Board level.

Düsseldorf, March 7, 2017

Dr. Helmut Perlet
Chairman of the Supervisory Board

Executive Board of GEA Group Aktiengesellschaft

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. His functions on the board include that of Labor Relations Director, and he is responsible also for all the regions. 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. 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 March 31, 2018.

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.

Dr. Stephan Petri, Member of the Executive Board and Labor Relations Director (until June 30, 2016)

Born on February 11, 1964, in Traben-Trarbach, Germany, Dr. Stephan Petri was the Executive Board member responsible for Human Resources, Legal/Compliance, Internal Audit and the group's other companies from June 1, 2012 to June 30, 2016. He also performed the function of Labor Relations Director. Dr. Petri left the company with effect from June 30, 2016 by mutual agreement with the Executive Board and the Supervisory Board in order to take up new challenges outside GEA. His position on the Executive Board was not replaced, and his duties – including that of Labor Relations Director – were taken over largely by Jürg Oleas.

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 (3) 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 fiscal year 2016 (January 1 to December 31, 2016).

GEA reports also on non-financial performance factors in the 2016 Annual Report. For the first time, the sustainability report is oriented to the international guidelines 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 G4 Materiality Disclosures item. The GRI Content Index can be found at the end of the Annual Report (see page 225 ff.). From now on, all GEA's Annual Reports will include a 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, continuously renewing 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.

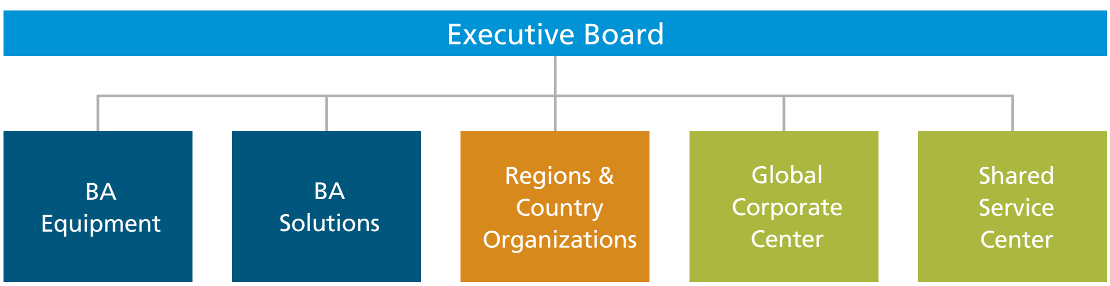
The group's enduring success is founded on a number of major global trends:

1. The continuous growth in the global population,
2. The growing middle class,
3. The growing demand for high-quality foods and beverages,
4. The 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.



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. The product range also extends to dairy equipment, feeding systems, and slurry engineering.

Business Area Solutions

The Business Area Solutions combines all group activities that largely consist of customer-specific and modular solutions provided within the scope of 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 dairy processing, baking, brewing, food, beverages, pharma, and chemical industries.

Other companies
The "Other companies" area comprises GEA Group Aktiengesellschaft and those companies with business activities that do not form part of the core business. These include companies that report investment property held for sale, and pension obligations. 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. The countries are grouped together in specifically defined regions and reported accordingly. 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. A 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 and of the plant engineering activities, especially Lurgi and Lentjes, and the continued 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.

Capital expenditure totaled EUR 91.0 million (previous year: EUR 90.7 million) and by far the largest share will continue to be used for research and development, and new products (45.8 percent). This enabled new generations of the robot milker and the DairyProQ fully automated milking system to be marketed in 2016. Both systems are currently being readied for licensing on the American market. Replacement investments accounted for 28.9 percent of total capital expenditure, followed by rationalization projects, which accounted for 13.3 percent. EUR 59.1 million of the capital expenditure was attributable to the Business Area Equipment, and EUR 24.9 million to the Business Area Solutions.

Capital expenditure in tangible and intangible assets per type
(%)

In regional terms, the main focus of capital expenditure was on DACH & Eastern Europe (56.7 percent) due to the high level of investment in research and development in milking, dairy and farming.

Capital expenditure in tangible and intangible assets by region
(%)

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 several forecasts for the current year and 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 six 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 90 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, the company focuses on operating EBITDA. 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 206). From the fiscal year 2017 on, the operating cash flow driver margin (i.e. the net amount of operating EBITDA, the change in average working capital, and capital expenditures for property, plant, and equipment, and intangible assets) will be adjusted additionally for capital expenditures in strategic projects. GEA also regularly collates a range of other performance indicators in order to obtain a meaningful picture of the overall situation.

Revenue is analyzed by region and customer industry on a monthly basis in order to identify market trends as early as possible. In this context, we also evaluate leading indicators:
the GEA Demand Index (GDI – see page 77) and order intake.

To enable a rapid response to developments, the Business Areas are also required to return regular forecasts – for the quarters and for the year as whole – for the key performance indicators revenue and operating EBITDA. In addition, these reports include forecasts of other performance indicators such as order intake.

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, the group 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, of which 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

In 2016, the procurement volume of GEA's continuing operations amounted to around EUR 2.2 billion. It is the biggest single expense item in the income statement. Stainless steel was the focus of raw material procurement. However, directly purchased stainless steel made up a relatively small proportion of the total requirement, as GEA acquires most of this commodity in the form of processed products from the market or in the context of assembly services. On average, the price of virtually all the finished and semifinished industrial products purchased by GEA fell moderately in comparison to the previous year. GEA was able to profit from the development of stainless steel prices in 2016.

GEA uses its own material group classification system to obtain information on the procurement volume as a whole. As well as providing detailed insight into suppliers and how the procurement volume breaks down by region, the system also forms the basis for defining strategies for the principal commodity groups, and is available to all GEA purchasing agents.

GEA's supply chain is normally structured as follows:

In 2016, the products of the Business Area Equipment were manufactured at 37 different sites around the globe. GEA buys in raw materials, semi-finished products, precursors and, notably, components that are not based on its own core technologies from external suppliers.

The Business Area Solutions develops, designs and supplies process solutions for a whole variety of applications. In the context of projects, plant components that do not originate from GEA itself are also bought in, and construction site and assembly services in particular are subcontracted. In the case of steelwork, this commodity often forms part of the subcontractor's services.

On the one hand, the procurement policy is based on the "local for local" principle as far as possible. As well as giving rise to short response times, this policy helps relieve the financial and ecological burden through savings in transport, while also boosting the local economy at the respective production and project locations. GEA's local procurement policy – but even more so its former decentralized corporate structure – means that the number of suppliers is still relatively high. The hundred biggest suppliers account for around a quarter of the overall procurement volume, while 35.5 percent of this volume is shared among some 200 suppliers (as of Q3 2016). This means that GEA is not dependent on specific suppliers.

On the other hand, the OneGEA organization is enabling GEA to standardize material specifications to a greater degree and to make greater use of strategic suppliers. It is GEA's aim to increase the percentage of goods and services procured centrally (12 percent in Q3 2016) and the share of preferred suppliers in the overall procurement volume (25 percent in Q3 2016) significantly by 2020. At the same time, the principle of local procurement is to be preserved and even applied more rigorously in some cases due to the benefits it brings in terms of efficiency and the advantages for the environment and the local communities. While the dual goals of supplier clustering and local procurement are at times incongruous, GEA is nonetheless closing in on their realization thanks to trends both internal and external. GEA's own manufacturing landscape is set to change still further. Today, six production sites in China, Germany, India and the USA are capable of manufacturing several product lines, and this places certain demands on the supply chain while also generating opportunities for local suppliers. Dynamic business growth in the burgeoning economies and emerging nations will necessitate an increasingly local approach to procurement there.

Region	Local procurement as a percentage of total volume (Q4 2015 – Q3 2016)*
Europe, Middle East & Africa	95
Asia Pacific	80
North and Latin America	89

*) Excluding intercompany procurement. As a rule, GEA uses its respective local purchasing organization. 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.

Thanks to the "local for local" principle, transport and logistics account for only a small proportion of the overall procurement volume. That said, these activities are still insufficiently bundled due to the former organizational structure. The goal is to centralize logistics in order to enhance efficiency and generate ecological benefits.

Spanning all functional areas and regions, GEA's Procurement Council (GPC) is responsible for managing the procurement organization as a whole. It comprises managers from the Business Area Equipment, Business Area Solutions and various country organizations, and is headed by a member of the Global Leadership Team. Attached to the GPC is a global Procurement Coordination Unit. In 2016 too, the GPC worked intensively on integrating the group's strategic procurement activities. Standardizing material specifications and concentrating procurement volumes on certain preferred suppliers remain the prime focus of attention.

Research and development

In today's global markets, technology corporations such as GEA need to show an enduring commitment to enhancing their own processes and technologies on an ongoing basis. This culture of innovation is the key to securing commercial success going forward. In addition to pursuing its own intensive research and development activities (R&D; see also page 108 f.), the company also supports cooperative research projects with its customers and suppliers.

GEA's focus on product leadership is underpinned by the fact that around 40 percent of the company's employees are engineers or perform engineering-related roles. Over 800 of these employees are assigned to product development. As a result of their work, GEA filed applications for a total of 105 (previous year: 114) new patent families during the fiscal year 2016.

GEA has defined a series of core R&D topics aimed at analyzing the role of process technology in value creation processes and, as such, is confronting macro-economic mega-trends such as the rise in the world's population, urbanization and the rising cost of energy. The consequences are particularly clear in the food and pharmaceuticals industries: For consumer demands for more safety, quality and durability in food and medicine can be satisfied only with the right industrial process technology.

A key R&D area is devoted to adding value to by-products of the agricultural and fish as well as meat processing industries. The aim here is to use e.g. mechanical and thermal separation techniques to hygienically prepare matter previously often disposed of as waste so that it can be recycled as quality raw materials for use in foodstuffs and animal feed. By way of example, only around half the carcass weight of a farmed salmon is actually used as food. The unprocessed parts of the fish contain valuable animal proteins and are a source of raw materials that GEA customers are increasingly looking to exploit. Thus, in the year under review, GEA i.e. installed a plant for the production of high-quality fish protein in Ireland.

2016 also saw the launch of the EU project SABANA (Sustainable Algae Biorefinery for Agriculture and Aquaculture) under the auspices of the University of Almería, Spain, which aims to advance waste-product recycling. As an industry partner, GEA is investing its own process know-how in this joint venture by providing separators and other plant and equipment for the trial installation. In the biorefinery project, universities and companies from the fields of biotechnology and engineering are researching methods of binding nutrients such as carbonaceous, nitrogenous and phosphorous compounds extracted from urban and livestock wastewater in an algal biomass.

As a leading provider of process engineering to the dairy industry, GEA is striving to improve its automation and sensor technology in order to help dairy farmers make real gains in animal health, product quality, productivity and efficiency.

In the year under review, GEA became a technology partner of the EU's PLF project (Precision Livestock Farming) through its "CowView" product. In this project, agriculture, industry and research have joined hands to develop monitoring tools for use in cattle, pig and poultry husbandry that places animal health in the foreground. GEA CowView is capable of evaluating movement patterns of cattle in the stall in a matter of seconds. The farmer is notified immediately of any unusual behavior and can take prompt action to prevent illness and perhaps avoid treatment with antibiotics. In trials on farms, researchers and farmers alike have attested to the reliability and accuracy of the new technology.

In addition to the food and beverages industries, the extremely challenging pharmaceuticals sector is another important market for GEA and its successful solutions. This sector is particularly characterized by technological progress and thus demands outstanding innovative capacity from its suppliers.

As an innovator of leading-edge production processes in the pharmaceuticals industry, GEA is driving forward research into OSD technology (Oral Solid Dose). It includes the ConsiGma™ flexible continuous tableting line (CTL) developed by GEA, which attracted international commendation in the year under review. And in March 2016, GEA's customer Pfizer received the International Society for Pharmaceutical Engineering's "Facility of the Year" award for the prototype of this system – a PCMM machine (Portable, Continuous, Miniature, Modular) currently installed at the company's campus in Groton/Connecticut, USA. Here, the pharmaceuticals company is combining continuous production technology from GEA with portable clean-room containers. The PCMM is a fully autonomous, mobile system for continuous production that can be transported to any location required. In October 2016, GEA also pocketed the "Excellence in Pharma: Manufacturing Technology and Equipment" award for the ConsiGma™ at the CPhI Worldwide trade fair in Barcelona, Spain.

In 2016, adjusted expenditure on research and development amounted to EUR 87.8 million. These figures include refunded expenses totaling EUR 23.6 million that are recorded in the cost of sales. As such, the R&D ratio was 2.0 percent of revenue (previous year: 1.7 percent). Amortization of capitalized development projects amounted to EUR 19.0 million in the reporting period (previous year: EUR 10.2 million). The capitalized development costs amounted to EUR 29.7 million, compared with EUR 34.3 million a year earlier. Cash disbursements for research and development amounted to EUR 98.5 million, compared with EUR 100.6 million in the previous year.

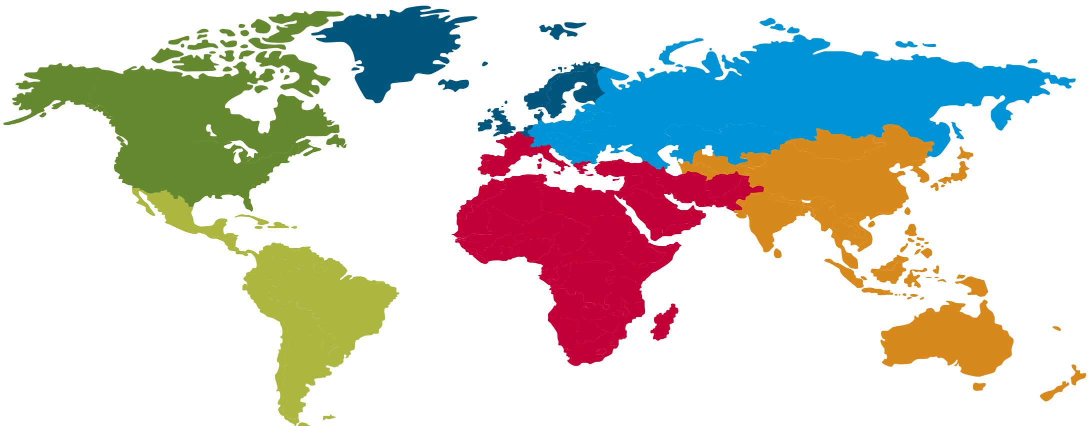
Research and development (R&D) (EUR million)	2016	2015	Change in %
Refunded expenses (contract costs)	23.6	10.8	> 100
Non-refunded R&D expenses after adjustments	64.2	65.8	–2.4
Total R&D expenses after adjustments	**87.8**	**76.5**	**14.7**
R&D ratio (as % of revenue)	**2.0**	**1.7**	**–**
Total R&D cash disbursements	**98.5**	**100.6**	**–2.1**
R&D ratio (as % of revenue)	**2.2**	**2.2**	**–**

Report on Economic Position

North America
1,709
804.6 million

North and Central Europe
2,924
663.8 million

DACH & Eastern Europe
6,301
902.1 million



Latin America
409
266.4 million

Western Europe, Middle East & Africa
2,727
805.0 million

Asia Pacific
2,867
1,050.1 million

= Employees (FTEs)
= Revenue

GEA in fiscal year 2016

The forecast for fiscal year 2016 assumed that demand in GEA's sales markets would moderately surpass the 2015 level. During the first half of the year, the International Monetary Fund (IMF) had to reduce its forecast for global economic growth, slightly downgrading the figures in the updates to the "World Economic Outlook" on two separate occasions (see page 24 f.). This was necessary mainly as a result of changing expectations for the industrialized nations, above all the USA, GEA's most important market. To a lesser degree, the forecast for the emerging economies had to be adjusted downwards as well. While China actually fared slightly better than had been predicted at the start of the year, economic growth in India lagged well behind expectations.

On October 19, 2016, GEA adjusted its forecast for the fiscal year 2016 as published in the 2015 Annual Report. Thus, GEA reduced its target from moderate growth to a moderate decline in revenue. The outlook for operating EBITDA was also reduced, namely from the order of EUR 645 to EUR 715 million down to around EUR 570 million, which includes the acquisition of Imaforni (around EUR 10 million). The outlook for the operating cash flow driver margin was reduced from the order of 10-11 percent to around 10.0 percent. The adjustments in predicted revenue growth were necessary on account of delays in the execution of projects largely on the customer side and mainly affecting the dairy processing sector, coupled with a contraction in revenue from cooling solutions for the oil and gas industry (Business Area Solutions). In the Business Area Equipment, limited revenue growth reflected the fall in organic revenue from the dairy farming sector. The downgraded outlook for both operating EBITDA and the operating cash flow driver margin is largely explained by reduced capacity utilization and cost overruns affecting several major projects.

The original forecast published in the 2015 Annual Report did not include the Imaforni acquisition in 2016. Adjusted for this acquisition, the decline in revenue amounted to 3.8 percent. Adjusted operating EBITDA thus amounted to EUR 553.0 million, while the corresponding operating cash flow driver margin was 9.4 percent. As such, GEA was not able to reach the targets implied in the original forecast. The targets in the adjusted October forecast were, however, met with respect to all indicators.

Growth rate projections	Revenue	Operating EBITDA	Operating Cash flow driver margin
Outlook 2016[1]	moderate growth	EUR 645 – 715 million	10.0% – 11.0% of evenue
Adjusted outlook[2] (October 19, 2016)	moderate decline	around EUR 570 million	around 10.0% of revenue
Actual 2016	**–2.3%**	**EUR 566.3 million**	**9.5%**

1) In the absence of any further weakening of global economic growth, provided that there are no significant exchange-rate fluctuations, and before 2016 acquisition
2) In the absence of any further weakening of global economic growth, provided that there are no significant exchange-rate fluctuations, and including approx. EUR 10 million from the acquisition Imaforni at operating EBITDA

On April 20, 2016, GEA Group Aktiengesellschaft's Annual General Meeting approved the proposal by the Supervisory Board and Executive Board to pay a dividend of EUR 0.80 per share for fiscal year 2015, up from EUR 0.70 per share. This means that the distribution to the shareholders was in line with the target of 40 to 50 percent of group earnings.

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 (UN) and the World Bank are other key indicators for the macroeconomic environment.

World Economic Outlook IMF		Outlook 2016							
	January 2016	April 2016		July 2016		October 2016		January 2017	
Worldwide	**3.4%**	**3.2%**	↓	**3.1%**	↘	**3.1%**	→	**3.1%**	→
Advanced economies	2.1%	1.9%	↓	1.8%	↘	1.6%	↓	1.6%	→
Emerging market and developing economies	4.3%	4.1%	↓	4.1%	→	4.2%	↗	4.1%	↘

↑ ≥ +0.2 percentage points ↗ +0.1 to +0.2 percentage points → –0.1 to +0.1 percentage points ↘ –0.1 to –0.2 percentage points ↓ ≤ –0.2 percentage points

According to the IMF, however, the absence of change in the average global growth rate is masking growth discrepancies in the various country groups. As such, the IMF has identified lower rates of growth for the industrialized nations compared with a year ago, with the USA displaying the most marked stall in growth over the 12-month period. By contrast, the IMF has announced that it expects growth in the emerging economies to remain at a similar level to the previous year, i.e. 4.1 percent in 2016.

World Economics Situation and Prospects UN		Outlook 2016	
	January 2016	May 2016	January 2017
Worldwide	**2.9%**	**2.4%**	**2.2%**
Developed economies	2.2%	1.8%	1.5%
Developing economies	4.3%	3.8%	3.6%

≥ +0.2 percentage points +0.1 to +0.2 percentage points –0.1 to +0.1 percentage points –0.1 to –0.2 percentage points ≤ –0.2 percentage points

In its "World Economic Situation and Prospects 2016" report, the United Nations predicted the lowest growth rate since the 2009 recession. The sluggish global economic trend was being underpinned by weak investment, diminishing growth in global trade, flagging productivity, and high debt. According to the UN, low commodity prices have exacerbated the situation for many exporters over the last two years, while conflicts and geopolitical tension in various areas of the world have only made matters worse.

Global Economic Prospects World Bank		Outlook 2016	
	January 2016	June 2016	January 2017
Worldwide	**2.9%**	**2.4%**	**2.3%**
Advanced economies	2.1%	1.7%	1.6%
Emerging and developing economies	4.8%	3.5%	3.4%

≥ +0.2 percentage points +0.1 to +0.2 percentage points –0.1 to +0.1 percentage points –0.1 to –0.2 percentage points ≤ –0.2 percentage points

And the World Bank's outlook is similar in tenor to that of the UN. Thus, global growth is set to slow to a "post-crisis low-point" on the back of flagging global trade, sluggish investment, and an increasingly uncertain political situation.

Significant changes

"Fit for 2020" project

GEA completed the implementation of its new group structure – developed within the framework of the "Fit for 2020" project – including the transfer of certain administrative tasks to Shared Service Centers according to schedule. Following a fundamental organizational change, the group has fewer levels of hierarchy and a considerably flatter structure, while being much closer to customers on account of its unified country organizations.

As part of this new structure, the development and manufacturing of products and the provision of process solutions were bundled in two business areas – Equipment and Solutions (see page 14 f.). GEA hopes to generate greater synergies across technologies and applications and promote functional excellence by standardizing its 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. With this new structure, GEA aims to make substantial savings and foster further growth.

Throughout 2016, a raft of defined measures was consistently implemented in an effort to bring the program to a close. Thanks to these measures, the savings initiative is proceeding according to plan. Following savings of EUR 23 million in 2015, the goal of around EUR 80 million for the end of 2016 was also met. The net reduction in global personnel capacity of around 1,450 equivalents earmarked by the restructuring initiative has now been accomplished or contractually agreed. With the new organization going from strength to strength, the "Fit for 2020" project is now officially closed.

Acquisitions

On February 2, 2016, GEA concluded an agreement to take over Imaforni S.p.A., a leading supplier of high-tech plant and equipment for pastry production. With head offices in Verona, Italy, the company has around 200 employees and generated revenue of some EUR 85 million in fiscal year 2015. The takeover will reinforce GEA's "Application Center Bakery" by adding complex production lines, especially for biscuits and crackers. The takeover was completed on April 1, 2016 (see page 155 ff.).

Management

Dr. Stephan Petri, formerly a member of the Executive Board, left the company with effect from June 30, 2016 by mutual agreement with the Executive Board and the Supervisory Board in order to take up new challenges outside GEA. His former duties, including the function of Labor Relations Director, were taken over to a large extent by Jürg Oleas, Chairman of the Executive Board of GEA, with effect from 1 July 2016. The remaining duties were divided among the other board members. Thus, GEA will be managed by a team of four Executive Board members in the future (see page 222).

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 reports respectively 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

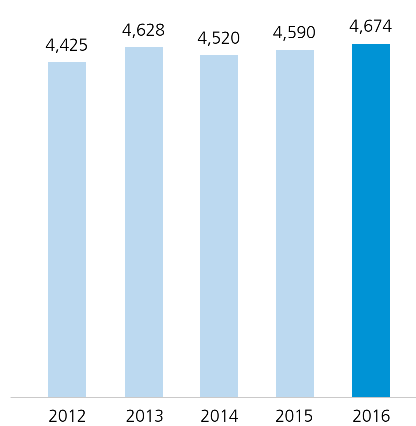
The group's order intake rose to EUR 4,673.6 million in full-year 2016. Adjusted for exchange rate fluctuations and acquisition effects (minus 1.7 and plus 2.0 percent respectively), growth increased by 1.4 percent. Although the increase mainly affected volumes in the EUR 5 to EUR 30 million order range, orders valued at between EUR 1 and EUR 5 million posted growth too.

Order intake (EUR million)	2016	2015	Change in %	Adjusted growth in %
BA Equipment	2,346.8	2,293.0	2.3	3.3
BA Solutions	2,534.6	2,495.6	1.6	–0.1
Total	**4,881.4**	**4,788.6**	**1.9**	**1.5**
Consolidation/others	–207.8	–198.5	–4.7	–
GEA	**4,673.6**	**4,590.1**	**1.8**	**1.4**

A reticent approach to investment was felt in the beverages and dairy farming customer industries, in pharmaceuticals, marine, as well as oil and gas. However, the sluggish performance in these industries was more than compensated by double-digit growth in foods and chemicals.

At a regional level, North and Latin America each posted particularly gratifying double-digit growth figures. Mexico, New Zealand and India each posted outstanding growth rates of more than 90 percent, while the emerging economies recorded above-average organic growth of 8.7 percent.

Order intake for the last 5 years
(EUR million)



Order intake by applications GEA

	Change 2016 to 2015	Share of order intake
Dairy Farming	⬇	12%
Dairy Processing	↘	21%
Food	⬆	27%
Beverages	⬇	11%
Food/Beverages	➡	**71%**
Pharma/Chemical	↘	14%
Other Industries	⬆	15%
Others	⬆	**29%**
GEA	↗	**100%**

⬆ > 5 percentage points ↗ 1 to 5 percentage points ➡ 1 to –1 percentage points ↘ –1 to –5 percentage points ⬇ < –5 percentage points

The largest major orders worth over EUR 30 million were won by the Business Area Solutions in the form of two dairy orders for customers in Eastern Europe and New Zealand with a combined value of approximately EUR 120 million. In the previous year, five major orders were received for almost EUR 260 million.

Order backlog

Expressed in terms of the order intake for the fiscal year, the order backlog as of December 31, 2016 amounted to 5.8 months (previous year: 5.4 months). In line with the different types of business performed, the order backlog ranges from around 3 months in the Business Area Equipment to around 8 months in the Business Area Solutions.

Order backlog (EUR million)	12/31/2016	12/31/2015	Change in %	Change (absolute)
BA Equipment	567.4	501.9	13.0	65.5
BA Solutions	1,742.5	1,585.4	9.9	157.1
Total	**2,309.9**	**2,087.3**	**10.7**	**222.6**
Consolidation/others	–45.8	–33.5	–36.6	–12.3
GEA	**2,264.0**	**2,053.7**	**10.2**	**210.3**

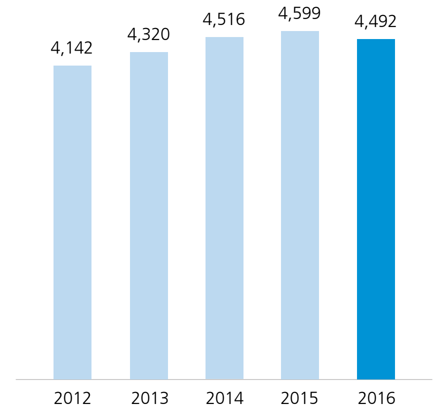
Revenue

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.

Adjusted for exchange rate fluctuations and acquisition effects (minus 1.6 and plus 2.4 percent respectively), revenue in 2016 was 3.1 percent below the figure for the previous year. The share of revenue enjoyed by service business rose from 29.4 percent to 30.9 percent. Adjusted growth in this business amounted to a gratifying 3.6 percent in the reporting period.

Sales (EUR million)	2016	2015	Change in %	Adjusted growth in %
BA Equipment	2,262.2	2,323.7	–2.6	–1.8
BA Solutions	2,425.7	2,475.2	–2.0	–4.4
Total	**4,687.9**	**4,798.9**	**–2.3**	**–3.2**
Consolidation/others	–196.0	–199.6	1.8	–
GEA	**4,491.9**	**4,599.3**	**–2.3**	**–3.1**

Revenue for the last 5 years
(EUR million)



The book-to-bill ratio, the ratio of order intake to revenue, was 1.04 in 2016 (previous year: 1.0).

The beverages and dairy farming end markets, along with the oil and gas as well as the marine industries were especially hard-hit by the decline in revenue. By contrast, a markedly positive trend was noted in the pharma/chemical customer industry.

The decline in revenue was felt virtually across the board, albeit with some regions affected more severely than others. Only Western Europe and Middle East & Africa posted growth in revenue.

Revenue by applications GEA

	Change 2016 to 2015	Share of revenue
Dairy Farming	↓	12%
Dairy Processing	↓	20%
Food	↑	25%
Beverages	↓	13%
Food/Beverages	↓	**70%**
Pharma/Chemical	↑	15%
Other Industries	↓	15%
Others	↗	**30%**
GEA	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Revenue by regions GEA

	Change 2016 to 2015	Share of revenue
Asia Pacific	↓	23%
DACH & Eastern Europe	↘	20%
Western Europe, Middle East & Africa	↑	18%
North and Central Europe	↘	15%
Latin America	↘	6%
North America	↘	18%
GEA	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Business Area Equipment

On a constant exchange rate basis and before acquisition effects, revenue in the Business Area Equipment declined by 1.8 percent, mainly as a result of developments in the dairy farming and dairy processing customer industries and in the marine sector. By contrast, an extremely positive trend was noted in the pharma sector.

Most affected by the decline in sales were the regions of Latin and North America. As before, the most significant sales regions are North America, DACH & Eastern Europe, and Asia Pacific which all enjoy a share of the revenue of over 20 percent.

Adjusted for exchange rates and acquisitions, the service business recorded growth of 1.7 percent in the reporting period, with its share of total revenue amounting to 39.1 percent (previous year: 37.9 percent).

Revenue by applications Business Area Equipment	Change 2016 to 2015	Share of revenue
Dairy Farming	↓	27%
Dairy Processing	↓	9%
Food	↘	31%
Beverages	↑	7%
Food/Beverages	↓	**74%**
Pharma/Chemical	↑	7%
Other Industries	↘	20%
Others	↗	**26%**
Business Area Equipment	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Revenue by regions Business Area Equipment	Change 2016 to 2015	Share of revenue
Asia Pacific	↘	21%
DACH & Eastern Europe	↘	21%
Western Europe, Middle East & Africa	↘	17%
North and Central Europe	↘	13%
Latin America	↓	6%
North America	↘	23%
Business Area Equipment	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Business Area Solutions

Adjusted for exchange rate and acquisition effects, the revenue volume in the Business Area Solutions fell by 4.4 percent in the year under review. This was mainly due to delays in the execution of projects in the dairy processing sector and a drop in revenue from projects carried out for the oil and gas industry, and it could not be fully compensated by revenue growth in the food customer industry and in the chemical sector.

Viewed in regional terms, Asia Pacific was hardest hit by the fall in revenue. Bucking the above trend were Western Europe, Middle East & Africa, which performed pleasingly well. The most important region of this Business Area remains Asia Pacific with a share of revenue of more than 25 percent.

The service business recorded highly commendable growth of 6.8 percent after adjustments for exchange rates and acquisitions. The business area's share of total revenue increased from 20.4 percent to 22.3 percent.

Revenue by applications Business Area Solutions	Change 2016 to 2015	Share of revenue
Dairy Farming	–	0%
Dairy Processing	↓	29%
Food	↑	21%
Beverages	↓	18%
Food/Beverages	↓	**67%**
Pharma/Chemical	↑	22%
Other Industries	↓	11%
Others	↗	**33%**
Business Area Solutions	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Revenue by regions Business Area Solutions	Change 2016 to 2015	Share of revenue
Asia Pacific	↓	26%
DACH & Eastern Europe	→	19%
Western Europe, Middle East & Africa	↑	19%
North and Central Europe	↘	17%
Latin America	↗	6%
North America	↘	14%
Business Area Solutions	↘	**100%**

↑ > 5 percentage points ↗ 1 to 5 percentage points → 1 to –1 percentage points ↘ –1 to –5 percentage points ↓ < –5 percentage points

Results of operations, financial position and net assets

Results of operations

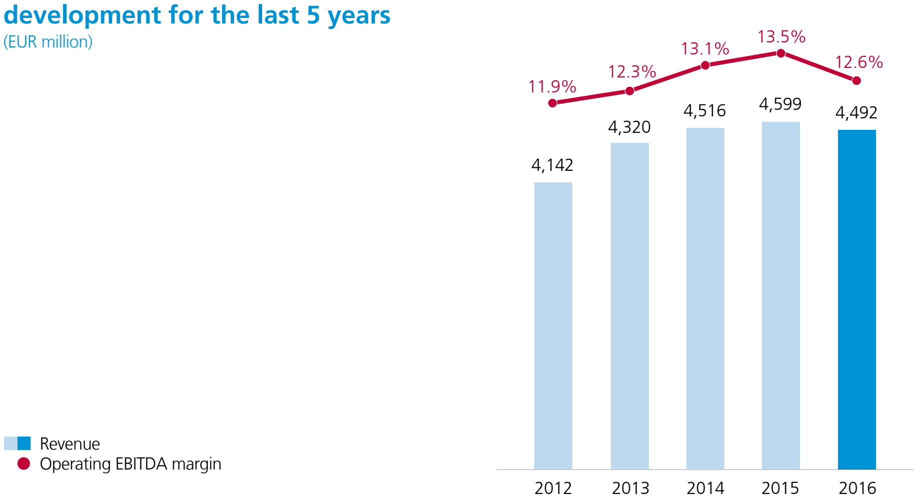
GEA is committed to its policy of consciously selecting orders on the basis of their price quality and contract terms. This is reflected in the multi-stage approval process for major customer projects.

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 206 f.). As such, the operating EBIT figure for 2016 was adjusted by EUR 68.3 million in total.

EBITDA improved by EUR 70.8 million year on year largely due to high expenditure on strategy projects and restructuring measures in the year before. Adjusted for the above-mentioned expenditure on strategy projects and for the effects of purchase price allocation, operating EBITDA ran to EUR 566.3 million, i.e. EUR 54.7 million below the prior-year level. The main reason for this trend was the drop in earnings in the Business Area Solutions which could not be fully offset. As a result, the operating EBITDA margin fell by around 90 basis points to 12.6 percent of revenue.

Operating EBITDA margin and revenue development for the last 5 years

(EUR million)



In the fiscal year 2016, the method of allocating intra-group services was aligned to the new group structure. In addition, an updated arm's length comparison revealed that the intra-group trademark fee charged by GEA Group Aktiengesellschaft to key manufacturing companies needed to be increased. This adjustment to internal price allocation gave rise to a change in the way earnings are reported between the Business Areas and companies outside the Business Areas. This change was the primary reason for the improvement in earnings of the group's "Other companies" compared with the previous year.

Business Area Equipment

At EUR 383.5 million, operating EBITDA in the Business Area Equipment was slightly up on the prior-year figure despite a decline in capacity utilization in milking, dairy farming and compression. The result was largely due to service business accounting for a bigger share of earnings, margin improvements in Food Processing & Packaging and Homogenizers, and savings generated by the "Fit for 2020" project. The premature termination of an adverse leasing contract also helped boost earnings. All told, the operating EBITDA margin improved by more than 50 basis points to 17.0 percent of revenue. Thus, the Business Area Equipment posted record highs in terms of both operating EBITDA and operating EBITDA margin.

Business Area Solutions

In the year under review, the Business Area Solutions posted a fall in operating EBITDA of EUR 71.8 million due to cost increases and delays affecting several major projects, and as a result of contracting oil and gas business in the field of cooling solutions. Accordingly, the operating EBITDA margin fell by 275 basis points.

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

Operating EBITDA/operating EBITDA margin* (EUR million)	2016	2015	Change in %
BA Equipment	383.5	381.8	0.4
as % of revenue	17.0	16.4	–
BA Solutions	183.5	255.3	–28.1
as % of revenue	7.6	10.3	–
Total	**567.0**	**637.1**	**–11.0**
as % of revenue	**12.1**	**13.3**	**–**
Consolidation/others	–0.7	–16.2	95.4
GEA	**566.3**	**621.0**	**–8.8**
as % of revenue	**12.6**	**13.5**	**–**

*) Before effects of purchase price allocations and adjustments (see page 206 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)	2016	2015	Change in %
Operating EBITDA*	**566.3**	**621.0**	**–8.8**
Realization of step-up amounts on inventories	–0.6	–1.2	–
Adjustments	–65.1	–190.0	–
EBITDA	**500.6**	**429.8**	**16.5**
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	–113.4	–119.4	–
Other impairment losses and reversals of impairment losses	–0.1	–1.0	–
EBIT	**387.0**	**309.4**	**25.1**
Depreciation and amortization on capitalization of purchase price allocation	33.3	26.9	–
Impairment losses and reversals on capitalization of purchase price allocation	–4.3	3.9	–
Realization of step-up amounts on inventories	0.6	1.2	–
Adjustments	68.3	197.4	–
Operating EBIT*	**485.0**	**538.8**	**–10.0**

*) Before effects of purchase price allocations and adjustments (see page 206 f.)

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

Operating EBIT/operating EBIT margin* (EUR million)	2016	2015	Change in %
BA Equipment	326.0	326.8	–0.2
as % of revenue	14.4	14.1	–
BA Solutions	164.3	234.8	–30.0
as % of revenue	6.8	9.5	–
Total	**490.3**	**561.7**	**–12.7**
as % of revenue	**10.5**	**11.7**	**–**
Consolidation/others	–5.3	–22.8	76.8
GEA	**485.0**	**538.8**	**–10.0**
as % of revenue	**10.8**	**11.7**	**–**

*) Before effects of purchase price allocations and adjustments (see page 206 f.)

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

Key figures: Results of operations (EUR million)	2016	2015	Change in %
Revenue	4,491.9	4,599.3	–2.3
Operating EBITDA*	566.3	621.0	–8.8
EBITDA	500.6	429.8	16.5
Operating EBIT*	485.0	538.8	–10.0
EBIT	387.0	309.4	25.1
Interest	36.8	39.4	–6.6
EBT	350.2	270.0	29.7
Income taxes	81.6	5.8	> 100
Profit after tax from continuing operations	268.6	264.2	1.6
Profit after tax from discontinued operations	16.0	97.6	–83.6
Profit for the period	284.6	361.9	–21.4

*) Before effects of purchase price allocations and adjustments (see page 206 f.)

Net interest income for the year as a whole improved slightly by EUR 2.6 million compared with the previous year. This was primarily due to lower bank interest payments due to the premature repayment of a loan from the European Investment Bank in the first quarter of 2015 coupled with timely repayment of the non-callable bond in the second quarter of 2016. By contrast, interest expenses arising from the discounting of other provisions increased slightly.

Mainly as a result of the high outlay on strategic projects in the previous year, EBT in full-year 2016 amounted to EUR 350.2 million, i.e. EUR 80.2 million above the previous year's figure. The corresponding EBT margin improved to 7.8 percent.

Income on discontinued operations amounting to EUR 16.0 million was largely due to mitigated or eliminated risks and liabilities from the sale of GEA's Heat Exchangers Segment and the former chemicals division. Eliminated risks and a settlement reached at Lentjes were other positive contributions to earnings. In the previous year, the considerable income from discontinued operations was mainly attributable to the settlement of a dispute in connection with the former business activities of mg technologies ag.

The income tax expense of EUR 81.6 million in fiscal year 2016 (previous year: EUR 5.8 million) comprised current tax expenses of EUR 57.8 million (previous year: EUR 61.4 million) and deferred taxes of EUR 23.8 million (previous year: EUR 55.7 million deferred tax income). The tax rate amounted to 23.3 percent in the reporting year (previous year: 2.1 percent).

Consolidated profit in the full year amounted to EUR 284.6 million (previous year: EUR 361.9 million); once again, almost all of this amount was attributable to GEA Group Aktiengesellschaft shareholders in 2016. Taking into account the unchanged average number of shares compared with the previous year (192,495,476) this corresponds to earnings per share of EUR 1.48 (previous year: EUR 1.88).

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 42 ff.).

The Executive Board and Supervisory Board are proposing to pay the same dividend as in the previous year, i.e. EUR 0.80 per share. As such, the target distribution to shareholders of 40 to 50 percent of group earnings communicated in 2014 will be exceeded slightly.

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	12/31/2016 approved	12/31/2016 utilized
European Investment Bank	July 2017	50	50
Borrower's note loan	September 2017	90	90
Syndicated credit line ("Club Deal")	August 2021	650	–
Various (bilateral) credit lines including accured interests	Maximum of 1 year or "until further notice"	66	7
Total		**856**	**146**

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. The centralized liquidity portfolio is managed mainly for capital preservation and risk reduction by diversifying the cash investments.

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 16 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.

As of December 31, 2016, net liquidity (including discontinued operations) was EUR 199.4 million down on the previous year's level. This was due in particular to acquisitions and the payment of expenses for strategic projects already posted in 2015.

Overview of net liquidity incl. discontinued operations (EUR million)	12/31/2016	12/31/2015
Cash and cash equivalents	929.1	1,174.2
Fixed deposits with a remaining period ≤ 1 year	–	200.0
Securities	–	37.0
Liabilities to banks	146.5	146.5
Bonds	–	282.7
Net liquidity (+)/Net debt (–)	**782.6**	**982.0**
Gearing (%)	–26.1	–34.5

Cash and cash equivalents fell to EUR 929.1 million as of December 31, 2016, compared with EUR 1,174.2 million as of the end of the previous year. Liabilities to banks (EUR 55.8 million) and from borrower's note loans (EUR 90,7 million, including accrued interest) totaled only EUR 146.5 million (previous year: EUR 429.1 million) as of December 31, 2016. This was due to the timely repayment of the non-callable bond in the second quarter of the year.

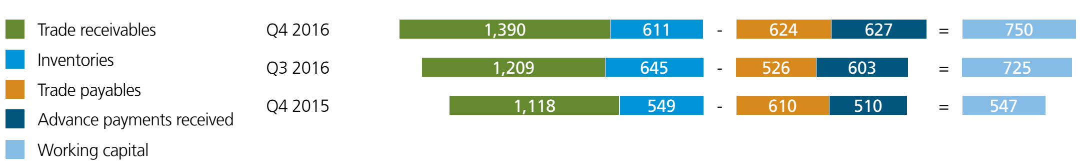
Detailed information on the maturity, currency, and interest rate structure of debt financing can be found in the notes to the consolidated financial statements (see pages 148 ff. and 184 ff.).

Guarantee lines – which are mainly for contract performance, advance payments, and warranties – of EUR 1,265.5 million (December 31, 2015: EUR 1,463.4 million) were available to GEA as of the reporting date, of which EUR 475.2 million (December 31, 2015: EUR 481.4 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 203).

Change in Working Capital (continued operations)

(EUR million)

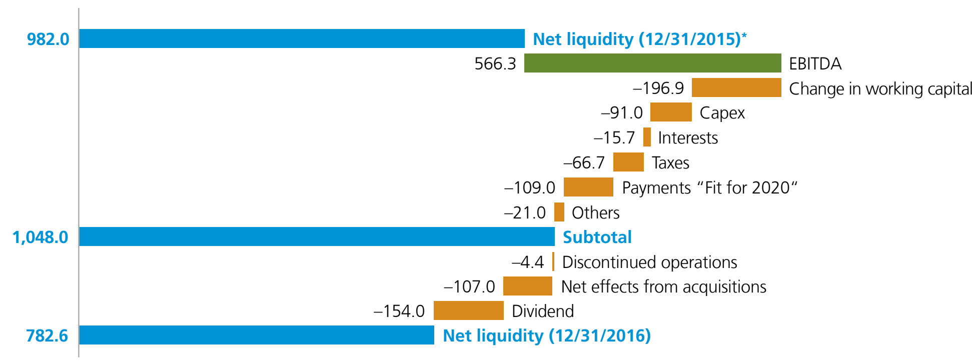


The EUR 203.1 million year-on-year increase in working capital from continued operations was attributable in more or less equal measure to the Business Area Equipment and the Business Area Solutions. Both trade receivables and inventories posted increases. Working capital was reduced, however, due to the rise in advance payment volumes. The ratio of average working capital to revenue increased from 13.1 percent to 14.5 percent.

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

Change in net liquidity

(EUR million)

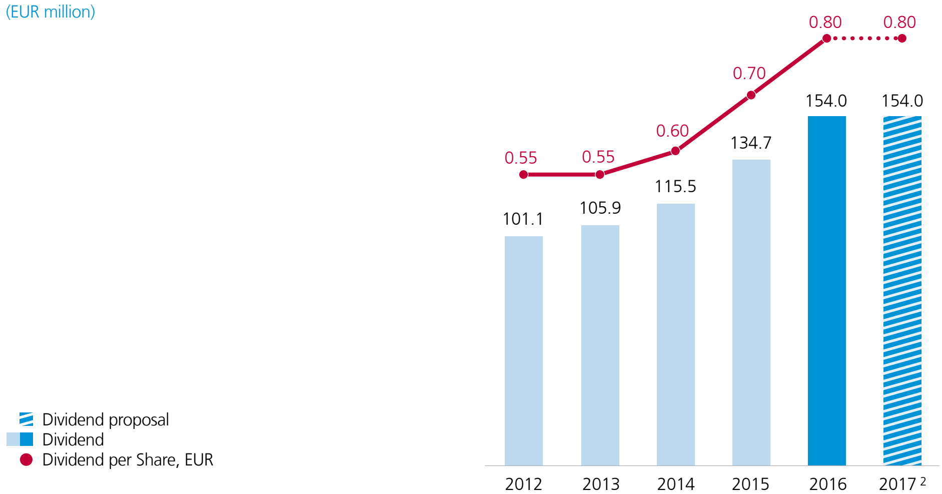


*) Including fixed deposits with a remaining period ≤ 1 year (EUR 200 million)

At EUR 154.0 million, GEA Group Aktiengesellschaft's dividend payout in fiscal year 2016 was the highest on record. With the number of shares unchanged, the more than 14 percent rise derived from the increase in the dividend per share from EUR 0.70 to EUR 0.80.

Dividend payments[1] for the last 5 years and dividend proposal

(EUR million)



1) Dividend payments respectively for the preceding fiscal year
2) On basis of dividend proposal and based on shares, which were issued by GEA Group Aktiengesellschaft on December 31, 2016 (subject to correction due to the decided share buyback program)

The consolidated cash flow statement can be summarized as follows:

Overview of cash flow statement (EUR million)	2016	2015	Change absolute
Cash flow from operating activities	161.2	324.7	–163.6
Cash flow from investing activities	56.3	–196.1	252.4
Free cash flow	**217.5**	**128.6**	**88.9**
Cash flow from financing activities	–459.8	–270.3	–189.5
Net cash flow from disposal group GEA Heat Exchangers	–0.7	–3.8	3.1
Net cash flow other discontinued operations	–3.7	124.2	–127.9
Change in unrestricted cash and cash equivalents	–244.8	–21.7	–223.1

Cash flow from operating activities attributable to continued operations amounted to EUR 161.2 million in the year under review, down EUR 163.5 million on the previous year (EUR 324.7 million). Although EBITDA improved by EUR 70.8 million, this was offset by outlay for strategic projects and higher liquidity outflow from the rise in working capital (EUR –83.8 million).

Cash flow from investing activities attributable to continued operations amounted to EUR 56.3 million in the reporting period (previous year: EUR –196.1 million). The figure includes outflows for company acquisitions in the reporting year of EUR 107.0 million, and EUR 91.0 million for capital expenditure on property, plant, and equipment, and intangible assets (previous year: EUR 119.7 million and EUR 90.7 million respectively). This was offset by inflows from maturing term deposits amounting to EUR 200.0 million and from the sale of an EONIA bond (EUR 37.0 million).

Cash flow from financing activities attributable to continued operations reflected the dividend payout (EUR 154.0 million) and, in particular, the timely repayment of the non-callable bond (EUR 274.7 million) in the second quarter. In the previous year, this balance-sheet item also included the dividend payout, in addition to the early repayment of the EUR 100.0 million loan from the European Investment Bank (EIB).

At EUR –4.4 million, cash flow from discontinued operations all but broke even. In the previous year, this indicator was characterized largely by inflows from the settlement of a dispute in connection with the former business activities of mg technologies ag.

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 (operating 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.

Operating cash flow driver/operating cash flow driver margin (EUR million)	12/31/2016	12/31/2015	Change in %
Operating EBITDA (last 12 months)	566.3	621.0	–8.8
Capital expenditure on property, plant and equipment (last 12 months)	–91.0	–90.7	0.4
Change in working capital (average of the last 12 months)	–48.2	–54.5	–11.4
Operating cash flow driver (operating EBITDA – capex –/+ change in working capital)	**427.0**	**475.8**	**–10.3**
as % of revenue (last 12 months)	**9.5**	**10.3**	**–**

The chief reason for the decline in this indicator was the EUR 54.7 million fall in operating EBITDA compared with 2015, this contrasting slightly with the effect from the rise in average working capital.

Net assets

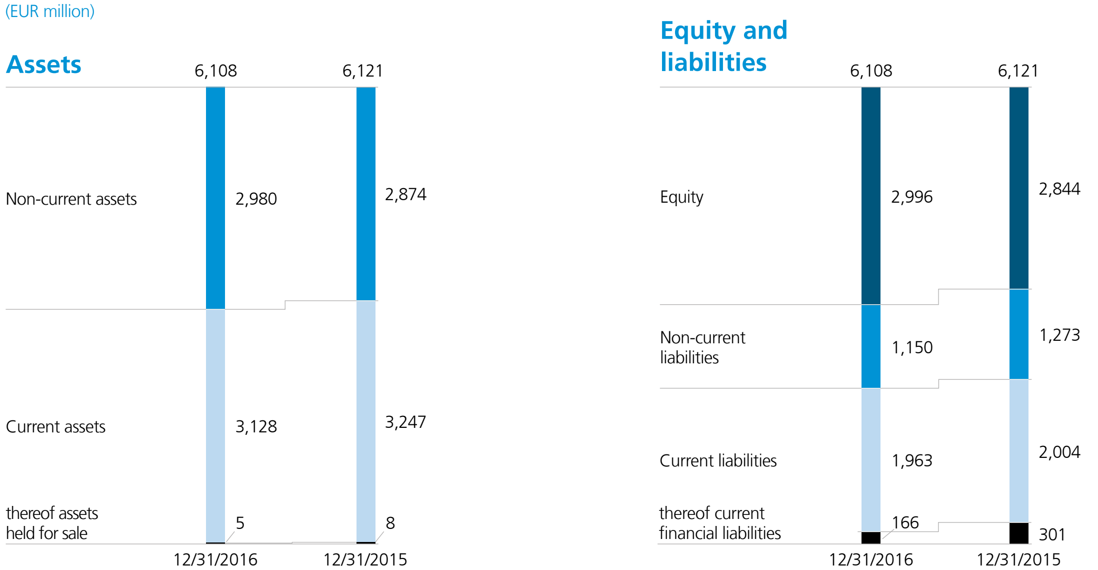
Condensed balance sheet (EUR million)	12/31/2016	as % of total assets	12/31/2015	as % of total assets	Change in %
Assets					
Non-current assets	2,979.8	48.8	2,873.9	46.9	3.7
thereof goodwill	1,505.6	24.7	1,431.5	23.4	5.2
thereof deferred taxes	502.1	8.2	491.1	8.0	2.2
Current assets	3,128.1	51.2	3,247.3	53.1	–3.7
thereof cash and cash equivalents	929.1	15.2	1,174.2	19.2	–20.9
thereof assets held for sale	5.4	0.1	8.1	0.1	–33.5
Total assets	**6,107.9**	**100.0**	**6,121.2**	**100.0**	**–0.2**
Equity and liabilities					
Equity	2,995.6	49.0	2,844.2	46.5	5.3
Non-current liabilities	1,149.8	18.8	1,272.6	20.8	–9.7
thereof financial liabilities	10.2	0.2	177.0	2.9	–94.2
thereof deferred taxes	144.9	2.4	111.2	1.8	30.4
Current liabilities	1,962.6	32.1	2,004.4	32.7	–2.1
thereof financial liabilities	165.7	2.7	300.7	4.9	–44.9
Total equity and liabilities	**6,107.9**	**100.0**	**6,121.2**	**100.0**	**–0.2**

The minor contraction in total assets of EUR 13.3 million is primarily due to the decrease in cash funds, maturing term deposits, and the sale of an EONIA bond. However, both trade receivables and inventories posted increases. The acquisition of Imaforni gave rise to an increase in intangible assets, too. The ratio of non-current to current assets shifted further in favor of non-current assets.

Equity increased significantly by EUR 151.4 million. The improvement in this balance sheet item was due to the consolidated profit of EUR 284.6 million, as well as to currency translation effects (EUR 45.4 million). This was offset by the dividend payment of EUR 154.0 million and the effect of a change in the interest rate applied to the measurement of pension obligations (EUR 25.3 million). The equity ratio improved significantly by 2.5 percentage points compared with that of December 31, 2015, to 49.0 percent.

Non-current liabilities were significantly reduced as a result of reclassification of the EIB loan and of the borrower's note loan for maturity reasons. Within current liabilities, the above-mentioned maturity-related reclassifications, together with the timely repayment of the non-callable bond (EUR 274.7 million) in the second quarter of 2016 served to reduce the balance-sheet total, whereas higher advance payment volumes increased it.

Comparison of net assets (2016 vs. 2015)
(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 2016.

In the context of the former mining activities of mg technologies ag, provisions had to be increased as a result of changes in the discount rate used to measure non-current liabilities. In contrast, the risks relating to the sale of Lentjes decreased further, meaning that the provisions recognized for this could be reversed. Also, a settlement concluded at Lentjes made a positive contribution to income.

Employees

With its “Fit for 2020” project, GEA established an organizational framework that will ensure future competitiveness and facilitate the implementation of growth targets in an increasingly challenging market environment. Although flatter hierarchies and a heavily streamlined, centralized administration necessitated job cuts, these were effected in a socially acceptable manner.

There were 16,937 employees as of December 31, 2016. This represents a decrease of 597 employees compared with December 31, 2015 (17,533 employees). Acquisitions and other changes in the basis of consolidation increased the number of employees by 269. Adjusted for these effects, total job-cuts amounted to 866 full-time equivalents, of which a large part is attributable to the “Fit for 2020” project.

Adjusted for acquisitions and other changes in the basis of consolidation, the reduction in workforce numbers was spread over all operating regions with the exception of Latin America, with DACH & Eastern Europe, and North and Central Europe bearing the brunt of the cuts. The regional spread of employees has not changed to any great extent.

Employees* by region	12/31/2016	in %	12/31/2015	in %
DACH & Eastern Europe	6,301	37.2	6,667	38.0
North and Central Europe	2,924	17.3	3,118	17.8
Asia Pacific	2,867	16.9	2,901	16.5
Western Europe, Middle East & Africa	2,727	16.1	2,664	15.2
North America	1,709	10.1	1,829	10.4
Latin America	409	2.4	355	2.0
Total	**16,937**	**100.0**	**17,533**	**100.0**

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

Workforce by regions and gender*	12/31/2016	
(in %)	share of men	share of women
DACH & Eastern Europe	82.0	18.0
North and Central Europe	83.8	16.2
Asia Pacific	85.0	15.0
Western Europe, Middle East & Africa	83.4	16.6
North America	86.6	13.4
Latin America	79.2	20.8
Total	**83.4**	**16.6**

*) Database: 15,343 employees. Due to the change in software infrastructure resulting from OneGEA, not all personnel records are available yet (2016 – 91 percent). In 2017, a new personnel management system will remedy this situation. From then on, it will be possible to provide reliable information about the breakdown of the active workforce by part-time/full-time employees as well as age groups.

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 98 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)	12/31/2016	as % of total assets	12/31/2015	as % of total assets
Assets				
Intangible fixed assets	5.3	0.1	3.8	0.1
Tangible fixed assets	1.7	–	1.6	–
Long-term financial assets	2,394.6	57.4	2,600.5	55.8
Fixed assets	**2,401.6**	**57.5**	**2,605.9**	**55.9**
Receivables and other assets	1,122.8	26.9	910.4	19.5
thereof Receivables from affiliated companies	1,102.1	26.4	882.6	19.0
thereof Other assets	20.7	0.5	27.8	0.6
Securities	–	–	37.0	0.8
Cash	648.2	15.5	1,100.5	23.6
Current assets	**1,771.0**	**42.4**	**2,047.9**	**44.0**
Prepaid expenses	**2.6**	**0.1**	**3.1**	**0.1**
Total	**4,175.2**	**100.0**	**4,656.9**	**100.0**
Equity and liabilities				
Subscribed capital	520.4	12.5	520.4	11.2
Capital reserves	250.8	6.0	250.8	5.4
Revenue reserves	836.7	20.0	731.7	15.7
Net retained profits	155.1	3.7	154.4	3.3
Equity	**1,763.0**	**42.2**	**1,657.3**	**35.6**
Provisions	**284.5**	**6.8**	**295.9**	**6.4**
Bonds	–	–	274.7	5.9
Liabilities to banks	140.0	3.4	140.0	3.0
Liabilities to affiliated companies	1,981.5	47.5	2,272.3	48.8
Other liabilities	6.1	0.1	16.0	0.3
Liabilities	**2,127.6**	**51.0**	**2,703.0**	**58.0**
Deferred income	**0.1**	**–**	**0.7**	**–**
Total	**4,175.2**	**100.0**	**4,656.9**	**100.0**

The contraction in total assets of EUR 481.7 million compared with the previous year is chiefly the result of a reduction in long-term loans to affiliated companies in the amount of EUR 205.9 million and a EUR 452.3 million fall in cash funds that was chiefly the result of the bond repayment in the amount of EUR 274.7 million. By contrast, receivables from affiliated companies rose by EUR 219.5 million to EUR 1,102.1 million. In addition, liabilities to affiliated companies fell by EUR 290.8 million to EUR 1,981.5 million as part of group financing.

Net income for the fiscal year of EUR 259.6 million less the dividend of EUR 153.9 million paid out in fiscal year 2016 led to the EUR 105.7 million increase in equity to EUR 1,763.0 million. The equity ratio increased by 6.6 percentage points to 42.2 percent.

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)	12/31/2016	in %	12/31/2015	in %
Revenue	136.4	52.5	–	–
Other operating income	157.9	60.8	435.1	305.1
Cost for purchased Services	–91.4	–35.2	–	–
Personnel expenses	–40.1	–15.4	–38.7	–27.1
Amortization amd writedowns of intangible fixed assets and depreciation and writedowns of tangible fixed assets	–1.4	–0.5	–0.8	–0.6
Other operating expenses	–183.7	–70.8	–308.2	–216.1
Investment income	291.4	112.2	66.2	46.4
Net interest income	–5.8	–2.2	5.8	4.1
Taxes on income	–3.7	–1.4	–16.2	–11.4
Net income after income tax	**259.6**	**100.0**	**143.2**	**100.4**
Other tax expenses	0.0	–	–0.6	–0.4
Net income for the fiscal year	**259.6**	**100.0**	**142.6**	**100.0**
Retained profits brought forward	0.5	0.2	1.8	1.3
Withdrawals from other revenue reserves	–	–	10.0	7.0
Appropriation to other revenue reserves	–105.0	–40.4	–	–
Net retained profits	**155.1**	**59.7**	**154.4**	**108.3**

Changes to BilRUG (the Federal Act to Implement Directive 2013/34/EU on Annual Financial Statements) mean that for the first time, certain items of other operating income will be reported as revenue in the income statement of GEA Group Aktiengesellschaft. These items essentially comprise charges amounting to EUR 109.8 million that were allocated to subsidiaries in the course of the fiscal year 2016 to cover Global Corporate Center and Shared Service Center functions, together with income from the trademark fee of EUR 24.1 million. In the previous year, similar items totaling EUR 31.5 million had been reported under other operating income. The 2016 increase in these income items was primarily due to the system of allocating intra-group services being aligned to the new group structure. In this modified system, most services rendered by group companies are initially charged to GEA Group Aktiengesellschaft before being passed on to subsidiaries in the form of intragroup allocations. In addition, the rate for the intra-group trademark fee was raised in 2016 following an updated arm's length comparison.

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 131.0 million (previous year: EUR 229.8 million) and losses of EUR 122.5 million (previous year: EUR 223.7 million) resulted in net exchange rate gains of EUR 8.5 million (previous year: EUR 6.1 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 73.1 million) or by external service providers (EUR 18.0 million) for carrying out Global Corporate Center and Shared Service Center functions.

In addition to currency translation losses, other operating expenses mainly comprise the outlays for expert opinions and consulting, as well as 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 Wiegand GmbH, GEA TDS GmbH, and GEA Refrigeration Germany GmbH. Expenses for loss absorption mainly comprise assumed losses from GEA Farm

Technologies GmbH, GEA Real Estate GmbH, mg Altersversorgung GmbH, GEA Refrigeration Technologies GmbH, and ZiAG Plant Engineering GmbH.

Net interest income decreased by EUR 11.6 million to EUR –5.8 million (previous year: EUR 5.8 million). This was largely the result of a EUR 15.5 million drop in interest income from loans advanced as financial assets. The decline was mainly due to diminishing volumes following scheduled repayments and to the issuing of new loans at much lower rates of interest.

Cash flow of GEA Group Aktiengesellschaft (HGB) (EUR million)	2016	2015
Cash flow from operating activities	–57.5	168.0
Cash flow from investing activities	33.9	–0.1
Cash flow from financing activities	–428.7	–234.7
Liquid funds	648.2	1,100.5

GEA Group Aktiengesellschaft's business development is primarily subject 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 90 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 259.6 million. In 2016, the Executive Board and Supervisory Board transferred EUR 105.0 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 an unchanged dividend of EUR 0.80 per share to shareholders from the net retained profits of EUR 155.1 million for a total of 192,495,476 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 total size of the dividend payout may fall slightly on account of treasury shares purchased up to the time of distribution via the share buyback program due to be launched in March 2017. This initiative will not change the size of the dividend per share.

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 December 22, 2009, 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.

Explanatory information in accordance with sections 289(4) and (5), and 315(2) No. 5 and 315(4) of the HGB

Composition of the subscribed capital and restrictions on rights

As of December 31, 2016, 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 AktG. The Executive Board is not aware of any restrictions affecting the 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, 2016.

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 on one or more occasions until April 23, 2017 (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 Executive Board is also entitled, with the approval of the Supervisory Board, to exclude fractions from shareholders' preemptive rights. The new shares may also be underwritten by banks with the obligation of offering them to the shareholders for subscription (indirect subscription right).

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). 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) 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.

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 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.

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 of the 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.

In the event of a change of control, the lenders of the borrower's note loans in the total amount of EUR 90 million are entitled to request early repayment of their loan receivable, including interest accrued up to the date of the early repayment. The borrower determines the repayment date, which may not be fewer than 60 days and more than 90 days after the date on which the borrower was informed of the change of control and notified the lenders of this via the paying agent.

In the case of the loan agreement with the European Investment Bank (EIB) amounting to EUR 50 million, the EIB is entitled to call in the loan and require early repayment including accrued interest in the event of a change of control. In this case, the borrower is obliged to repay the amount on the date specified by the Bank, which may not be earlier than 30 days after the repayment request.

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 76 ff. of the management report.

Overall Assessment of Business Development

GEA was confronted by various challenges in the course of the fiscal year 2016. A challenging business climate in the beverages and dairy farming customer industries was exacerbated by delays in the allocation of projects in the dairy processing sector especially. Orders from the pharmaceuticals, marine as well as oil and gas industries also slumped. That said, the trend in many other customer industries was enduringly positive, with double-digit growth in demand from the food customer industry and the chemicals segment more than compensating the declines in the other markets. Growth in order intake in the emerging economies was well above average.

In October 2016, GEA adjusted its forecast for the fiscal year 2016 as published in the 2015 Annual Report as these targets could not longer be reached. By the end of the year, revenue totaled EUR 4.5 billion. Largely as a result of declining volumes and cost overruns affecting several major projects, operating profit amounted to EUR 566 million and was therefore in line with the forecast ventured in October 2016. The operating EBITDA margin reached 12.6 percent of revenue, while the operating cash flow driver recorded a ratio to revenue of 9.5 percent. GEA therefore remains in robust economic shape.

The defined target range for the dividend is between 40 and 50 percent of the consolidated profit. At the same time, however, the company does not want to drop below the current dividend level without good reason, and this is why the Supervisory Board and Executive Board will again propose that the Annual General Meeting approve payment of a dividend of EUR 0.80 per share for fiscal year 2016, even if the dividend will then be slightly above the target range. The payout would then again be around the record level of the previous year.

Summing up, it can be said that the adjusted October forecast was met. Although certain key indicators lagged behind the record levels of the previous year, GEA's business progressed on a very stable footing in 2016, especially considering the highly volatile geopolitical climate in that year.

Report on Post-Balance Sheet Date Events

On 6 February 2017, the Executive Board of GEA Group Aktiengesellschaft with the approval of the Supervisory Board, in applying powers granted to it by the Annual General Meeting of April 16, 2015 to acquire and appropriate treasury shares, decided that the company should purchase treasury shares with a total value of up to EUR 450 million (net of incidental purchase costs) on the stock exchange during the period from March 1, 2017 to February 28, 2018. Based on the share price applicable at the time (EUR 38.16; Xetra closing price of February 3, 2017), this sum corresponded to up to 11,792,452 shares or 6.13 percent of the company's registered share capital.

Corporate Governance Report including Corporate Governance Statement

The Corporate Governance Statement issued in accordance with section 289a Handelsgesetzbuch (HGB–German Commercial Code) does not form part of the annual audit pursuant to section 317 para. 2 sentence 3 German Commercial Code.

Transparent, responsible corporate governance and control geared towards long-term value enhancement are given high priority at 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 May 5, 2015 (published in the Federal Gazette on June 12, 2015) to the greatest possible extent.

Declaration of Conformity

Currently and until and including December 31, 2016, GEA Group Aktiengesellschaft complies with the recommendations of the German Corporate Governance Code (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 exemption of the recommendation under No. 4.2.3 para. 2 sentence 6 GCGC according to which the amount of compensation of the Executive Board members shall be capped both overall and for individual compensation components.

From January 1, 2017, onwards, GEA Group Aktiengesellschaft will comply with all recommendations of the GCGC.

Explanation:

If the services of the Executive Board members lead to an extraordinary increase of value for the shareholders of the company, the Supervisory Board may, subject to its dutiful discretion, grant a discretionary bonus in accordance with the service agreements of the Executive Board members. The Executive Board members 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 based on statutory provisions and within the limits of the jurisdiction of the highest courts. Since the introduction of No. 4.2.3 para. 2 sentence 6 GCGC, the amount of this special bonus, which is only available in exceptional situations, has been gradually and expressly capped on the occasion of reappointments or new appointments of Executive Board members. Since the potential special bonus will be capped in all service agreements of the Executive Board members with effect as from January 1, 2017, the current deviation from the recommendation in No. 4.2.3 para. 2 sentence 6 GCGC no longer exists from this point in time onwards.

Since the issuance of the last Declaration of Conformity on December 17, 2015, 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 explained above relating to No. 4.2.3 para.2 sentence 6 GCGC.

Düsseldorf, December 16, 2016

For the Supervisory Board

Dr. Helmut Perlet

For the Executive Board

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 employees and bodies of GEA 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 constitutes 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 the website of GEA Group Aktiengesellschaft 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. For this purpose, the company established a compliance organization years ago. Group-wide compliance activities focus on corruption prevention, antitrust law, export control 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 reports to both the Executive Board and the Audit Committee of the Supervisory Board. The Chief Compliance Officer is assisted by the legal compliance and operational export control organization. The latter was aligned with GEA's new organizational structure within the framework of the "Fit for 2020" project. 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. As before, 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 Managers. Like before, each operating entity is assigned one Local Export 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 external third parties to report suspected compliance infringements or violations of the GEA codes of conduct – i.e., general principles of social responsibility – via an internet-based system. 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 sets 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 information see page 76 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 as well as compliance, agrees the key audit areas with the auditor and resolves on the audit fee. In doing so, it ensures, also taking into account the EU audit reform, that the auditor's work is not compromised by any conflicts of interest and that the auditor immediately reports on 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. In addition to the consolidated and annual financial and half-yearly report as well as quarterly 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 report, 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 holds 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 transaction reported to the company in fiscal year 2016 (still under section 15 WpHG – German Securities Trading Act) was 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 181 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 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 email. 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 12 and 222 ff. 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 compliance that are of relevance to the company. The Supervisory Board usually holds 6 meetings per calendar year that are attended by the Executive Board members 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 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).

When appointing members to the Executive Board and proposing candidates for election to the Supervisory Board, the Supervisory Board and its Committees will take into account a balanced mix of specialist expertise and personal attributes as well as the criterion of diversity.

At its meeting on December 17, 2015, the Supervisory Board passed a resolution on its composition on the basis of the recommendations outlined in the German Corporate Governance Code: The members of the Supervisory Board – while taking into account the specific situation of the company – are to have the knowledge, skills and specialist expertise required to ensure the proper performance of their duties. In this context, the Supervisory Board will also pay attention to industry knowledge, an adequate number of independent members, international experience as well as diversity. With a view to the best interests of the company, the decisive criterion for appointing Supervisory Board members shall always be the specialist expertise and personal suitability of the respective candidate.

With a view to section 5.4.1 para. 1 sentence 1 of the German Corporate Governance Code, the Supervisory Board seeks to ensure a board composition that takes into account the following elements in relation to its current term of office: The number of Supervisory Board members with an international background is to be at least maintained at its current level. 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. The Supervisory Board is to include – what it considers to be – an adequate number of independent members (section 2 para. 3 Rules of Procedure of the Supervisory Board). 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. As a rule, a member's uninterrupted service on the Supervisory Board is not to exceed three full terms of office and/or a period of 15 years. As a rule, 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 (section 2 para. 1 Rules of Procedure of the Supervisory Board). In its current composition, the Supervisory Board complies with these targets.

As a result of the elections of representatives on both the employer and employee side of the Supervisory Board, the number of female Supervisory Board members has gone up from three to five. As a consequence, the current proportion of women on the Supervisory Board amounts to approximately 42 percent and, thus, exceeds the legally binding minimum quota of 30 percent for the under-represented gender on the Supervisory Board.

Supervisory Board Committees

The work of the Supervisory Board is supported by committees. These are primarily the Presiding Committee and the Audit Committee, as well as the statutory Mediation Committee and 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 three members who include exclusively shareholder representatives in accordance with section 5.3.3 of the German Corporate Governance Code.

Both the Presiding Committee and the Audit Committee usually meet four to five times in each calendar year. 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 duties of the Presiding Committee, which is chaired by the Chairman of the Supervisory Board, include the preparation of the meetings of the Supervisory Board. Furthermore, the Presiding Committee's specific responsibility is to define the legal relationship between the company and the individual Executive Board members, and to ensure Executive Board succession planning. 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 and reporting 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 statements.

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 222 f. of this Annual Report. In addition, the Report of the Supervisory Board on pages 7 ff. of this Annual Report gives further details on the activities performed by the Supervisory Board and its Committees in fiscal year 2016.

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 of the 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 Sustainability at GEA (see page 99 f.). Under its diversity strategy, GEA also pursues the aim of attracting more women to GEA and 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, requires 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. In this context, the first implementation deadline set by such companies must be no later than June 30, 2017. From January 1, 2016, a statutory minimum quota of 30 percent applies to the underrepresented gender on the supervisory boards of listed and codetermined companies like GEA Group Aktiengesellschaft; this quota has to be observed whenever these companies seek to fill vacant supervisory board seats. As a result of the elections of representatives on both the employer and employee side of the Supervisory Board that were held during the period under review, the number of female Supervisory Board members has gone up from three to five.
As a consequence, the current proportion of women on the Supervisory Board of GEA Group Aktiengesellschaft amounts to approximately 42 percent and, thus, complies with the legally binding minimum quota of 30 percent for the underrepresented gender on the Supervisory Board.

In the light of the extremely short statutory deadline of June 30, 2017, set for the initial implementation of the relevant target, and in view of the current composition of the Executive Board, the Supervisory Board of GEA Group Aktiengesellschaft, during its Supervisory Board meeting held on September 23, 2015, resolved on setting a 0 percent target for the proportion of women represented on the Executive Board of GEA Group Aktiengesellschaft that is to be achieved by the above initial implementation deadline.

On September 7, 2015, the Executive Board of GEA Group Aktiengesellschaft determined target quotas for women on the first and second management levels below the Executive Board that are to be implemented within the maximum statutory period for the very first time. Against the backdrop of the extremely short statutory deadline of June 30, 2017, the defined target quotas of 18.1 percent and 23.5 percent respectively reflect the status quo at the time the company made this commitment, which does not preclude an increase in the share of women on these two management levels.

The other GEA companies affected by this law also set targets for 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, and defined the corresponding deadlines for target implementation.

Remuneration Report

The Remuneration Report outlines the key principles applied for 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 69 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 remuneration. 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 the sustainability of the remuneration system 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.

Remuneration components

In the fiscal year 2016, 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 Dr. Stephan Petri each received EUR 570 thousand. As Dr. Petri left the company on June 30, 2016, his fixed annual salary for 2016 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 consultancy services. Steffen Bersch is granted a rental allowance for his second home.

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 proportion 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 contract 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 personal 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.

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 the fiscal year 2016, the Supervisory Board has ascertained an 80.0 percent degree of average target achievement (previous year: 106.0 percent) for the members of the Executive Board.*

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

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 the fiscal year 2016, 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 2016, 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 the 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.

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 7.8 percent was achieved for the CFDM key performance indicator that is the result of a CFDM of 9.0 percent in the fiscal year 2014, 6.3 percent in the fiscal year 2015 and 8.0 percent in the fiscal year 2016. Thus, in 2016, the degree of target achievement for the CFDM amounts to 93.2 percent (previous year: 108.5 percent). For the ROCE key performance indicator an average of 18.8 percent was achieved during the preceding three-year period; it is the result of a ROCE of 22.6 percent in the fiscal year 2014, 15.2 percent in the fiscal year 2015 and 18.6 percent in the fiscal year 2016. Thus, for the fiscal year 2016, the degree of ROCE target achievement amounts to 98.3 percent (previous year: 110.0 percent). As to the variable remuneration awarded in the fiscal year 2016, the overall degree of target achievement under the multi-year component amounted to 91.6 percent (previous year: 119.3 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 percent) 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.

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 the fiscal year 2016 is measured over the three-year period between 2016 and 2018; a payment is scheduled for the fiscal year 2019. In the year under review, the 2013 tranche in the amount of EUR 1,225 thousand was paid out on the basis of a 199.0 percent target achievement level. As of December 31, 2016, the computed degree of target achievement for the 2016 tranche amounted to 125.4 percent, while totaling 102.6 percent for the 2015 tranche (previous year: 88.3 percent) and 133.2 percent for the 2014 tranche (previous year: 116.6 percent).*

*) The degree of overall target achievement and/or degrees of target achievement are rounded figures, respectively.

Summary of the variable remuneration components

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

Variable remuneration component	Target	Weighting	Cap	Overall cap	Assessment period				
					2014	2015	2016	2017	2018
Individual component	Individual targets	40%	200%				One year		
Multi-year component	Combination of cash flow driver margin and ROCE	40%	250%	240%	Retrospective (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.

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 Mr. Oleas› 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' 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 p.a. Under this arrangement, maximum pension benefits will be paid once his service agreement ends when or after Dr. 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 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 GEA companies 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 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 p.a. 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.

Dr. Stephan Petri

The contractual pension benefits of Dr. Stephan Petri, 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 the Executive Board service agreement ends when or after Dr. Petri reaches the age of 62 or in the event of his permanent incapacity to work. Should Dr. Stephan Petri's Executive Board service agreement end before one of the above conditions for payment of a pension is met, he will enjoy vested rights to a pro rata maximum annual pension of EUR 200 thousand payable on reaching the age of 62 that will be reduced on a pro rata basis subject to the ratio of his actual term of service for GEA until the termination of his Executive Board service agreement to the term of service required for obtaining his full pension benefits. In accordance with these contractual arrangements, Dr. Stephan Petri, who left GEA on June 30, 2016, can claim a pro rata annual pension in the amount of EUR 153,170.73 when he reaches 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. Stephan Petri's voluntary enrollment in the state pension scheme and/or one of the pension schemes for the liberal professions.

Dr. Stephan Petri made personal contributions to a deferred compensation scheme for Executive Board members earning vested benefits in the amount of EUR 33,500 p.a. In addition, Dr. Petri is entitled to vested benefits to the tune of EUR 33,854.87 p.a. from personal contributions made prior to his appointment to the Executive Board in connection with his participation in GEA's executive pension scheme. The respective payments under these pension components will also be made to Dr. Petri once he turns 62.

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

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 above capitalization option does not apply to his case.

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 2016 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 12/31/2016; annual entitlements at start of pension)	Annual pension entitlements earned as of 12/31/2016	Additions to pension provisions in fiscal year 2016	Present value of pension benefits as of 12/31/2016
Executive Board members as of 12/31/2016				
Jürg Oleas	360,000	313,333	588,019	9,016,146
Dr. Helmut Schmale	200,000	185,761	304,310	5,719,904
Steffen Bersch[1]	223,428	54,935	459,241	5,118,221
Former Executive Board members				
Dr. Stephan Petri[2]	220,526	220,526	788,039	4,699,593
Total	**1,003,954**	**774,555**	**2,139,609**	**24,553,864**

1) 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).
2) Dr. Stephan Petri resigned from the Executive Board with effect from 06/30/2016. Along with his pension benefits in the amount of EUR 153,171 p.a. in his capacity as a member of the Executive Board, Dr. Stephan Petri is also entitled to vested benefits in the amount of EUR 33,855 p.a. from personal contributions made under GEA's executive pension scheme prior to his appointment to the Executive Board, as well as vested benefits totaling EUR 33.500 from personal contributions made in connection with his participation in the deferred compensation pension scheme for Executive Board members (both amounts calculated on the basis of a retirement age of 62). The additions to pension provisions include EUR 595,063 attributable to pension commitments made in connection with Dr. Stephan Petri's departure from the Executive Board.

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 section 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 section 84 para. 3 AktG or if an Executive Board member validly resigns from office pursuant to section 84 para. 3 AktG, the Executive Board member's service agreement will end on expiry of the statutory notice period pursuant to section 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 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 section 21 Wertpapierhandelsgesetz (WpHG – German Securities Trading Act), an intercompany agreement is entered into with the company as a dependent company in accordance with section 291 ff. AktG, or absorption under section 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.

Dr. Stephan Petri was granted a payment in compensation for the consensual premature revocation of his appointment to the Executive Board and the premature mutually agreed termination of his service agreement with effect from midnight June 30, 2016, respectively; the level and composition of this compensation are in line with the above provisions governing resignation or the revocation of appointment for good cause. Further details are provided under "Remuneration of former Executive Board members and their dependents – Dr. Petri's departure from the Company".

Remuneration of the members of the Executive Board

Total remunerations in 2016 and 2015

In the year under review, total remunerations paid to active Executive Board members of GEA Group Aktiengesellschaft 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 is based on the fair value of the entitlement at grant date (January 1, 2016). In the year under review, it amounted to EUR 202,525 for Jürg Oleas, EUR 113,414 for Dr. Helmut Schmale, EUR 46,176 for Dr. Petri on a pro rata temporis basis, EUR 92,351 for Steffen Bersch and EUR 92,351 for Niels Erik Olsen, i.e., a total of EUR 546,817. As Dr. Stephan Petri left the company at the end of June 2016, his fixed remuneration for 2016 was paid out on a pro rata temporis basis. Dr. Stephan Petri's pro rata temporis bonus entitlements earned during the fiscal year 2016 as well as the amounts due to Dr. Petri under the 2014 and 2015 tranches of the share price component will not be paid out until 2018. Further details are provided under "Remuneration of former Executive Board members and their dependents – Dr. Petri's departure from the Company".

In the fiscal year 2015, the total remuneration paid to the incumbent members of the Executive Board amounted to EUR 6,374,980 and comprised both a fixed component of EUR 3,055,417 and a variable bonus of EUR 3,188,415. The bonus under the long-term share price component was based on the fair value of the entitlement at grant date (January 1, 2015). In the fiscal year 2015, it amounted to EUR 179,700 for Jürg Oleas, EUR 97,038 for Dr. Helmut Schmale, EUR 79,068 for Markus Hüllmann, as well as EUR 79,068 for Dr. Stephan Petri, i.e. a total of EUR 434,874.

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

(EUR)	Fixed remuneration	Variable components			Non-cash benefits	Pension subsidies	Total
		Individual component	Multi-year component	Long-term share price component[1]			
Jürg Oleas	1,250,000	400,000	458,000	202,525	43,180	–	**2,353,705**
Previous year	1,250,000	530,000	596,500	179,700	24,092	–	**2,580,292**
Dr. Helmut Schmale	700,000	224,000	256,480	113,414	39,418	6,788	**1,340,100**
Previous year	693,750	294,150	331,057	97,038	44,052	6,788	**1,466,835**
Dr. Stephan Petri[2]	285,000	91,200	104,424	46,176	13,348	3,394	**543,542**
Previous year	561,667	238,147	268,027	79,068	26,173	6,788	**1,179,870**
Markus Hüllmann[3]	–	–	–	–	–	–	**–**
Previous year	550,000	233,200	262,460	79,068	23,255	–	**1,147,983**
Steffen Bersch[4]	570,000	182,400	208,848	92,351	34,658	6,956	**1,095,213**
Previous year	–	–	–	–	–	–	**–**
Niels Erik Olsen[4]	819,014[5]	182,400	208,848	92,351	29,591	–	**1,332,204**
Previous year	–	–	–	–	–	–	**–**
Summe	**3,624,014**	**1,080,000**	**1,236,600**	**546,817**	**160,195**	**17,138**	**6,664,764**
Previous year	**3,055,417**	**1,295,497**	**1,458,044**	**434,874**	**117,572**	**13,576**	**6,374,980**

1) In the year under review, no payment under the long-term share price component granted for 2016 was made as this component is computed over a three-year period between 2016 and 2018. The bonus payable under the long-term share price component is based on the fair value of the entitlement at grant date (January 1, 2016).
2) Dr. Stephan Petri retired from the Executive Board on June 30, 2016.
3) Markus Hüllmann retired from the Executive Board on December 31, 2015.
4) 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 226,304.92 for his service as Head of Application Centers BA Solutions for the year 2015.
5) The amount of EUR 819,014 composes 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.

Supplemental disclosures relating to share-based remuneration for the period 2014 to 2016

In the fiscal years 2014 to 2016, 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 12/31/2016	Fair value as of 12/31/2015
Jürg Oleas	676,025	979,300
Dr. Helmut Schmale	367,921	528,822
Niels Graugaard[1]	–	75,370
Markus Hüllmann[2]	234,366	376,164
Dr. Stephan Petri[3]	355,102	430,892
Steffen Bersch	65,379	–
Niels Erik Olsen	65,379	–
Summe	**1,764,172**	**2,390,548**

1) Executive Board service agreement terminated in April 2013
2) Executive Board service agreement terminated in December 2015
3) Executive Board service agreement terminated in June 2016

Supplemental disclosures relating to share-based remuneration for 2011

In the fiscal years 2010 and 2011, the members of the Executive Board received their share-based remuneration in the form of phantom shares. The remuneration system applicable until the end of the fiscal year 2011 provided for a performance-related remuneration component that was awarded as a bonus. Only half of this bonus was payable with the first salary payment following the date of the company's Supervisory Board meeting convened to adopt the financial statements for the relevant fiscal year ("short-term bonus"), while the second half of the bonus was converted into phantom shares in the company whose payout amount was determined upon expiry of a holding period of three years ("long-term bonus"). Detailed information on the remuneration system applicable until the end of the fiscal year 2011 is provided in the 2011 Annual Report (see ibid. page 65 ff.) that may be accessed on the company's website (gea.com).

Detailed information on existing entitlements of Executive Board members under the long-term bonuses awarded for the fiscal year 2011 may be inferred from the table below. The long-term bonuses awarded for the fiscal year 2011, i.e. the last still outstanding remuneration component of the remuneration system applicable until the end of the fiscal year 2011, were paid out in the fiscal year 2015.

Phanton shares	Number of awarded shares	Fair value (EUR)	
	2011	2015	2014
Jürg Oleas			
2011 tranche (number of phantom shares in 2011)	40,997	–	1,570,185
Dr. Helmut Schmale			
2011 tranche (number of phantom shares in 2011)	20,498	–	785,073
Total	**61,495**	**–**	**2,355,258**

In the fiscal year 2016, 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 194 thousand for Jürg Oleas (previous year: EUR 236 thousand), EUR 108 thousand for Dr. Helmut Schmale (previous year: EUR 127 thousand), EUR 143 thousand for Dr. Stephan Petri (previous year: EUR 93 thousand), EUR 22 thousand for Markus Hüllmann (previous year: EUR 93 thousand), EUR 65 thousand for Steffen Bersch (previous year: EUR 0 thousand) and EUR 65 thousand for Niels Erik Olsen (previous year: EUR 0 thousand).

Further information on the awarded phantom shares and the long-term share price component is outlined in note 6.3.3 (see page 181 ff.) to the consolidated financial statements.

Supplemental disclosures relating to recognized expenditure and disbursed remuneration

In the fiscal year 2016, expenditure in the aggregate amount of EUR 8,861,109 (previous year: EUR 8,374,578) 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 the fiscal year 2016, remuneration components totaling EUR 7,779,540 (previous year: EUR 9,257,826) 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.

(EUR)	Recognized expenditure	Paid out remuneration
Jürg Oleas	2,933,449	2,917,205
Previous year	3,212,912	4,409,717
Dr. Helmut Schmale	1,638,759	1,640,077
Previous year	1,795,339	2,370,586
Dr. Stephan Petri[1]	1,428,526	1,026,827
Previous year	1,496,279	1,204,714
Niels Graugaard[2]	–	75,370
Previous year	–307	172,434
Markus Hüllmann[3]	22,385	659,843
Previous year	1,870,355	1,100,375
Steffen Bersch[4]	1,527,482	611,614
Previous year	–	–
Niels Erik Olsen[4]	1,310,508	848,605
Previous year	–	–
Total	**8,861,109**	**7,779,540**
Previous year	**8,374,578**	**9,257,826**

1) Executive Board service agreement terminated in June 2016
2) Executive Board service agreement terminated in April 2013
3) Executive Board service agreement terminated in December 2015
4) 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 226,304.92 for his service as Head of Application Centers BA Solutions for the year 2015.

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 (EUR)	Jürg Oleas				Dr. Helmut Schmale			
	Chairman of the Executive Board				Chief Financial Officer			
	2015	2016	Min. (2016)	Max. (2016)[2]	2015	2016	Min. (2016)	Max. (2016)[2]
Fixed remuneration	1,250,000	1,250,000	1,250,000	1,250,000	693,750	700,000	700,000	700,000
Fringe benefits	24,092	43,180	43,180	43,180	44,052	39,418	39,418	39,418
Pension subsidies	0	0	0	0	6,788	6,788	6,788	6,788
Total non-performance-related components	**1,274,092**	**1,293,180**	**1,293,180**	**1,293,180**	**744,590**	**746,206**	**746,206**	**746,206**
One-year variable remuneration	**500,000**	**500,000**	**0**	**1,000,000**	**277,500**	**280,000**	**0**	**560,000**
Individual component	500,000	500,000	0	1,000,000	277,500	280,000	0	560,000
Multi-year variable remuneration	**679,700**	**702,525**	**0**	**2,000,000**	**374,538**	**393,414**	**0**	**1,120,000**
Multi-year component	500,000	500,000	0	1,250,000	277,500	280,000	0	700,000
Long-term share price component (tranche 2015)[1]	179,700	0	0	0	97,038	0	0	0
Long-term share price component (tranche 2016)[1]	0	202,525	0	750,000	0	113,414	0	420,000
Total performance-related components	**1,179,700**	**1,202,525**	**0**	**3,000,000**	**652,038**	**673,414**	**0**	**1,680,000**
Service cost	451,059	454,378	454,378	454,378	208,255	209,727	209,727	209,727
Total remuneration (GCGC)	**2,904,851**	**2,950,083**	**1,747,558**	**4,747,558**	**1,604,883**	**1,629,347**	**955,933**	**2,635,933**

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 2015 tranche was 01/01/2015, for the 2016 tranche it was 01/01/2016.
2) Not taking into account the possibility of granting a special discretionary bonus.

Benefits granted (EUR)	Steffen Bersch				Niels Erik Olsen			
	Member of the Executive Board				Member of the Executive Board			
	Since 01/01/2016				Since 01/01/2016			
	2015	2016	Min. (2016)	Max. (2016)[2]	2015	2016	Min. (2016)	Max. (2016)[2]
Fixed remuneration	0	570,000	570,000	570,000	0	819,014[3]	819,014[3]	819,014[3]
Fringe benefits	0	34,658	34,658	34,658	0	29,591	29,591	29,591
Pension subsidies	0	6,956	6,956	6,956	0	0	0	0
Total non-performance-related components	**0**	**611,614**	**611,614**	**611,614**	**0**	**848,605**	**848,605**	**848,605**
One-year variable remuneration	**0**	**228,000**	**0**	**456,000**	**0**	**228,000**	**0**	**456,000**
Individual component	0	228,000	0	456,000	0	228,000	0	456,000
Multi-year variable remuneration	**0**	**320,351**	**0**	**912,000**	**0**	**320,351**	**0**	**912,000**
Multi-year component	0	228,000	0	570,000	0	228,000	0	570,000
Long-term share price component (tranche 2015)[1]	0	0	0	0	0	0	0	0
Long-term share price component (tranche 2016)[1]	0	92,351	0	342,000	0	92,351	0	342,000
Total performance-related components	**0**	**548,351**	**0**	**1,368,000**	**0**	**548,351**	**0**	**1,368,001**
Service cost	0	454,329	454,329	454,329	0	5,276	5,276	5,276
Total remuneration (GCGC)	**0**	**1,614,294**	**1,065,943**	**2,433,943**	**0**	**1,402,232**	**853,881**	**2,221,881**

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 2015 tranche was 01/01/2015, for the 2016 tranche it was 01/01/2016.
2) Not taking into account the possibility of granting a special discretionary bonus.
3) The amount of EUR 819,014 composes 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.

Benefits granted (EUR)	Dr. Stephan Petri Member of the Executive Board Until 06/30/2016			
	2015	2016	Min. (2016)	Max. (2016)[2]
Fixed remuneration	561,667	285,000	285,000	285,000
Fringe benefits	26,173	13,348	13,348	13,348
Pension subsidies	6,788	3,394	3,394	3,394
Total non-performance-related components	**594,628**	**301,742**	**301,742**	**301,742**
One-year variable remuneration	**224,667**	**114,000**	**0**	**228,000**
Individual component	224,667	114,000	0	228,000
Multi-year variable remuneration	**303,735**	**160,176**	**0**	**160,176**
Multi-year component	224,667	114,000	0	285,000
Long-term share price component (tranche 2015)[1]	79,068	0	0	0
Long-term share price component (tranche 2016)[1]	0	46,176	0	171,000
Total performance-related components	**528,402**	**274,176**	**0**	**684,000**
Service cost	237,355	713,645	713,645	713,645
Total remuneration (GCGC)	**1,360,385**	**1,289,563**	**1,015,387**	**1,699,387**

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 2015 tranche was 01/01/2015, for the 2016 tranche it was 01/01/2016.
2) Not taking into account the possibility of granting a special discretionary bonus.

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

Allocation (EUR)	Jürg Oleas Chairman of the Executive Board		Dr. Helmut Schmale Chief Financial Officer	
	2015	2016	2015	2016
Fixed remuneration	1,250,000	1,250,000	693,750	700,000
Fringe benefits	24,092	43,180	44,052	39,418
Pension subsidies	0	0	6,788	6,788
Total non-performance-related components	**1,274,092**	**1,293,180**	**744,590**	**746,206**
One-year variable remuneration	**530,000**	**400,000**	**294,150**	**224,000**
Individual component	530,000	400,000	294,150	224,000
Multi-year variable remuneration	**2,534,125**	**955,525**	**1,310,133**	**525,144**
Multi-year component	596,500	458,000	331,057	256,480
Long-term share price component (tranche 2013)	0	497,525	0	268,664
Long-term share price component (tranche 2012)	342,100	0	181,313	0
Phantom shares (tranche 2011)	1,595,525	0	797,763	0
Total performance-related components	**3,064,125**	**1,355,525**	**1,604,283**	**749,144**
Service cost	451,059	454,378	208,255	209,727
Total remuneration (GCGC)	**4,789,277**	**3,103,083**	**2,557,128**	**1,705,076**

Allocation (EUR)	Steffen Bersch[1]		Niels Erik Olsen[1]	
	Member of the Executive Board		Member of the Executive Board	
	Since 01/01/2016		Since 01/01/2016	
	2015	2016	2015	2016
Fixed remuneration	0	570,000	0	819,014[2]
Fringe benefits	0	34,658	0	29,591
Pension subsidies	0	6,956	0	0
Total non-performance-related components	**0**	**611,614**	**0**	**848,605**
One-year variable remuneration	**0**	**182,400**	**0**	**182,400**
Individual component	0	182,400	0	182,400
Multi-year variable remuneration	**0**	**208,848**	**0**	**208,848**
Multi-year component	0	208,848	0	208,848
Long-term share price component (tranche 2013)	0	0	0	0
Long-term share price component (tranche 2012)	0	0	0	0
Phantom shares (tranche 2011)	0	0	0	0
Total performance-related components	**0**	**391,248**	**0**	**391,248**
Service cost	0	454,329	0	5,276
Total remuneration (GCGC)	**0**	**1,457,191**	**0**	**1,245,129**

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 226,304.92 for his service as Head of Application Centers BA Solutions for the year 2015.
2) The amount of EUR 819,014 composes 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 (EUR)	Dr. Stephan Petri		Markus Hüllmann	
	Member of the Executive Board		Member of the Executive Board	
	Until 06/30/2016		Until 12/31/2015	
	2015	2016	2015	2016
Fixed remuneration	561,667	285,000	550,000	0
Fringe benefits	26,173	13,348	23,255	352
Pension subsidies	6,788	3,394	0	0
Total non-performance-related components	**594,628**	**301,742**	**573,255**	**352**
One-year variable remuneration	**238,147**	**91,200**	**233,200**	**0**
Individual component	238,147	91,200	233,200	0
Multi-year variable remuneration	**355,833**	**323,335**	**262,460**	**164,183**
Multi-year component	268,027	104,424	262,460	0
Long-term share price component (tranche 2013)	87,806	218,911	0	164,183
Long-term share price component (tranche 2012)	0	0	0	0
Phantom shares (tranche 2011)	0	0	0	0
Total performance-related components	**593,980**	**414,535**	**495,660**	**164,183**
Service cost	237,355	713,645	651,870	0
Total remuneration (GCGC)	**1,425,962**	**1,429,922**	**1,720,785**	**164,535**

Allocation (EUR)	Niels Graugaard	
	Member of the Executive Board	
	Until 04/18/2013	
	2015	2016
Fixed remuneration	0	0
Fringe benefits	0	0
Pension subsidies	0	0
Total non-performance-related components	**0**	**0**
One-year variable remuneration	**0**	**0**
Individual component	0	0
Multi-year variable remuneration	**172,434**	**75,370**
Multi-year component	0	0
Long-term share price component (tranche 2013)	172,434	75,370
Long-term share price component (tranche 2012)	0	0
Phantom shares (tranche 2011)*	0	0
Total performance-related components	**172,434**	**75,370**
Service cost	0	0
Total remuneration (GCGC)	**172,434**	**75,370**

*) Due to the service agreement concluded with Niels Graugaard being terminated in April 2013, the holding period for phantom shares under the 2011 long-term bonus decreased to one year as of termination date in accordance with the contractual provisions. For this reason, the bonus was paid out as early as 2014.

Remuneration of former Executive Board members and their surviving dependents

In the fiscal year 2016, former members of the Executive Board and their surviving dependents received remunerations in the amount of EUR 6,892 thousand (previous year: EUR 4,992 thousand) from GEA. As of December 31, 2016, GEA had set up pension provisions totaling EUR 69,547 thousand (previous year: EUR 62,458 thousand) for former Executive Board members and their surviving dependents.

Dr. Petri's departure from the Company

Dr. Petri was granted a payment in compensation for the consensual premature revocation of his appointment to the Supervisory Board that was originally due to expire on May 31, 2018, as well as the premature mutually agreed termination of his service agreement with effect from midnight on June 30, 2016, respectively. This compensation includes lost remuneration and fringe benefits for a period of 23 months starting from June 30, 2016, until the original expiry of Dr. Petri's service agreement on May 31, 2018. The compensation in the overall amount of EUR 2,112,177.80 was paid out in January 2017; the level and composition of this amount are in line with the provisions governing resignation or the revocation of appointment for good cause that are outlined under "Termination rights, premature termination of an Executive Board member's appointment, change of control events and effects on remuneration".

Apart from the above compensation, Dr. Petri received no further payments in connection with his premature departure. For the disbursement of the variable remuneration components he had earned by the time of his departure, a modified uniform payout date on March 31, 2018 was agreed. The disbursement of the 2015 and 2016 (pro rata temporis) tranche under the long term share component is based on a target achievement level of 100 percent.

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 1,217 thousand (previous year: EUR 1,168 thousand). Pursuant to section 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 section 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 section 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 the fiscal year 2016, the Supervisory Board held seven meetings, the Presiding Committee met on four and the Audit Committee was convened on five occasions.

The following table shows the individual remuneration and its respective components for members of the Supervisory Board, the Presiding Committee and the Audit Committee for 2016 compared with the previous year:

(EUR)	Supervisory Board remuneration	Presiding Committee remuneration	Audit Committee remuneration	Attendance fees	**Total**
Dr. Heraeus (until April 20, 2016)	37,910	21,230	10,615	4,000	**73,755**
Previous year	125,000	70,000	35,000	17,000	**247,000**
Siegers* (until September 29, 2016)	55,943	26,107	–	8,000	**90,050**
Previous year	75,000	35,000	–	9,000	**119,000**
Bastaki	50,000	24,385	–	10,000	**84,385**
Previous year	50,000	–	–	7,000	**57,000**
Prof. Dr. Bauer	50,000	24,385	–	10,000	**84,385**
Previous year	50,000	–	–	6,000	**56,000**
Eberlein	50,000	–	70,000	12,000	**132,000**
Previous year	50,000	–	70,000	12,000	**132,000**
Gröbel*	50,000	35,000	–	11,000	**96,000**
Previous year	50,000	35,000	–	13,000	**98,000**
Hubert* (since September 30, 2016)	12,705	7,077	–	2,000	**21,782**
Previous year	–	–	–	–	**–**
Kämpfert	50,000	7,077	–	8,000	**65,077**
Previous year	50,000	–	–	6,000	**56,000**
Kerkemeier*	50,000	–	–	7,000	**57,000**
Previous year	50,000	–	–	6,000	**56,000**
Krönchen*	50,000	–	35,000	12,000	**97,000**
Previous year	50,000	–	35,000	12,000	**97,000**
Löw*	55,055	24,385	26,107	14,000	**119,547**
Previous year	50,000	–	35,000	12,000	**97,000**
Dr. Perlet	102,254	59,385	24,385	14,000	**200,024**
Previous year	50,000	35,000	–	11,000	**96,000**
Spence	50,000	–	–	7,000	**57,000**
Previous year	50,000	–	–	7,000	**57,000**
Dr. Zhang (since April 21, 2016)	34,836	–	–	4,000	**38,836**
Previous year	–	–	–	–	**–**
Total	**698,703**	**229,031**	**166,107**	**123,000**	**1,216,841**
Previous year	**700,000**	**175,000**	**175,000**	**118,000**	**1,168,000**

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

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 sustainably 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 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.

Risks in connection with discontinued operations were reduced thanks to further progress in completing the Lentjes projects. The sale of the GEA Heat Exchangers segment resulted in risks in the form of financial obligations towards the purchaser.

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

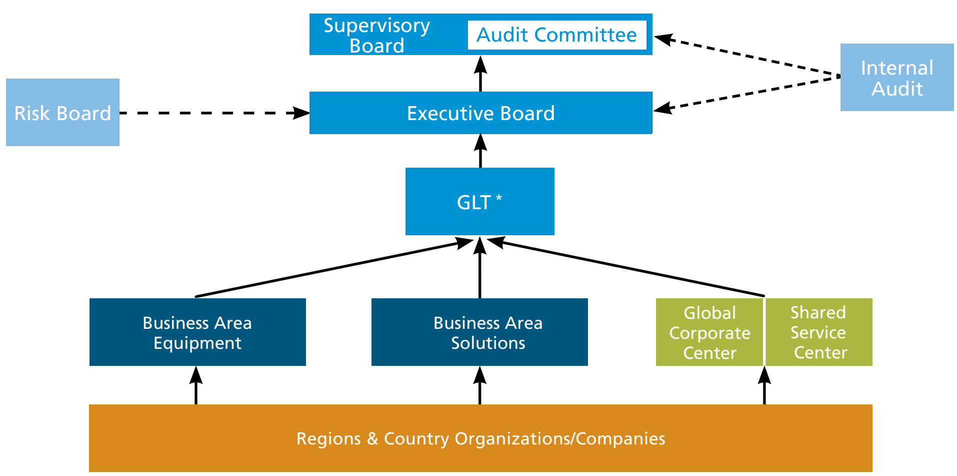
Risk management system

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 heads 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 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 Demand Index (GDI) is used to collate estimates by GEA's market experts of expected short- to medium-term market developments. The GDI 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. To prevent errors, standardized IT systems are used in GEA's accounting, financial control, and finance functions in all group companies. All guidelines and IT systems are updated on a continuous basis to reflect legal and business 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 at the Düsseldorf Regional Court. 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 is asserting various claims under company law, in particular for equity substitution, which amount to approximately

EUR 18 million including possible interest. 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, recent or pending 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 on 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.

As contractually agreed, defined risks relating to selected orders remained with the group following the sale of the former Lentjes division. The remaining risks are rated as low 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' long-term loyalty to the group (see page 98 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 2016. 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

Principles of financial risk management

The Executive Board has implemented an effective set of guidelines with which to monitor and thus largely limit or hedge 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.

Because it operates worldwide, GEA is continuously exposed to currency, interest rate, commodity price, credit, and liquidity risk in the course of its ordinary activities. The aim of financial risk management is to mitigate these risks through the appropriate deployment of derivative and non-derivative hedging instruments. The group's financial risks are quantified in section 3 of the notes to the consolidated financial statements (see pages 148 ff.).

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

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. The resulting currency risk gives rise both to a transaction exposure and a translation exposure.

A transaction exposure arises whenever the values of the company's future foreign currency payments are subjected to unanticipated changes in exchange rates. Hedging the ensuing currency risk is a key element of risk management. GEA reduces transaction exposures from its operative business in part by manufacturing its products in the countries in which they will be sold. Residual transaction exposures from operative business are managed proactively by the Corporate Treasury.

The uniform group guidelines for central currency management applied within GEA require 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, as well as for anticipated and planned transactions whose occurrence is deemed highly likely. 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 options described, changes in exchange rates may affect GEA's 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 currency exposures arising from contractual cash flows (receivables and payables). 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. However, 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 closely coordinated with the central Treasury and Corporate Finance unit.

A translation exposure arises when items on the balance sheets or income statements of the separate financial statements submitted by foreign subsidiaries have to be converted into the group currency with reference to a particular date. Unlike transaction exposures, translation exposures will not necessarily have an effect on future cashflows. The effect of exchange rate fluctuations on carrying amounts is reflected in the group's equity. Translation exposures are hedged only in exceptional cases.

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 interest rate 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. In line with the current guidelines, only the central Treasury and Corporate Finance unit may enter into such interest rate hedges.

Credit risk

GEA engages in business with third parties and is therefore exposed as a matter of course to global credit or default risk arising both from its operative business and financial investments, i.e. if a counterparty fails to fulfill its obligations.

The financial standing of potential customers is ascertained via an internal risk board procedure before orders are accepted. Active receivables management, including nonrecourse factoring, nonrecourse financing, and credit insurance, is also performed. In addition, 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. In 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 identified at an early stage and appropriate action can be taken.

Since trade receivables are usually due from a large number of customers in different industries and regions, there is no concentration of risk. Valuation allowances take account of specific credit risks.

Default exposures can arise equally from financial investments, e.g. through investments in bank or securities balances, and from positive fair values of derivatives. The counterparty limit system used by GEA's central Treasury and Corporate Finance unit aims to continuously assess and manage counterparty default risk. In order to mitigate and spread 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). Recommendations and estimates provided by financial regulators and the central banks are also used. Appropriate measures are taken if the individual limits are exceeded.

In order to reduce credit risk in the context of financial investments and direct write-downs during derivatives trading, such transactions are entered into only with reputable financial institutions whose creditworthiness has been classified as reliable and is continuously monitored under the counterparty limit system described above.

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. The central Treasury and Corporate Finance unit is responsible for managing this risk. Cash funds are arranged and credit lines managed on the basis of a multi-year financial plan and a rolling month-by-month cash forecast. These funds are then made available to the companies by group management. Cash pools have been established in an increasing number of countries with GEA subsidiaries in order to optimize the use of cash funds and borrowing within GEA. To mitigate liquidity risk, GEA will continue to use various financing instruments in the future so as to diversify its sources of funding and stagger maturities.

The impact of potential risk scenarios on changes in liquidity is also simulated. All internal risk management information and internal and external information on potential market and other external risks is taken into account. On the basis of this, the Executive Board and Supervisory Board have agreed strict rules governing the level of cash and long-term credit lines to be held to cover potential liquidity risk.

Tax risks

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 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 76 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 2017 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.

GEA's new structure has been in place since the middle of 2015. The group now boasts much flatter hierarchies and is also much closer to its local 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 former, 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. Rising 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.

The Imaforni takeover (see page 26) will reinforce GEA's "Application Center Bakery" and is testament to the company's increasing focus on the bakery industry. Further acquisitions may well see GEA expand its portfolio of skills, as in this case, and thus 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 2017

As described in the section on the macroeconomic environment in the report on the economic position (see page 24 f.), GEA, as a global technology company, considers global growth in gross domestic product (GDP) and the corresponding forecasts made by the IMF, the UN and the World Bank to be key benchmarks for its own performance.

World Economic Outlook IMF (January 2017)	2016	Outlook 2017
Worldwide	**3.1%**	**3.4%**
Advanced economies	1.6%	1.9%
Emerging market and developing economies	4.2%	4.5%

The IMF is sticking to its October 2016 forecast. However, considerable uncertainty still exists as to the political course the new US administration will take and the repercussions this will have for the global economy.

World Economics Situation and Prospects UN (January 2017)	2016	Outlook 2017
Worldwide	**2.2%**	**2.7%**
Developed economies	1.5%	1.7%
Developing economies	3.6%	4.4%

And while the United Nations predicted a slight recovery in its own global economic report, UN economic experts are interpreting this as an indication of economic stabilization rather than as a signal of a robust and sustained recovery in global demand.

Global Economic Prospects World Bank (January 2017)	2016	Outlook 2017
Worldwide	**2.3%**	**2.7%**
Advanced economies	1.6%	1.8%
Emerging and developing economies	3.4%	4.2%

The World Bank is predicting a moderate recovery in 2017 based largely on an improving situation in the emerging and developing economies. While it is possible that fiscal initiatives launched in the major global economies – above all in the United States – may generate stronger-than-expected global growth, the World Bank believes that downside risks, coupled with increased political uncertainty, protectionist tendencies and a risk of turbulence on the financial markets, will continue to cast a shadow over global economic prospects.

Economic environment for GEA

GEA's planning for the current fiscal year 2017 assumes that demand in its sales markets will be moderately higher than the levels seen in 2016.

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

1. The continuous growth in the global population,
2. The growing middle class,
3. The growing demand for high-quality foods and beverages,
4. The increasing demand for production methods that are efficient and conserve valuable resources.

The United Nations assumes that the world's population, which currently stands at more than 7.3 billion people, will rise over the coming years by around 80 million people per year (see The World's Cities in 2016; World Population Prospects: The 2015 Revision; World Urbanization Prospects, 2014). The world's population is set to grow to 8 billion by 2023. 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.

Linked to this growth is an increasing degree of urbanization. The number of people living in urban areas rose from 746 million in 1950 to more than 4.0 billion 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 2.5 billion people by 2050, particularly in Asia and Africa. In addition, 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. Here, as well, only state-of-the-art technologies can provide the capacity needed to cope with rising demand.

Another factor is that, 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 growing demand for high-quality foods and, linked to this, ongoing high levels of investment in the food industry. 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, January 2017) expects the prices of most industrial goods to continue rising throughout the current year. But there is a big difference here between the burgeoning price of energy (increase of 26 percent) and that of the other commodities (increase of 3 percent) which could even see a downward trend.

The company does not believe that customer project finance will be significantly affected by uncertainty in the capital markets.

The proportion of GEA's revenue accounted for by the food industry in 2017 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 2017 as against the past fiscal year.

Growth in the customer industries

The following trends are expected for GEA's key applications (based on external studies and own estimates):

Food
The consumption of packaged food is likely to continue growing at a moderate rate driven by increases in consumption in the Asia Pacific region, as well as in the Middle East and Africa. In this context, global consumption of baked goods as well as processed meat and fish products is set to grow at an above-average rate.

Dairy Farming
Despite milk production having been on the wane since the middle of 2016, global prices have yet to fully recover and a perceptible improvement in the milk price crisis is not expected to happen until the first quarter of 2017. As a result, an increase in the investment appetite of the northern hemisphere markets (USA/EU), which are especially relevant to GEA – is not expected to materialize before the second quarter of 2017. In the medium to long term, the situation in the global dairy market is expected to improve due to increases in the consumption of dairy products.

Dairy Processing
Global milk consumption is set to increase slightly over the next few years, with demand for cheese, baby food, and products in the yogurt, kefir and curd cheese segment expected to post above-average growth. Since milk consumption in the industrialized nations has not kept pace with growth in the other markets, it is expected that investment in extra production capacity will shift increasingly toward Latin America and Asia. In the industrialized nations, investment activity will likely focus on projects for increasing productivity. After the large number of major projects in recent years, it is expected that customers will tend to focus more on medium-sized investments in the short term in response to a string of political, economic and regulatory challenges.

Beverages
Global beverage consumption is set to grow faster over the next few years than in the recent past, with global consumption of soft drinks increasing at a faster pace than demand for alcoholic beverages. Demand for juices and aseptically filled soft drinks – an important market for GEA – is also expected to increase in the future. Whereas growth in the consumption of alcoholic beverages and soft drinks in Asia will not attain the high levels seen in recent years, demand for beverages in Europe and Latin America is expected to increase going forward.

Pharma
Global outlay on drugs and global R&D spending will continue to rise, as will growth rates in this market generally, especially in the so-called pharmerging markets (e.g. China, Brazil, Russia, Turkey and India), as well as in Germany, France, UK, Italy and Spain. All told, therefore, investment in the pharma sector – and especially in the area of liquid pharma – will continue to rise.

Chemical
The manufacture of petrochemical products, in particular, is set to increase further in the coming years and give rise to the predicted further increase in investment activity. The upward trend is specifically the result of growth in production in Asia, the Gulf States and North America.

Business outlook

The forecast is subject to there being no slowdown in global economic growth and no significant negative exchange rate effects. Acquisitions made in 2017 are not included in the calculation of the key performance indicators. Further, this forecast presupposes an absence of serious slumps in demand from relevant customer industries or shifts between these industries which could negatively impact margins.

Revenue

GEA is aiming to generate moderate revenue growth in this fiscal year.

Earnings

The group expects operating EBITDA to reach a level of between EUR 620 million and EUR 670 million this year.

Cash flow driver margin

With respect to our operating cash flow drivers, i.e. the net amount of operating EBITDA, the change in working capital, and capital expenditure, we are aiming for a ratio to revenue of between 8.5 percent and 9.5 percent in 2017. This indicator does not include investments in strategic projects.

Further expectations

Acquisitions

The strategy of acquiring companies to open up new markets for GEA or specifically expand GEA's product portfolio in existing markets will remain unchanged and valid. This will enable us to provide our customers with an ever-broader range of services from a single source.

Dividend

The Executive Board and Supervisory Board will propose to the Annual General Meeting an unchanged dividend of EUR 0.80 per share for 2016. As such, the total dividend will again amount to EUR 154.0 million on the basis of the number of shares in circulation as of December 31, 2016. This dividend payment would exceed our declared target of distributing between 40 and 50 percent of of net income to shareholders.

Summary

All told, provided that there is no further slowdown in the global economy, GEA expects the group as a whole to record moderate growth. 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. With regard to the distribution ratio, our objective is still to distribute between 40 and 50 percent of net income to our shareholders.

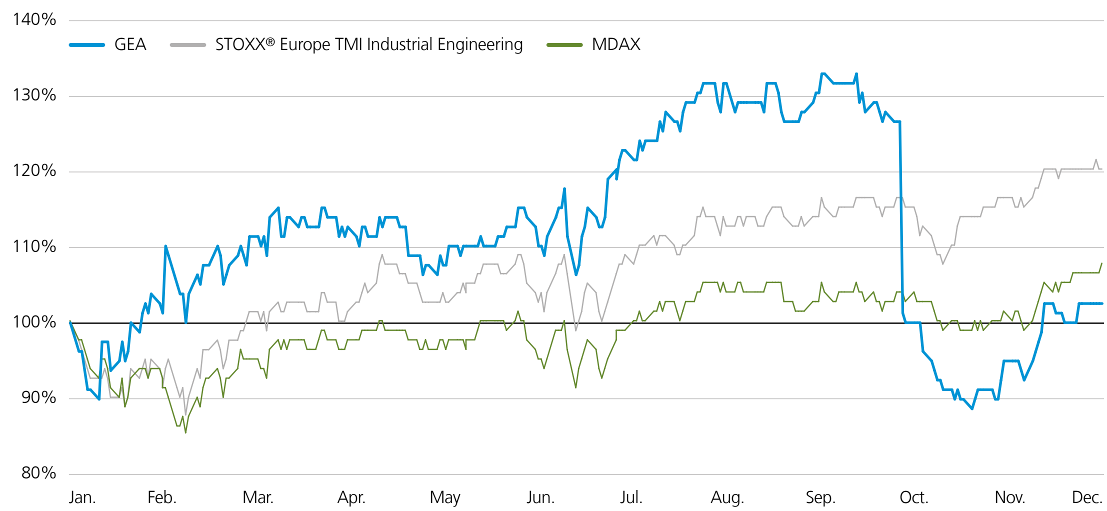
Düsseldorf, March 1, 2017

Jürg Oleas   Dr. Helmut Schmale   Steffen Bersch   Niels Erik Olsen

GEA Shares/Investor Relations

Performance of GEA shares on the capital markets

GEA's share price increased slightly over the course of the fiscal year in a market environment dominated by strong economic and political factors. On September 22, 2016, GEA shares reached EUR 49.99 – the highest closing price ever. Publication of a profit warning after close of trading on October 19, 2016, triggered a price slump that bottomed out at EUR 32.91 on November 14, 2016. The final weeks of the year saw the share recover some ground, closing the year at EUR 38.23 – a gain of 2.2 percent over the year.



Shareholder structure

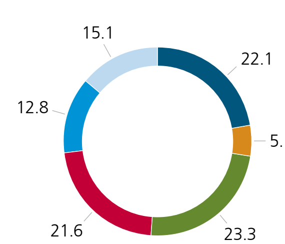
As of December 31, 2016, GEA Group Aktiengesellschaft did not hold any treasury shares, meaning that the number of outstanding shares was unchanged at the end of the year, at 192,495,476. This led to a market capitalization of EUR 7.4 billion as of the end of 2016 compared with EUR 7.2 billion in December 2015.

As in previous years, the company performed detailed analyses of its shareholder structure in 2016 too. The current analysis from the second half of 2016 identified 85 percent of the company's shareholders. Institutional investors held 76 percent of the shares and Kuwait Investment Office accounted for around 8.9 percent.

Regional breakdown of shareholders

(%)

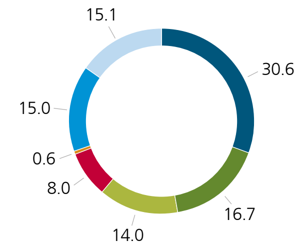
- Continental Europe excl. Germany
- Germany
- UK and Ireland
- North America
- Rest of world (incl. Kuwait)
- Not identified (incl. 0.7% non-institutional shareholders)



Based on 192,495,476 shares, which were issued by GEA Group Aktiengesellschaft at the date of the survey in the third quarter of 2016

Investment styles of institutional investors
(%)

- Growth
- GARP*
- Value
- Index
- Hedge fund
- Others (incl. Kuwait Investment Office)
- Not identified (incl. 0.7% non-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 2016

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 2016, for example, 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 further developments within the group above and beyond its quarterly, half-yearly, and annual reports. 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 2016, it held a total of 35 roadshows. GEA representatives also took part in 27 conferences, as well as holding 442 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 2016, resulting in the following score for GEA:

	2016		2015	
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 (including its borrower's note loans) in the amount of EUR 855.7 million, of which EUR 146.5 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 148 ff.

Non-financial Success Factors – Sustainability at GEA

About sustainability reporting

For the first time, GEA's sustainability reporting relative to the fiscal year 2016 is aligned with the international guidelines set by the Global Reporting Initiative (GRI). It observes the G4 Guidelines and is compiled in accordance with the "Core" option. Thus, GEA focuses on the key sustainability issues within the group that were identified on the basis of a materiality analysis (see page 111 ff.). The report profile, stakeholder engagement as well as the aspect boundaries are outlined on page 111 ff.

Unless otherwise specified, sustainability reporting embraces the worldwide activities of GEA Group Aktiengesellschaft. The information provided is based on an analysis of GEA's management systems with the data being supplied by the operational entities 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 225 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 and safety
- Responsibility for the environment
- Social responsibility
- Basic principles underlying the sustainability report

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. Procurement and supply chain issues are addressed in GEA's Management Report (see page 19 f.).

Value creation

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. Accordingly, the group is mainly managed on the basis of revenue, operating result and the operating cash flow driver margin (for detailed information refer to the following chapters: 'Basic Information on the Group', 'Report on Economic Position' and 'Outlook').

Corporate structure

In the fiscal year 2016, GEA completed the implementation of the new OneGEA group structure (see page 14 f.). GEA expects that the "Equipment" and "Solutions" Business Areas will harness more operational synergies across technologies and applications while promoting functional efficiency by means of standardized processes. Customer-focused sales and service activities were bundled in country organizations. Today, GEA has a much flatter hierarchical structure, operates closer to the customer while showing a unified profile by presenting a single brand to customers all around the globe.

Service

Apart from the performance of a system or plant, the customer's commercial success in production notably depends on machine uptime. Given the sophistication and high degree of automation of today's production systems and plants, even minimal downtime usually has a major impact on productivity. Due to GEA's former organizational structure, service activities were decentralized. Accordingly, customers had several points of contact with different service offerings. Meanwhile, the company's service approach has been given a full makeover, turning a rather reactive into a proactive type of life cycle management. GEA Service Managers act as local contacts who are responsible for all product groups and services. Based on its new service concept, GEA acts as a value-add partner accompanying its customers through the entire lifecycle of a product: from plant dimensioning, commissioning, spare parts supply with shorter response times, repair after failure up to preventive and predictive maintenance. Moreover, GEA offers integrated performance management. Apart from smaller-scale machine modernization, GEA's Service may also perform machine upgrades. The latter involve the replacement of entire subassemblies by new generation components and it is also possible to exchange control units. Upgrades do not only improve machine reliability, but also enhance efficiency while eventually bringing about higher levels of profitability.

In the year under review, GEA's service business accounted for more than 30 percent of group revenue, with the company seeking to maintain this level in the long run.

Responsibility for correct behavior

Compliance as a group-wide basic principle designed to ensure 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 breaches of compliance are committed in their respective areas of responsibility. A detailed description of GEA's Compliance Management System can be found in the Corporate Governance Report (see page 50 ff.) and online on GEA's website.

Human rights

In 2007, the Executive Board and the European Works Council of GEA Group Aktiengesellschaft as well as the European and International Metalworkers' Federation signed the basic principles of social responsibility ("Codes of Conduct"). The latter apply to all group employees worldwide. In these Codes, GEA 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.

Whistleblower system

A whistleblower system represents an effective tool for guaranteeing and monitoring compliance with the basic principles of social responsibility as well as compliance rules and regulations. Since 2014, GEA has offered its employees and third parties the possibility of using the Integrity System, a secure whistleblower portal, for reporting such violations.

The Integrity System does not constitute a general platform for voicing complaints. It merely embraces a few selected reporting categories that imply particular risks to the company, its employees or 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, i.e., the basic principles of social responsibility, come under a distinct reporting category. GEA's Integrity System is available 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. 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.

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 level of risk exposure, 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 mid-four-digit Euro amounts 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 joint Executive Board.

Training and consulting

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

- Basic compliance training comprises extensive face-to-face courses; in 2016, such training was delivered to managers as well as purchasing and sales staff from Belgium, Chile, China, Germany, Dubai, Great Britain, Italy, Poland, South Africa and the USA. In addition, this training was also provided to GEA's newly acquired companies.
- Face-to-face training for selected Local Export Managers and employees regularly doing business in countries that were 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 export managers in the EU and the USA was offered.
- Employees from the country organizations received specific online anti-trust training.
- 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 first 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. 24 audits conducted in 2016 scrutinized GEA sites in relation to corruption risks. These reviews performed by Group Internal Audit are regularly supplemented by the group auditor's focus on additional compliance-related key audit areas that have been defined.

Violations

Should 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 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 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 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 77). A risk and, thus, a fine is deemed significant if it exceeds an amount of EUR 10 million. In the fiscal year 2016, 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 we 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 sustained success for our customers by providing innovative product and service solutions.

The new group structure allowed GEA to establish a new OneGEA procurement organization. In this context, the company is currently putting in place a new procurement portal on GEA's website at gea.com. The registration process requires that suppliers commit themselves to complying with the code of conduct established by the German Association of Materials Management, Purchasing and Logistics. The code also refers to the ten principles of the United Nations Global Compact on human rights, labor standards, the environment and anti-corruption.

GEA audits all suppliers at regular intervals. The audits embrace ecological aspects, working practices, respect for human rights as well as social impact. Key suppliers are inspected on a yearly basis. In the year under review, the company conducted a total of 300 supplier audits.

Responsibility for employees

The Executive Board of GEA Group Aktiengesellschaft thanks all group employees for their commitment and productive cooperation in the fiscal year 2016. These thanks expressly include the employee representative bodies at home and abroad; the company is grateful for their responsible and constructive contributions.

Detailed information about headcount figures is provided in the Management Report (see page 41).

Employee engagement survey

In the fourth quarter of the year under review, the company conducted "GEA Voices 2016", its employee engagement survey. The previous survey had taken place in 2013. The response rate (proportion of all employees worldwide that participated in the survey) totaled 80 percent. In 2017, the results will undergo an in-depth analysis that will be followed by the definition of appropriate measures.

Co-determination

Labor relations at GEA are characterized by mutual respect and parity co-determination at corporate level. 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, GEA also has a Group Works Council established in accordance with the Works Constitution Act that governs co-determination rights and notification deadlines. In addition, GEA's European Works Council has the right to be informed and consulted by the management. Its competence is limited to decisions and developments with a transnational impact on the company's employees and comprises the EU member states, the countries of the European Economic Area as well as Switzerland. The basic principles of social responsibility ("Codes of Conduct") 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. The corresponding whistleblower system for reporting violations is in place and available worldwide.

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 seeks to meet 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. GEA employs people from more than 70 different nations. 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 promoting mobility within the group.

To institutionalize and manage diversity within the company, the latter introduced a diversity management policy in tandem with 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 while defining 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 include both working time options and people's place of work. GEA has implemented a mixture of measures that are designed to promote diversity. For instance, staffing processes place emphasis on including diversity criteria as standard practice. Despite the sector-specific challenges, GEA seeks to attract more women to join GEA while aiming at including more female talent in the company's internal development programs. Moreover, diversity management sets the stage for a reliable identification of high potentials and talents.

Members of executive bodies and employees by gender	12/31/2016	
(in %)	share of men	share of women
Supervisory Board	58.3	41.7
Executive Board	100.0	0.0
Managers[1]	91.5	8.5
Total workforce[2]	83.4	16.6

1) At GEA, the first three management levels below Executive Board level are defined as managers.
2) Database: 15,343 employees. Due to the change in software infrastructure resulting from One GEA, not all personnel records are available yet (2016 – 91 percent).
In 2017, a new personnel management system will remedy this situation.

For a number of years, the principles of diversity and equal opportunities have been integrated with a particular emphasis on human resources processes. In the fiscal year 2016, one topic had been the advancement of women, in particular in relation to human resources development. In general, when commissioning the services of external recruitment agencies, GEA makes sure that a minimum proportion of female candidates is included.

Besides, in 2016, the company decided to place more focus on promoting women in leadership positions in the future. For this reason, a specific program for female high potentials and executives scheduled to start in 2017 and involving 25 to 30 international female 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.

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 managers conduct so-called "talent days" 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. Based on a set of shared beliefs, GEA seeks to shape a corporate culture that will be instrumental in safeguarding the future success of the group.

At regular intervals, managers worldwide are subjected to performance reviews. The respective results constitute a basis for planning the individual development of the managers.

GEA promotes young talents and executives by offering various programs. Talent development schemes like the "First Professional Program" and "Professionals on Stage" serve the purpose of identifying and developing employees with management 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. The global curriculum embraces modules for experienced managers like "Leading Others" and "Engaging Employees" that focus on the further development of leadership skills.

Work-life balance

GEA explicitly endorses a better reconciliation of work and family life and supports its employees in many different ways. Some sites offer experienced advice for expectant mothers and fathers as well as sponsorship programs for employees on parental leave, corporate child care or flexible working regimes. Apart from that, GEA cooperates with an international external service provider for supporting employees in their search for facilities that provide childcare and look after dependents in need of care. Moreover, this offering includes free social counseling.

Vocational training in Germany

	GEA 12/31/2016	GEA 12/31/2015	Mechanical Engineering 12/31/2015*
Apprentices	381	427	66.476
Apprentice-employee ratio (in %)	6.5	6.9	6.5

*) Apprentice-employee ratio in Germany as of 12/31/2015. Source: VDMA 2017 www.vdma.org

In the year under review, GEA trained 381 young people at 17 sites in Germany 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.

An exchange of trainees between various sites would be desirable as such, but is not always practicable because frequently, trainees are still underage and, thus, subject to statutory restrictions. Nonetheless, GEA seeks to make training more international.

Learning and continuous education

Since late 2015, employees worldwide may avail themselves of GEA's Learning Center Portal, a central learning and training platform. The latter currently offers management, sales and project management training, GEA product and application training courses as well as e-learning programs on technical and managerial topics. E-learning programs are available to all GEA employees and may be delivered anywhere irrespective of a person's location. They aim at supporting employees in their further individual and occupational development. In the year under review, an overall number of 4,762 employees, i.e. 28 percent of GEA's entire workforce, made use of these learning and training opportunities. Duration of e-learning is not recorded.

GEA Aid Commission

Employees, who suddenly get into difficulties, for instance after a severe accident or a sudden illness, require swift and unbureaucratic financial assistance. In a group-wide agreement concluded with the Works Council, GEA has pledged to unbureaucratically provide financial assistance under such circumstances. Employees affected in this way, but also the families of employees who suddenly passed away, may turn to the GEA Aid Commission for help.

Travel safety

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, our 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 the GEA Security Center. If employees make use of the so-called "travel tracker" while en route, GEA is informed about the planned itinerary and may respond quickly in the event of a crisis.

Responsibility for quality, safety and health

Certification

Management systems and their respective certification constitute an important bedrock for a production environment that is sustainable in each and every respect. 65 GEA sites embrace manufacturing facilities; 37 form part of the Equipment Business Area while 28 belong the Solutions Business Area. In addition, there are further sites in the country organizations as well as 40 sales offices. The group's 2016 status quo with respect to certifications is as follows:

Management system	Number of certified companies*	Number of integrated sites
DIN ISO 9001:2015	89	62
DIN ISO 14001:2015	17	12
BS OHSAS 18001:2007	15	10
DIN ISO 50001:2011	8	5

*) comprises manufacturing sites 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 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

GEA's major manufacturing sites hold all four certifications.

In the year under review, GEA already started clustering its sites with integrated management systems under the roof of a unified GEA matrix certification. Since June 2016, GEA Group Aktiengesellschaft, which is headquartered in Düsseldorf, has been assessed and certified as meeting the requirements of ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007 as well as ISO 50001:2011 and, thus, heads the group of certified sites. Now, the company seeks to gradually integrate all certified sites while obtaining certifications for further locations. In the future, GEA Group Aktiengesellschaft and 30 percent of the members of the above group will be audited every year. That way, GEA is going to save almost 40 percent of annual certification costs incurred by the group.

Customer satisfaction survey 2016

In the year under review, the high level of quality of the products and services provided by GEA was confirmed by its most important stakeholder group: Customers are highly satisfied with machine quality and performance as well as the technological innovations developed by the company. This represents one of the key preliminary results of the second global customer satisfaction survey that had been initiated by GEA and was conducted in the fourth quarter of 2016. A total of 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 relevant survey findings will be incorporated into improvement processes. This global survey is to be repeated on a regular basis in the future. In addition, GEA frequently organizes customer satisfaction surveys at a local level.

Management approach to quality, health, safety and the environment

In its "Quality, Health, Safety and Environment (QHSE) Policy", the Executive Board of GEA Group Aktiengesellschaft has committed to a clear policy regarding quality, health, safety and the environment: 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 (QHSE) 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 of 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

Each organizational unit is responsible for defining overall and specific targets with regard to quality, health, safety and the environment, and for developing and implementing sustainable programs for accomplishing these goals.

GEA communicates these corporate standards to all individuals acting for or on behalf of the company while actively integrating them in the implementation of this policy. The latter is promulgated at all sites and made publicly available on the corporate website (at gea.com, investors/corporate-governance/csr). QHSE is firmly established at all organizational levels of the company.

Handling serious adverse events, learning process

Serious incidents such as severe accidents, fire or environmental 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 a probe into the respective incident. Following this, a "lessons learned process" is started; its findings are also used proactively to prevent risks, identify improvement measures and communicate them to the organization.

To control substantial corporate risks to the best of its ability, GEA has established a comprehensive safety management system that sets out clear criteria for detecting, assessing and reporting critical developments well in advance.

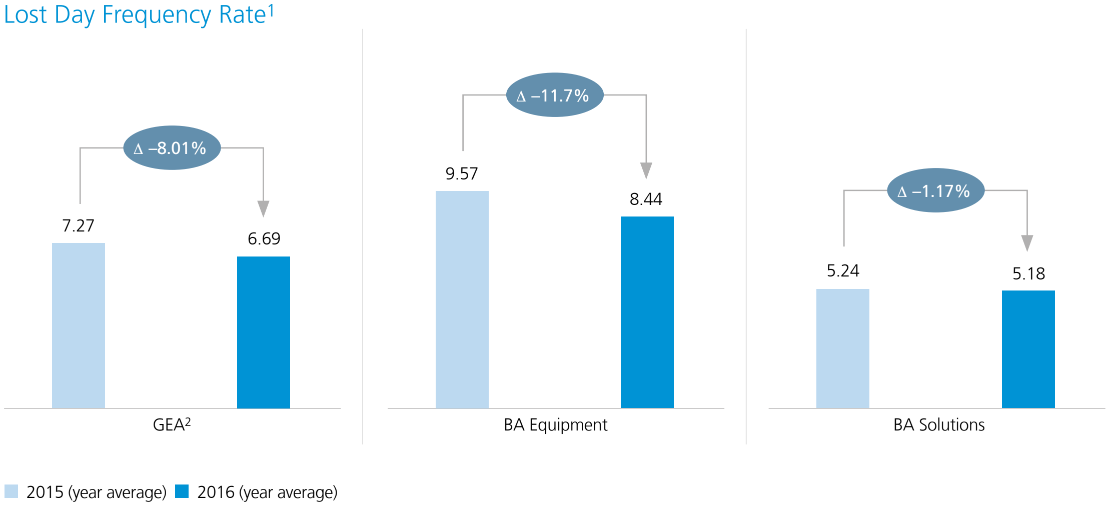
Occupational health and safety

The formal concepts of occupational health and safety embrace vital interests of all people in employment. Staff do neither want to sustain an accident, nor do they want to develop a disease caused by unhealthy conditions or working practices – for instance, heavy lifting from an unfavorable position or non-ergonomic workstations. A safe and healthy workplace is attractive to the company: It guarantees satisfied staff and enhances the opportunity of attracting young talent. Moreover, the company seeks to avoid downtime and operational disruptions in its own economic interest. This is also entirely valid for the rest of the value chain: Safety and health are given highest priority in connection with the installation and operation of GEA systems and plants at the customer's site. In this context, customers usually require compliance with a set 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. GEA also offers a wide range of product-related training courses for customer employees.

Global data relating to occupational safety and the environment, such as monthly accident statistics, is recorded by means of a software. On the one hand, the data for the year under review – always based on one million working hours – confirms the positive trend towards a decline in accident frequency. On the other hand, however, the severity of accidents has increased, which is reflected in the higher number of working days lost. 2016 did not see any fatal injuries in the workplace.

Key figures Safety at GEA 2016

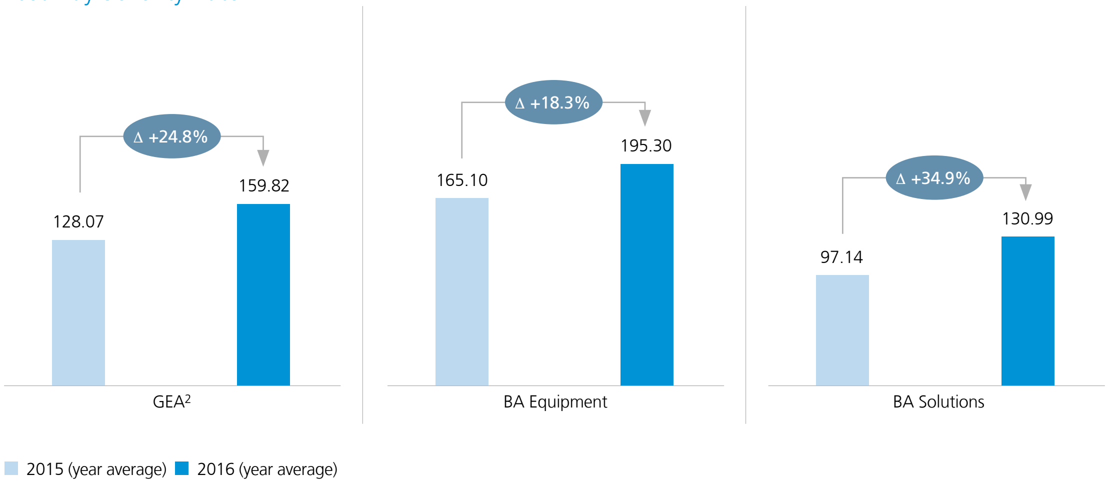
Lost Day Frequency Rate[1]



1) number of lost day accidents based on 1 million working hours
2) including Global Corporate Center

In the future, GEA wants to take the quality of its processes in the fields of health, occupational safety and the environment to the next level and move from reactive reporting to a proactive approach. For this purpose, GEA develops action plans designed to analyze the root causes of accidents and incidents in order to identify potential hazards for the purpose of risk prevention. The information gleaned from these analyses is communicated to the organization in terms of preventive measures whose implementation is being tracked. This approach is in line with a comprehensive risk assessment conducted by GEA experts in the pre-project phase: Which potential hazards are associated with the sites? Which risks may be derived from that and how can they be avoided? While occupational safety is based on centralized, group-wide processes, measures relating to health at the workplace are identified and managed at a local level, respectively.

Key figures Safety at GEA 2016
Lost Day Severity Rate[1]



1) Accident severity: number of lost days due to accidents based on 1 million working hours, GEA counts lost time up to 365 days
2) including Global Corporate Center

GEA will continue its efforts to further enhance occupational safety and health while going the extra mile to reinforce and support safe conduct.

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 in the farm technology segment 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 a natural and carbon-neutral cooling agent.

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

Legal Compliance Audits

All local statutory rules and regulations applicable to health, safety and the environment are regularly scrutinized by means of audits that are conducted by external service providers. The reports are uniform and compiled on the basis of a set of 25 criteria. This approach reveals potential for improvement and allows for corrective action to be taken. The respective local organization is obliged to define sustainable action plans, the implementation of which is evaluated by the respective Business Area and/or country organization. The improvement process is completed as soon as the competent corporate governance function gives its approval. In 2016, such legal compliance audits were conducted in 21 GEA companies located in seven different countries on three continents.

Responsibility for the environment

Even though energy consumption and emission levels in production are relatively low in the mechanical engineering sector, GEA regularly checks all areas for potential improvements in efficiency. The specific targets and programs are defined by each individual site, respectively.

Carbon Disclosure Project – emissions and energy consumption

As in previous years, GEA took part in the 2016 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 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 provided information on the risks and opportunities related to climate change, as well as its action taken in the field of climate protection. From GEA's perspective, any risks arising from potential shifts in demand will at the very least be offset by equally large opportunities to supply customers with energy-efficient solutions for their production processes from the company's wide range of products. The collected information embraces data for the preceding year, i.e., 2015 figures in the year under review. The higher levels of emissions result from the 2015 increase in revenue as well as the inclusion of acquired companies. Direct greenhouse gas emissions (scope 1) specifically include CO_2 emissions from fuel combustion, while indirect greenhouse gas emissions (scope 2) result from the generation of electricity, heat, cooling energy and steam by other companies for meeting GEA's demand. Further indirect emissions (scope 3) derive from activities undertaken by the organization, but originate from sources it cannot control. At GEA, this primarily includes emissions from business travel that are shown below.

Direct greenhouse gas emissions (scope 1), in tons of CO_2 equivalent	2015	2014*
Business Area Equipment	25,001	–
Business Area Solutions	14,703	–
Global Corporate Center & Shared Service Center	614	–
GEA's total	**40,318**	**33,827**

*) for the year 2014, only GEA's total is available

Indirect energy-related greenhouse gas emissions (scope 2), in tons of CO_2 equivalent	2015	2014*
Business Area Equipment	30,278	–
Business Area Solutions	11,794	–
Global Corporate Center & Shared Service Center	285	–
GEA's total	**42,357**	**39,810**

*) for the year 2014, only GEA's total is available

Additional greenhouse gas emissions (scope 3), in tons of CO_2 equivalent	2015	2014*
GEA's total	62,606	73,340

*) for the year 2014, only GEA's total is available

Best Practice: GEA's site in Oelde, Germany

Relying on an energy management system that meets the requirements of DIN EN ISO 50001, GEA also puts emphasis on enhancing energy efficiency at its own production sites in order to conserve natural resources and optimize operating costs. The components of a systematic energy management system include the comprehensive analysis and evaluation of in-house energy fluxes based on which measures for improving the energy balance of an entity are formulated. For example, the energy strategy pursued by GEA's largest global site in Oelde seeks to continuously improve energy efficiency levels by 1.5 percent per year while cutting CO_2 emissions in relation to production output by a minimum of 1.5 percent by the year 2020.

Within the framework of its energy strategy, GEA implemented two projects at its Oelde site in the year under review, with the projects being designed to make production even more sustainable. The company invested a six-figure sum to connect the heat supply system of two buildings to the company's own cogeneration plant and renew the cooling systems operated in the IT center; in the future, the energy required for cooling these premises will also be provided by the new energy center.

At the heart of the local energy management system is the energy center of the cogeneration plant that was opened in 2013. GEA's energy center combines the cogeneration plant with an absorption refrigerator to allow the use of trigeneration; as opposed to conventional power generation, this brings about a circa 60 percent reduction in primary energy consumption. Since last year, when two further buildings were connected to the plant for ensuring their required heat supply, the plant's degree of capacity utilization has gone up even further. Due to this measure, the primary energy consumption of these buildings went down by 30 percent; this reduces the site's carbon footprint by 180 tons per year. Apart from that, GEA realized further energy savings by replacing the conventional split air conditioning systems in the computer center; as a result, the center's energy consumption went down by half, while CO_2 emissions were reduced by 305 tons per year. The required cooling energy can be provided via the hybrid heat exchangers of the cogeneration plant by means of free cooling, i.e. without requiring any additional energy; moreover, maintenance is less complex while plant operation is more reliable.

Ecological impact of products and services

"Engineering for a better world": GEA's claim embraces the core value proposition of the group. Apart from responsibly shaping its own value creation processes, the company makes a contribution in terms of sustainable management and the protection of natural resources 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 have become increasingly important in connection with the investment decisions taken by these customers. This is why GEA has to come up with more and more sophisticated technology solutions. Today, it is imperative that new technologies or systems are significantly more efficient and usually smaller while offering the same level of performance as their predecessors. Lower consumption of resources, less floor space, harnessed energy recovery potential, ease of operation – these are the criteria currently applied by customers when making their purchasing decisions. For standing out amongst its peers and offering more customer benefits, a capital goods manufacturer has to gain technological leadership. At the end of the day, it is innovation that will give a manufacturer the technological edge.

GEA's innovation process

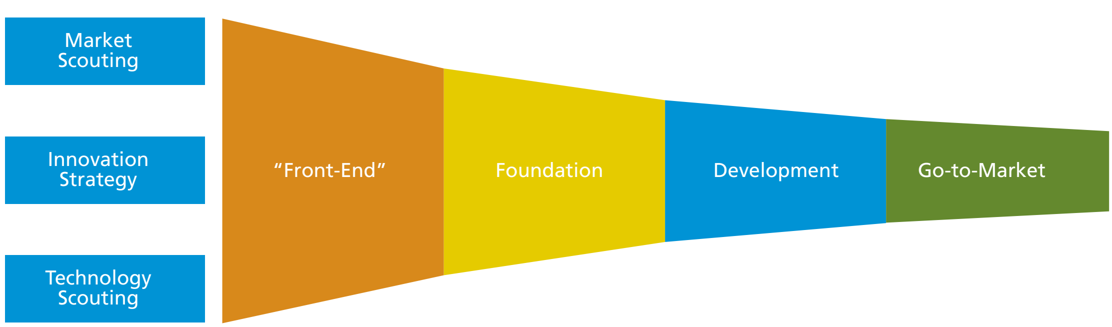
GEA offers a wide range of components, systems as well as process equipment and never tires of improving them in terms of resource efficiency, flexibility, quality and costs. GEA has defined around 200 core technologies that offer tremendous potential for optimization, also when combined with other technologies. In order to gauge the success of the resources allocated to innovation across the entire company, GEA refers to specific key performance indicators along its "innovation pipeline":

- number of ideas, projects or products in the various stages of innovation as well as the respective budgets allocated to research and development
- development costs
- anticipated sales volume or savings potential
- capex for enhancing existing products and processes
- optionally, the proportion of sales generated on the basis of products that are less than three years old, if this is relevant to the management of the innovation process

In connection with the realignment of its group structure, GEA is currently making considerable adjustments to this "innovation pipeline" as well as the above set of key parameters. For this reason, it would not make sense to provide a report including the relevant figures for the year 2016. In the year under review, GEA already made major efforts to define and roll out a unified, company-wide innovation process. In particular, the initial stages ("Front-End") of the new innovation management scheme, i.e., systematic idea generation and feasibility test, are to be expanded. For instance, this includes advanced problem solving and idea generator tools, the systematic analysis of market- and technology-driven trends as well as the pre-selection and tests of a new IT-based idea platform. GEA intends to roll out this idea platform across the entire company by the end of 2017.

In the future, GEA's innovation management process will once again include the respective underlying key performance indicators by referring to the following structure:

Innovation Management at GEA



For a more detailed report on GEA's research and development activities see the section on "Research and Development" (see page 20 ff.)

Best Practice: Innovation project in Austria

An Austrian innovation project showcases how the ecological footprint of the customer can be improved by relying on GEA technology. In spring 2016, GEA installed and commissioned a distillation plant designed for the recovery of isopropyl alcohol utilized during xanthan gum production on behalf of a biotechnology company. GEA applied a globally unique, patented process that is second to none in terms of energy efficiency and sustainability: GEA made use of vapor compressors reducing the overall energy consumption to less than 10 percent in comparison with conventional, single-stage stream-heated systems. In this particular case, CO_2 emissions went down 50,000 tons per year. Compared with the most advanced plant that existed before, this new and highly-automated distillation technology allows the company to save another 40 percent of energy while enhancing economic efficiency and conserving resources.

GEA supported this project, which involved an interdisciplinary team of engineers from Chemicals, Separation Processes and Automation, by making available resources from the GEA innovation fund. Using a dedicated software, the engineers accurately simulated the thermodynamic behavior of the plant for the purpose of optimizing the process control system prior to plant commissioning. This is why, from day one of production, the plant has generated the required amount of distillate in line with the specifications set by the customer.

Social responsibility

As a global player, GEA participates in a multitude of regional and local projects and initiatives; in addition, it is a member of various industry associations, such as the Verband Deutscher Maschinen- und Anlagenbau (VDMA – German Engineering Association) as well as Eurovent, Europe's Industry Association for Indoor Climate, Process Cooling, and Food Cold Chain Technologies. As a rule, the company's sites independently steer their activities in this particular area.

Social and civic engagement ("corporate citizenship") is an integral part of GEA's identity and firmly embedded in GEA's value system while reflecting GEA's way of transacting business. GEA engages in projects involving children and supports young researchers or scientists in the hope of retaining them for the benefit of the group. The following examples illustrate some of the endeavors undertaken in the fiscal year 2016:

For the past 13 years, GEA has supported Future Farmers of America (FFA), a US organization that focuses on promoting scientific education in agricultural disciplines. Apart from that, corporate sites participated in numerous charity events that included a running event in Chicago, which took place in 2016. As one of the sponsors, GEA was instrumental in raising more than USD 120,000 for the "Feeding Tomorrow" research program.

In June 2016, GEA joined MassChallenge Switzerland as one of the founding partners together with other renowned companies. MassChallenge operates as a non-governmental organization and allows start-ups to gain access to a global network of mentors and venture capital investors without acquiring any shares in said start-ups. This way, the association assists young entrepreneurs with a promising future.

In the year under review, GEA donated EUR 25,000 to a project for the protection of Syrian refugee children in Jordan that was carried out by the UN Refugee Agency. This UNHCR (United Nations High Commissioner for Refugees) project is designed to cater for the primary needs of Syrian refugee families and to ensure that the children are given the possibility of attending school.

GEA's 'Southern and Eastern Africa' country organization supported "Investing in Youth of Botlokwa", a non-profit organization in South Africa. Amongst other things, the organization provided young people with information on career opportunities and acquainted them with the field of technology.

The integration of HLW (Hinterländer Werkstätten, Dautphetal, a sheltered workshop) employees into the production process at GEA's Biedenkopf-Wallau site in Germany serves as a successful example of ensuring the inclusion of predominantly mentally-handicapped people. The site manufactures state-of-the art food processing and packaging plants and equipment. While the group of HLW employees was initially working in a separate section of GEA's manufacturing operations, its members are now assigned to various activities across the whole facility and fully integrated members of the workforce.

In Germany, GEA is engaged in a multitude of cooperation schemes involving many schools and universities. By joining forces and working together, educational facilities and companies ease students' transition to work and help them make the right career choice in order to ensure the availability of sufficient 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 includes information events held in the participating schools, job application training for students as well as joint projects comprising students and apprentices.

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, one of the participants came from Finland, to name but one example.

Another event serving the purpose of promoting qualified young talent is the Industry Contact Forum that was organized for the ninth time at GEA's site in Büchen in 2016. For the very first time, it was jointly hosted by brewery and dairy experts. 50 students from HAW Hamburg (University of Applied Sciences) as well as the universities of Flensburg, Hannover and Fulda were given an insight into the work of a project engineer.

Basic principles underlying the sustainability report

This sustainability report was submitted to the GRI Materiality Disclosures Service. GRI has confirmed the accuracy of the G4 Materiality Disclosures (G4-17 to G4-27).

The sustainability report has not been externally assured for the year under review. GEA is seeking external assurance for its report in fiscal year 2017.

Unless indicated otherwise, the disclosures comprise the worldwide activities of the overall group, i.e., GEA Group Aktiengesellschaft including all companies over which GEA can exercise significant influence or control. 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 Notes to the Consolidated Financial Statements. **G4-17**

Since this represents the first time report in line with the GRI Guidelines, there are no changes from previous reporting periods. **G4-22** **G4-23**

In mid-2016, GEA started the process for defining the report content 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 focusing 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. The findings of both workshops were summarized in a comprehensive list of sustainability issues; the list also included an initial assessment of relevance that provided some guidance in terms of stakeholder engagement. For performing this assessment, the above experts relied on the experience gained during their exchange with stakeholder groups closely related to them as well as their personal industry and competition-related expertise and knowledge. **G4-18**

Moreover, the internal experts were an important source for identifying and engaging external stakeholder groups. 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). Every year, GEA participates in the Climate Change Information Request of the Carbon Disclosure Project (CDP), a non-governmental organization. The relevant documents were also taken into consideration. Detailed discussions were held with the members of the Group Works Council and further employee representatives on the Supervisory Board. Apart from the sustainability reports compiled by key customers and competitors, the analysis placed particular emphasis on customers' supplier guidelines and audits as well as investor queries relating to sustainability issues. **G4-25** **G4-26**

G4-24 As a listed company with a shareholder structure characterized by the presence of institutional investors – without a major shareholder – GEA defined the classic "shareholders" group of stakeholders 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/sub-contractors
- Local communities
- Employees
- General public/media
- Regulators/public authorities
- Schools/universities
- Competitors

In conclusion, it can be said that the initial assessments and results of the materiality analysis conducted by engaging the relevant stakeholder groups have yielded very similar results. Regardless of the result of the materiality analysis, GEA already bases the contents of its 2016 documentation on the principle of non-financial reporting that is expected to be legally required from 2017 onwards ("CSR Directive" 2014/95/EU of the European Parliament and of the Council of October 22, 2014 as well as the corresponding German draft bill for reinforcing non-financial reporting by companies in their combined management and group management reports, "CSR Directive Implementation Act"). The Executive Board of GEA Group Aktiengesellschaft deliberated and adopted this approach.

G4-19 Reporting addresses the key aspects derived from the most important issues. They include:

- Labor/management relations
- Occupational health and safety
- Training and education
- Procurement practices
- Supplier Assessment
- Compliance
- Emissions (including indirect, energy-related emissions)
- Anti-corruption
- Human rights (assessment)
- Products and services
- Diversity and equal opportunity
- Economic performance

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

On aspect boundaries outside the organization: **G4-20 G4-21**

- Relevant emissions are also produced by external suppliers that provide GEA with electricity, heat, cooling energy as well as steam
- Products and services: ecological impact of GEA equipment operated at the customer's site
- The assessment of external suppliers in line with ecological criteria, working practices, impact on human rights and society is not only relevant in terms of the company's own procurement decisions, but also to GEA's customers and their assessment of the entire supply chain
- Occupational health and safety are relevant to assignments performed by GEA employees at the customer's site as well as external staff under GEA contracts
- Compliance and anti-corruption – outside of the organization, they are of particular relevance to the supply chain as well as individuals like commercial and sales agents, who are working in close proximity to the customer
- The respect for human rights is also of essential importance in GEA's supply chain

This overview outlines the aspects that were given high priority by specific stakeholder groups: **G4-27**

Assessment of material aspects by stakeholders*	Capital market	Customers	Suppliers/ sub-contractors	Local commu-nities	Employees	General public/ media	Regulators/ public authorities	Schools/ universities	Competi-tors
Economic performance	✓	✓	✓	✓	✓	✓		✓	✓
Procurement practices	✓	✓	✓	✓					
Emissions	✓	✓		✓	✓	✓	✓		
Products and services	✓	✓	✓		✓	✓	✓	✓	✓
Supplier assessment	✓	✓	✓						
Labor/management relations	✓			✓	✓	✓			
Occupational health and safety	✓	✓	✓		✓		✓		
Training and education	✓			✓	✓			✓	
Diversity and equal opportunity	✓				✓	✓		✓	
Human rights	✓	✓	✓		✓	✓	✓		
Anti-corruption	✓	✓	✓		✓	✓	✓		✓
Compliance	✓	✓	✓		✓	✓	✓		✓

*) according to order of GRI guidelines

Consolidated Financial Statements

Consolidated Balance Sheet
as of December 31, 2016

Assets (EUR thousand)	Section	12/31/2016	12/31/2015
Property, plant and equipment	5.1	485,046	508,072
Investment property	5.2	3,662	7,736
Goodwill	5.3	1,505,629	1,431,515
Other intangible assets	5.4	428,801	382,359
Equity-accounted investments	5.5	15,929	16,631
Other non-current financial assets	5.6	38,654	36,454
Deferred taxes	7.8	502,117	491,119
Non-current assets		**2,979,838**	**2,873,886**
Inventories	5.7	611,405	548,623
Trade receivables	5.8	1,390,397	1,118,081
Income tax receivables	5.9	25,832	26,082
Other current financial assets	5.6	165,942	372,289
Cash and cash equivalents	5.10	929,120	1,174,150
Assets held for sale	5.11	5,403	8,121
Current assets		**3,128,099**	**3,247,346**
Total assets		**6,107,937**	**6,121,232**

Equity and liabilities (EUR thousand)	Section	12/31/2016	12/31/2015
Subscribed capital		520,376	520,376
Capital reserve		1,217,861	1,217,861
Retained earnings		1,067,812	962,515
Accumulated other comprehensive income		188,977	142,877
Non-controlling interests		578	570
Equity	6.1	**2,995,604**	**2,844,199**
Non-current provisions	6.2	138,751	145,160
Non-current employee benefit obligations	6.3	807,652	775,594
Non-current financial liabilities	6.4	10,238	177,009
Other non-current liabilities	6.7	48,181	63,708
Deferred taxes	7.8	144,930	111,170
Non-current liabilities		**1,149,752**	**1,272,641**
Current provisions	6.2	144,465	130,607
Current employee benefit obligations	6.3	181,424	244,235
Current financial liabilities	6.4	165,719	300,735
Trade payables	6.5	624,817	610,315
Income tax liabilities	6.6	33,317	40,743
Other current liabilities	6.7	812,839	677,757
Current liabilities		**1,962,581**	**2,004,392**
Total equity and liabilities		**6,107,937**	**6,121,232**

Consolidated Income Statement
for the period January 1 – December 31, 2016

(EUR thousand)	Section	01/01/2016 - 12/31/2016			01/01/2015 - 12/31/2015			Change in %
		Excluding restructuring	Restructuring expenses	**Total**	Excluding restructuring	Restructuring expenses	**Total**	
Revenue	7.1	4,491,894	–	**4,491,894**	4,599,269	–	**4,599,269**	–2.3
Cost of sales		3,103,739	–1,234	**3,102,505**	3,118,718	51,763	**3,170,481**	–2.1
Gross margin		**1,388,155**	**1,234**	**1,389,389**	**1,480,551**	**–51,763**	**1,428,788**	**–2.8**
Selling expenses		498,172	1,460	**499,632**	499,532	23,472	**523,004**	–4.5
Research and development expenses		57,846	–455	**57,391**	66,377	5,802	**72,179**	–20.5
General and administrative expenses		480,839	–1,354	**479,485**	492,555	43,333	**535,888**	–10.5
Other income	7.2	383,276	–	**383,276**	392,141	–	**392,141**	–2.3
Other expenses	7.3	348,852	3,560	**352,412**	382,357	1,263	**383,620**	–8.1
Share of profit or loss of equity-accounted investments		3,070	–	**3,070**	2,569	–	**2,569**	19.5
Other financial income	7.6	503	–	**503**	2,499	–	**2,499**	–79.9
Other financial expenses	7.7	271	–	**271**	1,861	–	**1,861**	–85.4
Earnings before interest and tax (EBIT)		**389,024**	**–1,977**	**387,047**	**435,078**	**–125,633**	**309,445**	**25.1**
Interest income	7.6			**7,857**			**11,475**	–31.5
Interest expense	7.7			**44,676**			**50,913**	–12.3
Profit before tax from continuing operations				**350,228**			**270,007**	**29.7**
Income taxes	7.8			**81,628**			**5,758**	> 100
thereof current taxes				**57,792**			**61,428**	–5.9
thereof deferred taxes				**23,836**			**–55,670**	–
Profit after tax from continuing operations				**268,600**			**264,249**	**1.6**
Profit after tax from discontinued operations	7.9			**15,975**			**97,617**	**–83.6**
Profit for the period				**284,575**			**361,866**	**–21.4**
thereof attributable to shareholders of GEA Group AG				**284,555**			**361,857**	–21.4
thereof attributable to non-controlling interests				**20**			**9**	> 100

(EUR)	Section	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Basic and diluted earnings per share from continuing operations		1.40	1.37
Basic and diluted earnings per share from discontinued operations		0.08	0.51
Basic and diluted earnings per share	7.10	**1.48**	**1.88**
Weighted average number of ordinary shares used to calculate basic and diluted earnings per share (million)		**192.5**	**192.5**

Consolidated Statement of Comprehensive Income
for the period January 1 – December 31, 2016

(EUR thousand)	Section	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Profit for the period		**284,575**	**361,866**
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	–25,262	–1,689
thereof changes in actuarial gains and losses		–37,192	–1,463
thereof tax effect		11,930	–226
Items, that will be reclassified subsequently to profit or loss when specific conditions are met:			
Exchange differences on translating foreign operations		45,435	87,212
thereof changes in unrealized gains and losses		45,435	87,212
Result of available-for-sale financial assets	6.8	–233	763
thereof changes in unrealized gains and losses		–331	1,089
thereof tax effect		98	–326
Result of cash flow hedges		898	3,586
thereof changes in unrealized gains and losses		1,283	946
thereof realized gains and losses		–	4,485
thereof tax effect		–385	–1,845
Other comprehensive income		**20,838**	**89,872**
Total comprehensive income		**305,413**	**451,738**
thereof attributable to GEA Group AG shareholders		305,393	451,729
thereof attributable to non-controlling interests		20	9

Consolidated Cash Flow Statement
for the period January 1 – December 31, 2016

(EUR thousand)	Section	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Profit for the period		284,575	361,866
plus income taxes		81,628	5,758
minus profit after tax from discontinued operations		–15,975	–97,617
Profit before tax from continuing operations		350,228	270,007
Net interest income		36,819	39,438
Earnings before interest and tax (EBIT)		**387,047**	**309,445**
Depreciation, amortization, impairment losses, and reversal of impairment losses on non-current assets		113,568	120,342
Other non-cash income and expenses		3,548	–8,021
Employee benefit obligations from defined benefit pension plans		–41,036	–40,015
Change in provisions and other employee benefit obligations		–65,969	59,928
Losses and disposal of non-current assets		–4,321	–722
Change in inventories including unbilled construction contracts *		–72,130	5,634
Change in trade receivables		–118,859	–53,997
Change in trade payables		–5,882	–64,693
Change in other operating assets and liabilities		31,869	82,305
Tax payments		–66,678	–85,524
Cash flow from operating activities of continued operations		**161,157**	**324,682**
Cash flow from operating activities of discontinued operations		1,229	–22,559
Cash flow from operating activities		**162,386**	**302,123**
Proceeds from disposal of non-current assets		6,405	3,424
Payments to acquire property, plant and equipment, and intangible assets		–91,007	–90,679
Payments from current financial assets	5.6	–	–200,000
Proceeds from current financial assets		237,000	200,000
Payments from non-current financial assets		–640	–
Proceeds from non-current financial assets		4,098	–
Interest income		4,993	6,816
Dividend income		2,454	4,107
Payments to acquire subsidiaries and other businesses		–106,995	–119,723
Cash flow from investing activities of continued operations		**56,308**	**–196,055**
Cash flow from investing activities of discontinued operations		–5,600	142,911
Cash flow from investing activities		**50,708**	**–53,144**
Dividend payments		–153,996	–134,747
Payments from finance leases		–3,853	–4,153
Proceeds from finance loans		–	2,762
Proceeds from bond issue	6.4	–274,739	–
Repayments of finance loans		–4,064	–107,508
Interest payments		–23,117	–26,650
Cash flow from financing activities of continued operations		**–459,769**	**–270,296**
Cash flow from financing activities of discontinued operations		–35	40
Cash flow from financing activities		**–459,804**	**–270,256**
Effect of exchange rate changes on cash and cash equivalents		1,936	–382
Change in unrestricted cash and cash equivalents		**–244,774**	**–21,659**
Unrestricted cash and cash equivalents at beginning of period		1,172,778	1,194,437
Unrestricted cash and cash equivalents at end of period	5.10	928,004	1,172,778
Restricted cash and cash equivalents	5.10	1,116	1,372
Cash and cash equivalents total		**929,120**	**1,174,150**

*) Including advanced payments received

Consolidated Statement of Changes in Equity
as of December 31, 2016

(EUR thousand)	Subscribed capital	Capital reserves	Retained earnings	Accumulated other comprehensive income: 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, 2015 (192,495,476 shares)	**520,376**	**1,217,861**	**737,094**	**57,315**	**–997**	**–5,002**	**2,526,647**	**560**	**2,527,207**
Income	–	–	361,857	–	–	–	**361,857**	9	**361,866**
Other comprehensive income	–	–	–1,689	87,212	763	3,586	**89,872**	–	**89,872**
Total comprehensive income	–	–	360,168	87,212	763	3,586	**451,729**	9	**451,738**
Dividend payment by GEA Group Aktiengesellschaft	–	–	–134,747	–	–	–	**–134,747**	–	**–134,747**
Change in non-controlling interests	–	–	–	–	–	–	**–**	1	**1**
Balance at Dec. 31, 2015 (192,495,476 shares)	**520,376**	**1,217,861**	**962,515**	**144,527**	**–234**	**–1,416**	**2,843,629**	**570**	**2,844,199**
Income	–	–	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**
Dividend payment by GEA Group Aktiengesellschaft	–	–	–153,996	–	–	–	**–153,996**	–	**–153,996**
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**

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, 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 315a 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 1, 2017 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 1 "Presentation of Financial Statements" – Disclosure Initiative – issued by the IASB in December 2014
The amendments are attributable to an IASB initiative to improve the presentation and disclosure requirements in existing standards. They clarify that disclosures are generally only required if their content is not immaterial. In addition, they clarify how shares in the other comprehensive income of equity-accounted companies should be presented in the statement of comprehensive income. The amendments also extend the requirements on the aggregation and disaggregation of line items in the balance sheet and statement of comprehensive income. Lastly, they ease the rigid requirements regarding the structure of the notes, so that these can now be structured in a way that takes better account of their relevance for the individual company.

Amendments to IAS 19 "Employee Benefits" – "Defined Benefit Plans: Employee Contributions" – issued by the IASB in November 2013

The amendments concern requirements relating to contributions from employees or third parties that are linked to service and clarify the corresponding requirements for attributing such contributions to periods of service. In addition, the accounting for contributions that are independent of the number of years of service has been simplified.

IFRS 14 "Regulatory Deferral Accounts" – issued by the IASB in January 2014

Since IFRS 14 is mandatory only for first-time adopters of IFRSs, the new regulations were not applicable to GEA's financial statements.

Improvements to IFRSs 2010-2012 Cycle – amendments under the IASB's annual improvements project – published by the IASB in December 2013

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 a total of seven standards.

Improvements to IFRSs 2012 – 2014 Cycle – amendments under the IASB's annual improvements project – published by the IASB in September 2014

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 a total of four standards.

The initial application of the new requirements had no material effect on the consolidated financial statements.

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, 2016.

Unless otherwise stated, the new standards and interpretations have been endorsed by the EU.

GEA is currently examining the effects 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. 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. There is an optional right to measure certain equity instruments at fair value through other comprehensive income; in this case, dividend income from these assets is recognized in profit or loss.

Accounting for financial liabilities
With regard to accounting for financial liabilities, the most important change relates to the presentation of changes in value of financial liabilities measured 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 effects 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 continue to be met, hedging relationships do not have to be terminated as a result of the transition from IAS 39 to IFRS 9. The existing requirements under IAS 39 may also, as an option, continue to be applied under IFRS 9.

New impairment model
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.

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.

IFRS 9 no longer requires restatement of prior-period figures upon initial application. When an entity chooses to apply this exemption, additional disclosures are required under IFRS 7 to allow for assessment of the effects of the first-time application of IFRS 9.

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. On the basis of its findings so far, GEA expects that application of the new impairment model and the resulting requirements to use credit information on customers will have implications for its internal procedures and processes. The group is currently identifying what system adjustments will be necessary in order to map the forward-looking customer information required under IFRS 9 to determine expected credit losses.

This assessment is based on our provisional findings and reflects the current status of the analysis. In 2017, GEA will proceed with the analysis in an effort to ascertain any implications arising from application of the new impairment model.

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 extensive disclosures on revenue recognition.

IFRS 15 (incl. the amendment on the timing of initial application) was endorsed by the EU in September 2016 and is thus applicable to fiscal years beginning on or after January 1, 2018. Earlier application of the requirements is permitted. Although initial application of the standard is always with retrospective effect, IFRS 15 does allow for a number of practical expedients.

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 (subject to endorsement by the EU) for the first time as of the fiscal year 2018.

GEA expects to 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 prior revenue standards, e.g. IAS 11 and 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 (or other appropriate components of equity) at the date of initial application. The alternative would be "full retrospective adoption", i.e. where IFRS 15 is applied to the presentation of the comparative period; in that case, impacts from the transition would be recognized in equity at the beginning of the comparative period.

GEA is currently analyzing the effects of the new regulations as part of a group-wide project. The project comprises two phases:

The first involves a detailed analysis of the implications of IFRS 15 for the two Business Areas, Solutions and Equipment. The results of the analysis will be verified in the individual divisions and then documented with regard to the initial application of IFRS 15. The detailed analysis had not been completed by the end of the fiscal year 2016. Upon conclusion thereof and depending on the findings made, GEA will decide on whether to exercise any of the practical expedients for the initial application of IFRS 15.

In the second phase, any necessary adjustments to existing accounting processes and IT systems will be made, and financial staff will be trained in the (initial) application of the new regulation to ensure a uniform approach to IFRS 15. Based on the findings so far, GEA does not believe that the new requirements under IFRS 15 will have serious repercussions for the group's net assets, financial position, and results of operations. That said, isolated, minor differences to current accounting practice could occur.

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

Separation of performance obligations under IFRS 15 and allocation of the total transaction price could lead to revenues occasionally being recognized later to a minor degree. With regard to the timing of revenue recognition in the case of contracts to supply spare parts, GEA currently assumes that it does not have any "stand-ready obligation"; rather, it is the provision of the individual components that constitutes the performance obligation.

GEA is expecting only very limited repercussions from the requirements under IFRS 15 to determine the full consideration (total transaction price) for revenues recognizable under a customer contract.

According to IFRS 15, parts of the overall consideration such as performance-based incentives, but also discounts, bulk rebates and even contractual penalties all constitute a "variable consideration" that must be estimated at contract inception. In addition, IFRS 15 provides for a constraint with regard to revenue recognition for variable considerations. As things currently stand, GEA believes that in isolated cases, application of this constraint may result in revenues for variable considerations being recognized later than under current practice. The group will continue its assessment of individual contracts in the coming months in order to determine the consequences of these new regulations.

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. As things stand, GEA does not expect any major differences to current accounting practice in this regard:

Business Area Solutions: 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 payment for the good/service already provided.

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.

In both business areas, however, GEA also provides services such as maintenance. The group has arrived at the provisional conclusion that services will continue to be recognized as a performance obligation satisfied "over time", as the customer receives the benefit from the service while the service performance is being transferred and can also utilize it at the same time.

Under IFRS 15 regulations, an appropriate method of measuring progress towards complete satisfaction of the performance obligation must be defined for all revenues recognized "over time". A current debate in this context concerns the implications for progress measurement should the criteria for revenue recognition over time not be met until after contract inception. Different points of views are currently being expressed in expert discussions on this subject, which is still awaiting clarification by the standards body. GEA is monitoring the progress of the debate and is using the current project to identify whether there are likely to be serious implications in terms of the timing of revenue recognition.

The presentation and disclosure requirements under IFRS 15 go beyond the provisions of the current standard. IFRS 15 requires extensive qualitative and quantitative disclosures for the classification of revenue, as well as on performance obligations and contract balances, and on significant judgments. In its group-wide project, GEA is currently studying these requirements to ascertain the extent to which its internal procedures, accounting processes and IT systems will need to be modified in order to capture the necessary information.

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.

The new release replaces the currently valid 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".

GEA is currently analyzing the implications of the new regulations, its current assumption being that the new provisions will result in an increase in total assets and liabilities, as well as higher EBITDA.

Subject to endorsement by the EU, these 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.

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.

Subject to their endorsement by the EU, the amendments will be required to be applied for 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 7 "Statement 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 "Statement of Cash Flows".

These require a company to disclose changes to such financial liabilities, the inflows and outflows of which 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. The proposed format for the corresponding disclosures is a reconciliation between the opening and closing balances.

GEA does not expect the implementation of the amendments to IFRS 7 to materially affect its financial reporting.

Subject to their endorsement by the EU, the amendments will be required to be applied for the first time in fiscal years beginning on or after January 1, 2017; earlier application is permitted. No comparative figures from the previous year have to be provided in the year when the regulations are first applied.

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 does not expect the implementation of the amendments to IFRS 12 to affect its financial reporting.

Subject to their endorsement by the EU, the amendments will be required to be applied retrospectively for fiscal years beginning on or after January 1, 2017; earlier application is permitted. When the amendments are initially applied, the individual equity components affected by the change will not be required to be adjusted in the opening balance of the earliest period shown. If this simplification is used, all changes in equity can be recorded in the revenue reserves instead.

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).

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 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.

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.

Intragroup receivables, liabilities, income, and expenses are eliminated, as are cash flows and 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, 2016.

The consolidated group changed as follows in fiscal year 2016:

Number of companies	2016	2015
Consolidated group as of January 1	**222**	**216**
German companies (including GEA Group AG)	36	35
Foreign companies	186	181
Initial consolidation	7	11
Merger	–7	–3
Liquidation	0	–1
Deconsolidation	–3	–1
Consolidated group as of December 31	**219**	**222**
German companies (including GEA Group AG)	36	36
Foreign companies	183	186

A total of 47 subsidiaries (previous year: 46) 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: 0.3 percent) of the group's aggregate consolidated revenue, while their earnings account for 0.4 percent (previous year: –0.2 percent) of recognized earnings before tax of the complete group, and their equity accounts for 0.5 percent (previous year: 0.8 percent) of consolidated equity. The subsidiaries are measured at cost and recognized as non-current other 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 non-controlling 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 non-controlling 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: 2) and 5 investments in joint ventures (previous year: 6) 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.

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 of disposal. 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 documented 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 in the income statement. 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 nonderivative 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 nonderivative 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 the income statement. 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 work is remunerated. 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).

Restructuring provisions
Restructuring provisions are recognized as soon as the company has a constructive obligation to carry out restructuring measures, having given notice of the restructuring plan to the parties affected. In assessing whether the criteria for recognition have been met, the management must make certain assumptions as to whether the announcement has given rise to justified expectations among the parties affected that the company will carry out the restructuring, and whether major changes to the restructuring plan are anticipated.

In order to determine the amount of the restructuring provisions, management must, above all, estimate the amount of the expected severance payments. To this end, the management needs to make assumptions with regard to the wage structure and length of service of the employees affected by the cuts, as well as to the manner in which the downsizing program is to be implemented (e.g. voluntary schemes, partial retirement, redundancy packages).

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).

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 closely 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 interest rate derivatives are allocated to individual loans. The hedging relationships are documented and recognized as cash flow hedges. 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.

Cross-currency swaps were used in connection with the financing of acquisitions in Canada and the UK. They are recognized at fair value. However, they are not included in any 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 264 thousand in fiscal year 2016 (previous year: EUR –6,449 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. Cash funds are arranged and credit lines managed on the basis of a multi-year financial plan and a rolling month-by-month cash forecast. The funds are then 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 16 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
2016							
Trade payables	624,817	623,882	935	–	–	–	–
Borrower's note loan	90,651	92,453	–	–	–	–	–
Bonds	–	–	–	–	–	–	–
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	–	–
2015							
Trade payables	610,315	609,487	828	–	–	–	–
Borrower's note loan	90,595	2,453	92,453	–	–	–	–
Bonds	282,666	286,415	–	–	–	–	–
Liabilities to banks	55,869	5,870	50,171	101	32	5	–
Liabilities under finance leases	33,809	3,930	3,906	4,023	3,906	3,906	48,057
Liabilities to investees	202	202	–	–	–	–	–
Currency derivatives not included in a recognized hedging relationship	8,357	284,541	10,268	1,194	–	–	–
Interest rate and cross-currency derivatives not included in a recognized hedging relationship	3,950	7,864	25,959	4,042	–	–	–
Interest rate and cross-currency derivatives included in a cash flow hedge	2,296	1,256	1,042	–	–	–	–
Other financial liabilities	139,221	82,045	45,798	15,838	7,372	5,811	–

All financial liabilities outstanding as of December 31, 2016, 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 920,969 thousand (previous year: EUR 336,165 thousand) were partially offset by payments received from these instruments of EUR 901,654 thousand (previous year: EUR 320,373 thousand).

As of December 31, 2016, the group held cash credit lines of EUR 855,664 thousand (previous year: EUR 1,199,350 thousand), EUR 146,496 thousand of which has been utilized (previous year: EUR 429,130 thousand). The cash credit lines are composed of the following items:

(EUR thousand)	Maturity	12/31/2016 approved	12/31/2016 utilized	12/31/2015 approved	12/31/2015 utilized
GEA Bond	April 2016	–	–	274,739	274,739
European Investment Bank	July 2017	50,000	50,000	50,000	50,000
Borrower's note loan	September 2017	90,000	90,000	90,000	90,000
Syndicated credit line ("Club Deal")	August 2021	650,000	–	650,000	–
Various (bilateral) credit lines including accured interests	Maximum of 1 year or "until further notice"	65,664	6,496	134,611	14,391
Total		**855,664**	**146,496**	**1,199,350**	**429,130**

On April 21, 2016, GEA repaid the outstanding amount of EUR 274,739 thousand on the bond issued on April 14, 2011.

To ensure long-term group financing, GEA Group Aktiengesellschaft took advantage of the first option to extend the Club Deal, prolonging it until August 2021. The loan features one further prolongation option, potentially extending the deal up to 2022.

As of December 31, 2016, guarantee lines for the performance of contracts, advance payments, and warranty obligations of EUR 1,265,468 thousand were available to the group as a whole (previous year: EUR 1,463,367 thousand), EUR 475,220 thousand of which has been utilized (previous year: EUR 481,442 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, 2016, EUR 20,149 thousand (previous year: EUR 26,275 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 6,055 thousand (previous year: EUR 14,865 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 50,759 thousand (previous year: EUR 63,646 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 15,329 thousand (previous year: EUR 19,094 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 102,631 thousand (previous year: EUR 99,369 thousand) of group guarantees were granted to Lurgi AG's customers to collateralize that company's contractual obligations in the unlikely event of default. The purchaser of the Lurgi Group has granted bank guarantees that cover the amount for which GEA Group Aktiengesellschaft is liable under the bank guarantees issued. The bank guarantees of EUR 2,830 thousand granted last year to Lentjes GmbH under GEA Group Aktiengesellschaft credit lines were fully derecognized in 2016. Group guarantees granted to Lentjes GmbH to collateralize that company's contractual obligations to its customers had already been fully derecognized in 2015.

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 interest rate derivatives are included in a hedging relationship in the form of cash flow hedges, they are subject to equity-related interest rate risk. No interest rate derivatives were designated as cash flow hedges as of December 31, 2016.
- From cross-currency swaps: Although swaps are matched by intragroup receivables as hedged items, they are not included in a documented hedging relationship. While receivables are measured using the spot rate, the currency components of the swaps are measured on the basis of the forward rates. The two rates could differ significantly depending on the interest rate difference between the two currencies.
- 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 are 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		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

(EUR thousand)		Nominal amount	Profit/loss for the year	
Base currency	Foreign currency		2015	
			+ 10%	**- 10%**
EUR	USD	597,664	5,209	–6,366
EUR	GBP	94,278	–1,280	1,565
EUR	NZD	59,984	–1,079	1,319
EUR	CNY	40,622	384	–470
EUR	ZAR	27,681	2,155	–2,634
EUR	CAD	23,887	2,240	–2,738

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.

The potential fluctuations in the profit or loss for the year result primarily from derivatives that are not included in a designated hedging relationship, but are used to avoid currency risk as part of the general hedging strategy.

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:

	12/31/2016		12/31/2015	
(EUR thousand)	+ 100 basis points	–100 basis points	+ 100 basis points	–10 basis points
Interest rate risk recognized in equity	251	–254	766	–78
Interest rate risk recognized in profit or loss	130	–133	824	–83

The calculation is based on a net volume of EUR 78,263 thousand (previous year: EUR 121,469 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)	12/31/2016	12/31/2015
Liabilities to banks	–55,845	–55,869
Borrower's note loan	–90,651	–90,595
Bonds	–	–282,666
Cash and cash equivalents	929,120	1,174,150
Current securities	–	37,000
Fixed deposits with a remaining period ≤ 1 year	–	200,000
Net liquidity (+)/Net debt (–)	**782,624**	**982,020**
Equity	**2,995,604**	**2,844,199**
Equity ratio	**49.0%**	**46.5%**
Gearing	–26.1%	–34.5%

Net liquidity fell by EUR 199,396 thousand in the course of the fiscal year, closing at EUR 782,624 thousand on December 31, 2016.

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:

	2016		2015	
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 2016, GEA acquired the following company by way of a share deal:

Business	Head office	Acquisition Date	Percentage of voting interest (%)	Consideration transferred (EUR thousand)
Imaforni S.p.A.	Colognola ai Colli, Verona (Italy)	April 1, 2016	100.0	153,478

On April 1, 2016, GEA completed the purchase of shares in the Italian corporate group Imaforni and, in the process, acquired all shares of the group's holding company, Imaforni S.p.A.

Imaforni is a leading supplier of high-tech production plant and solutions to the pastries sector and will be allocated to the Business Area Solutions. The takeover will reinforce GEA's "Application Center Bakery" by adding complex production lines, especially for biscuits and crackers. It constitutes a further step in the context of the Group's application strategy and is a measure of its intent to expand its leading position in the field of sophisticated process technologies for the food industry. The transaction costs associated with the acquisition amount to EUR 1,326 thousand, of which EUR 62 thousand was incurred in the previous year. The transaction costs associated with the acquisition are reported in other expenses.

In addition, towards the end of the year, 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.

4.2 Consideration paid

The consideration paid is composed as follows:

Business (EUR thousand)	Cash	Contingent consideration	Total
Imaforni S.p.A.	153,478	–	**153,478**

4.3 Assets acquired and liabilities assumed

The following assets were acquired and liabilities assumed through the acquisition of Imaforni:

Fair value (EUR thousand)	Imaforni S.p.A.
Property, plant and equipment	1,604
Intangible assets	57,436
Other non-current assets	2
Non-current assets	**59,042**
Inventories	4,720
Trade receivables	24,956
Other current assets	2,272
Cash and cash equivalents	52,464
Current assets	**84,412**
Total assets	**143,454**
Other non-current liabilities	2,907
Deferred taxes	16,092
Non-current liabilities	**18,999**
Trade payables	14,614
Income tax liabilities	2,696
Other current liabilities	23,952
Current liabilities	**41,262**
Total liabilities	**60,261**
Net assets acquired	**83,193**
of which attributable to GEA Group AG	83,193
Acquisition cost	153,478
Goodwill of GEA Group AG	70,285

The fair value and gross amount of the receivables acquired are calculated as follows:

Trade receivables (EUR thousand)	Gross amount	Contractual cash flows not expected to be collectable	Fair value
Imaforni S.p.A.	25,292	–336	24,956

The goodwill arising from the acquisition of EUR 70,285 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.

4.4 Impact on consolidated revenue and consolidated profit

Since its acquisition, the Imaforni corporate group has contributed to consolidated revenue and consolidated profit after tax as follows:

(EUR thousand)	Sales	Profit for the period
Imaforni S.p.A.	66,402	3,909
Total	**66,402**	**3,909**

If the corporate group had been acquired as of January 1, 2016, consolidated revenue in the reporting period would have been EUR 4,512,341 thousand, and the corresponding consolidated profit after tax EUR 284,820 thousand.

4.5 Cash outflows

The acquisition of the Imaforni corporate group resulted in the following cash outflows in 2016:

(EUR thousand)	2016	2015
Consideration transferred	153,478	152,156
less contingent consideration	–	–4,600
Purchase price paid	**153,478**	**147,556**
less cash acquired	–52,464	–33,377
Net cash used in acquisition	**101,014**	**114,179**

Outflows of EUR 106,995 thousand from acquisitions were recognized in the cash flow statement for the fiscal year 2016.

Allocation of the purchase price for Imaforni was finalized in the fourth quarter of 2016. As such, there were no changes to the disclosures made in the half-yearly financial report for 2016.

4.6 Acquisitions in the previous year

Allocation of the purchase price for the Comas corporate group purchased in the previous year was finalized in the second quarter of 2016 without further amendments.

The second quarter of 2016 also saw allocation of the purchase price for CMT, a company also acquired in the previous year, finalized with some minor adjustments. These resulted in a reduction in the goodwill in respect of CMT of EUR 1,600 thousand to EUR 10,761 thousand.

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, 2015					
Cost	520,733	409,148	328,812	27,339	**1,286,032**
Cumulative depreciation and impairment losses	–238,325	–298,584	–247,334	–3,031	**–787,274**
Carrying amount	**282,408**	**110,564**	**81,478**	**24,308**	**498,758**
Changes in 2015					
Additions	4,068	12,859	16,137	19,213	**52,277**
Disposals	–190	–789	–687	–683	**–2,349**
Depreciation	–13,965	–23,227	–21,339	–801	**–59,332**
Impairment losses	–2,669	–22	–7	–	**–2,698**
Reversal of impairment losses	–	40	–	–	**40**
Reclassification as held for sale	–1,367	–	–	–	**–1,367**
Acquisitions through business combinations	16,646	4,350	1,752	18	**22,766**
Currency translation	3,994	2,053	727	63	**6,837**
Other changes	6,017	5,704	439	–19,020	**–6,860**
Carrying amount at Dec. 31, 2015	**294,942**	**111,532**	**78,500**	**23,098**	**508,072**
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**
Reversal of impairment losses	–	–	–	–	**–**
Reclassification as held for sale	–	–	–	–	**–**
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**
Dec. 31, 2016					
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**

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	3 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)	2016	2015
Cost – capitalized leased assets under finance leases	23,116	43,893
Cumulative depreciation and impairment losses	–8,804	–11,639
Carrying amount	**14,312**	**32,254**

EUR 13,667 thousand (previous year: EUR 27,150 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 535 thousand as of the reporting date (previous year: EUR 4,355 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, 2015			
Cost	15,037	9,834	**24,871**
Cumulative depreciation and impairment losses	–6,793	–5,595	**–12,388**
Carrying amount	**8,244**	**4,239**	**12,483**
Changes in 2015			
Disposals	–1,006	–192	**–1,198**
Depreciation	–	–582	**–582**
Reversal of impairment losses	–	–	**–**
Currency translation	–4	–25	**–29**
Reclassification in held for sale	–541	–2,397	**–2,938**
Carrying amount at Dec. 31, 2015	**6,693**	**1,043**	**7,736**
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			
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**
Dec. 31, 2016			
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**

The fair value of investment property is EUR 11,250 thousand (previous year: EUR 21,325 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)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Rental income	1,836	2,304
Operating expenses	950	1,731
thereof: properties used to generate rental income	950	1,731
Total	**886**	**573**

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)	GEA Farm Technologies	GEA Mechanical Equipment	GEA Process Engineering	GEA Refrigeration Technologies	BA Equipment	BA Solutions	Total
Carrying amount at Dec. 31, 2014	**187,768**	**570,849**	**387,587**	**183,768**	**–**	**–**	**1,329,972**
Additions	–	–	6,409	815	11,697	70,943	**89,864**
Currency translation	6,793	3,239	1,747	3,387	–1,724	–1,763	**11,679**
Reclassification	–194,561	–574,088	–395,743	–187,970	869,086	483,276	**–**
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**

Impairment test

Goodwill recoverability was tested at the end of fiscal year 2016. 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 2017, 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. Growth is also assumed for the other customer industries. Both GEA's Business Areas will profit from these underlying trends. 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 1.00 percent (previous year: 1.50 percent) and a market risk premium of 7.00 percent (previous year: 6.75 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 (in %)	12/31/2016	12/31/2015
BA Equipment	7.50	7.76
BA Solutions	6.58	7.09

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, 2015						
Cost	64,679	169,925	97,647	136,849	115,671	**584,771**
Cumulative amortization and impairment losses	–12,744	–74,706	–65,203	–69,150	–37,411	**–259,214**
Carrying amount	**51,935**	**95,219**	**32,444**	**67,699**	**78,260**	**325,557**
Changes in 2015						
Additions	7	–	6,967	4,605	29,689	**41,268**
Disposals	–1	–	–90	–178	–125	**–394**
Amortization	–276	–18,928	–8,946	–9,457	–10,170	**–47,777**
Impairment losses	–3,892	–	–3,089	–6	–2,031	**–9,018**
Reversal of impairment losses	–	–	–	–	–	**–**
Acquisitions through business combinations	40,221	11,134	364	12,635	1	**64,355**
Currency translation	479	173	34	1,152	103	**1,941**
Other changes	112	11	1,079	–271	5,497	**6,428**
Carrying amount at Dec. 31, 2015	**88,585**	**87,609**	**28,762**	**76,179**	**101,224**	**382,359**
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**
Dec. 31, 2016						
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**

The additions to internally generated intangible assets are primarily attributable to the Business Area Equipment, where costs relating to developments in automated milking were capitalized.

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 10
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 58,756 thousand in fiscal year 2016 (previous year: EUR 47,777 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 102,886 thousand (previous year: EUR 86,015 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:

	12/31/2016		12/31/2015	
Segment	Carrying amount (EUR thousand)	Proportion of total carrying amount (%)	Carrying amount (EUR thousand)	Proportion of total carrying amount (%)
BA Equipment	42,163	41.0	45,364	52.7
BA Solutions	60,723	59.0	40,651	47.3
Total	**102,886**	**100.0**	**86,015**	**100.0**

These brands are tested for impairment at least once a year. For this purpose, their fair value less costs of disposal 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. The assumed license fee installments generally correspond to those of the initial measurement. The payments saved calculated in this way are then discounted using a brand-specific after tax discount rate (last year: before tax). Valuation is based on the following assumptions:

(in %)	12/31/2016	12/31/2015
Discount rate	6.19 – 8.37	7.94 – 16.30
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 value in use of the cash-generating unit to which it belongs.

The impairment test carried out at the end of the year produced impairment losses of EUR 28 thousand (previous year: EUR 3,892 thousand), while simultaneous reversals of such losses amounted to EUR 4,413 thousand (previous year: EUR 0 thousand). The impairment losses of EUR 28 thousand (previous year: EUR 1,213 thousand) and simultaneous reversals amounting to EUR 1,189 thousand (previous year: EUR 0 thousand) were attributable to the Business Area Equipment. The Business Area Solutions recorded only reversals of impairment losses, and these amounted to EUR 3,224 thousand in the reporting year (previous year: impairment loss of EUR 2,679 thousand).

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 6 thousand as of December 31, 2016 (previous year: EUR 2,026 thousand).

The share of the profit or loss of equity-accounted associates is as follows:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Profit/loss from continuing operations	82	145
Total profit/loss	**82**	**145**

Joint ventures

Equity-accounted joint ventures are reported at a carrying amount of EUR 15,923 thousand as of December 31, 2016 (previous year: EUR 14,605 thousand).

The share of the profit or loss of equity-accounted joint ventures is as follows:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Profit/loss from coninuing operations	2,988	2,404
Total profit/loss	**2,988**	**2,404**

5.6 Other financial assets

Other financial assets are composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Investments in unconsolidated subsidiaries and other equity investments	22,568	21,746
Other securities	9,098	9,311
Derivative financial instruments	99	152
Miscellaneous other financial assets	6,889	5,245
Other non-current financial assets	**38,654**	**36,454**
Other securities	–	37,000
Derivative financial instruments	3,317	7,424
Miscellaneous other financial assets	162,625	327,865
Other current financial assets	**165,942**	**372,289**
Total	**204,596**	**408,743**

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 169,514 thousand (previous year: EUR 333,110 thousand) were recognized as of the reporting date. They are broken down into non-current and current assets as follows:

(EUR thousand)	12/31/2016	12/31/2015
Other receivables from unconsolidated subsidiaries	34	67
Other receivables from equity investments	429	790
Receivables from tax authorities	456	448
Sundry miscellaneous other financial assets	5,970	3,940
Other non-current financial assets	**6,889**	**5,245**
Other receivables from unconsolidated subsidiaries	6,883	3,520
Other receivables from equity investments	15,753	12,188
Other receivables from tax authorities	60,668	45,013
Fixed term deposits	–	200,000
Sundry miscellaneous other financial assets	79,321	67,144
Other current financial assets	**162,625**	**327,865**
Total	**169,514**	**333,110**

Receivables from tax authorities primarily comprise VAT receivables.

Miscellaneous other financial assets include prepaid expenses totaling EUR 25,913 thousand (previous year: EUR 24,033 thousand).

The maturity structure of miscellaneous other financial assets is as follows:

(EUR thousand)		12/31/2016	12/31/2015
Carrying amount before impairment losses		**87,304**	**73,223**
Impairment losses		2,013	2,139
Carrying amount		**85,291**	**71,084**
thereof not overdue at the reporting date		83,503	70,773
thereof past due at reporting date		1,788	311
	less than 30 days	758	191
	between 31 and 60 days	337	42
	between 61 and 90 days	152	18
	between 91 and 180 days	90	18
	between 181 and 360 days	131	11
	more than 360 days	320	31

5.7 Inventories

Inventories are composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Raw materials, consumables, and supplies	129,293	133,370
Work in progress	107,811	94,778
Assets for third parties under construction	23,194	17,911
Finished goods and merchandise	291,165	273,572
Advance payments	59,942	28,992
Total	**611,405**	**548,623**

Inventories of EUR 2,763 million were recognized as an expense in fiscal year 2016 (previous year: EUR 2,839 million). Impairment losses on inventories were EUR 15,783 thousand in the reporting period (previous year: EUR 11,694 thousand). Impairment losses on inventories in previous years amounting to EUR 2,305 thousand (previous year: EUR 2,432 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)	12/31/2016	12/31/2015
Trade receivables	929,388	781,209
thereof from third parties	913,587	766,856
thereof from unconsolidated subsidiaries	15,801	14,353
Gross amount due from customers for contract work	461,009	336,872
Total	**1,390,397**	**1,118,081**

Trade receivables include receivables of EUR 7,244 thousand (previous year: EUR 4,636 thousand) that will not be realized until more than one year after the reporting date. Bad debt allowances on trade receivables totaled EUR 49,371 thousand (previous year: EUR 49,031 thousand).

The maturity structure of trade receivables – with the exception of receivables from unconsolidated subsidiaries – is as follows:

(EUR thousand)		12/31/2016	12/31/2015
Carrying amount before impairment losses		**962,958**	**815,887**
Impairment losses		49,371	49,031
Carrying amount		**913,587**	**766,856**
thereof not overdue at the reporting date		618,555	549,262
thereof past due at reporting date		295,032	217,594
	less than 30 days	108,555	95,825
	between 31 and 60 days	52,563	38,756
	between 61 and 90 days	22,582	21,411
	between 91 and 180 days	44,216	28,928
	between 181 and 360 days	38,084	18,145
	more than 360 days	29,032	14,529

Construction contracts

The gross amount due from and to customers for contract work is composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Capitalized production cost of construction contracts	2,875,083	2,630,119
plus net gain from construction contracts	549,758	475,814
less anticipated losses	20,379	8,740
less progress billings	3,301,326	3,085,790
Total	**103,136**	**11,403**
Gross amount due from customers for contract work (included in trade receivables)	461,009	336,872
Gross amount due to customers for contract work (included in other liabilities)	–357,873	–325,469
Total	**103,136**	**11,403**

Advance payments received on construction contracts amounted to EUR 62,425 thousand as of December 31, 2016 (previous year: EUR 32,758 thousand). Customer retention money amounted to EUR 12,124 thousand (previous year: EUR 9,680 thousand). Revenue of EUR 2,212,385 thousand (previous year: EUR 2,160,765 thousand) was generated from construction contracts in the reporting period.

5.9 Income tax receivables

Income tax receivables amounted to EUR 25,832 thousand at the reporting date (previous year: EUR 26,082 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)	12/31/2016	12/31/2015
Unrestricted cash	928,004	1,172,778
Restricted Cash	1,116	1,372
Total	**929,120**	**1,174,150**

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 0.4 percent (previous year: between 0.0 and 0.6 percent). The average interest rate as of the end of the year is 0.1 percent (previous year: 0.2 percent).

5.11 Assets held for sale

Assets held for sale are reported at a carrying amount of EUR 5,403 thousand as of December 31, 2016 (previous year: EUR 8,121 thousand). This is land in Frankfurt that is not required for operating purposes. This asset will be disposed of since it has no further use.

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, 2016. 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.

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.

Authorized capital

(EUR thousand)	Annual General Meeting resolution	Expiring on	Amount (EUR thousand)
Authorized Capital I	April 24, 2012	April 23, 2017	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 on one or more occasions until April 23, 2017 (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 Executive Board is also entitled, with the approval of the Supervisory Board, to exclude fractions from shareholders' preemptive rights. The new shares may also be underwritten by banks with the obligation of offering them to the shareholders for subscription (indirect subscription right).

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)	12/31/2016	12/31/2015
Bonds with warrants and convertible bonds according Annual General Meeting resolution April 16, 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 2016.

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 non-current employee benefit obligations are included 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 578 thousand (previous year: EUR 570 thousand).

6.2 Provisions

The following table shows the composition of and changes in provisions in 2016:

(EUR thousand)	Guarantees, warranties	Financial guarantee contracts	Litigation risks	Follow-up costs	Environmental protection, mining	Other provisions	**Total**
Balance at Jan. 1, 2016	**66,740**	**11,299**	**16,837**	**24,840**	**71,688**	**84,363**	**275,767**
thereof non-current	11,149	10,190	6,644	3,425	71,609	42,143	**145,160**
thereof current	55,591	1,109	10,193	21,415	79	42,220	**130,607**
Additions	45,234	88	1,294	27,011	813	33,858	**108,298**
Utilization	–27,410	–195	–5,499	–11,623	–1,991	–25,744	**–72,462**
Reversal	–17,590	–7,928	–225	–4,280	–353	–20,011	**–50,387**
Changes in consolidated group	777	–	–	12	–	1,418	**2,207**
Unwinding of discount	–	–	–	–	18,822	132	**18,954**
Enchange differences	425	1	181	114	4	114	**839**
Balance at Dec. 31, 2016	**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**

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. As of December 31, 2016, refund claims amounting to EUR 0 thousand (previous year: EUR 385 thousand) against nongroup third parties were recognized. 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 2016 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 2017.

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 60 percent of other provisions are expected to be settled in fiscal year 2016.

6.3 Employee benefit obligations

Employee benefit obligations comprise the following items:

(EUR thousand)	12/31/2016	12/31/2015
Obligations under pension plans and supplementary healthcare benefits	772,796	744,914
thereof defined benefit pension plans	755,496	726,349
thereof obligations under supplementary healthcare benefits	16,061	15,403
thereof defined contribution pension plans	1,239	3,162
Other employee benefit obligations	4,020	3,573
Partial retirement	13,187	10,265
Jubilee benefits	8,949	9,172
Redundancy plan and severance payments	2,531	2,602
Other non-current obligations to employees	6,169	5,068
Non-current employee benefit obligations	**807,652**	**775,594**
Redundancy plan and severance payments	33,716	88,700
Outstanding vacation, flexitime/overtime credits	59,315	56,436
Bonuses	72,864	78,596
Other current obligations to employees	15,529	20,503
Current employee benefit obligations	**181,424**	**244,235**
Total employee benefit obligations	**989,076**	**1,019,829**

The fall in current employee benefit obligations is largely due to outflows for severance payments in the context of the "Fit for 2020" project (see section 7.4). As of December 31, 2016, the corresponding obligations with regard to severance payments and redundancy packages amounted to EUR 33,925 thousand (previous year: EUR 85,347 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, 2016, and as of December 31, 2015.

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 of which 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:

	12/31/2016		12/31/2015	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Present value of defined benefit obligation at beginning of fiscal year	**715,252**	**174,318**	**724,943**	**181,633**
Current service cost	11,770	3,180	13,926	3,349
Interest Cost from discounting unwinding on obligations	13,957	5,563	14,113	5,305
Employee contributions	–	531	–	842
Remeasurement of present value of obligation	31,627	8,241	–7,284	1,626
Actuarial gains (losses) from changes in demographic assumptions	–	–1,330	–	–1,038
Actuarial gains (losses) resulting from changes in financial assumptions	32,547	9,744	–6,095	71
Actuarial gains (losses) resulting from experience adjustments	–920	–173	–1,189	2,593
Past service cost	–634	–753	–4,568	–10,886
Gains and losses from settlements	–	1,509	–	–411
Past service cost and gains and losses from settlements that occur together	595	–	–	–
Payments without settlements	–31,391	–8,658	–31,121	–9,900
Payments in respect of any settlements	–	–11,618	–	–12,398
Transfer of assets	–668	–	–1,470	–
Changes in combined group due to acquisitions	–	2,907	6,972	1,600
Other changes in combined group	–	213	–259	–
Currency translation	–	–789	–	13,558
Present value of defined benefit obligation at end of fiscal year	**740,509**	**174,644**	**715,252**	**174,318**
Fair value of plan assets at beginning of the fiscal year	**22,807**	**125,808**	**20,222**	**128,585**
Interest income on plan assets	450	3,491	417	3,812
Employer contributions	5,197	4,074	3,236	5,695
Employee contributions	–	531	–	842
Remeasurement: return from plan assets in excess/ shortage of interest income	19	3,362	–109	–1,762
Payments without settlements	–873	–7,413	–959	–8,978
Payments in respect of any settlements	–	–11,618	–	–12,398
Transfer of assets	–521	–	–	–
Currency translation	–	–1,481	–	10,012
Fair value of plan assets at the end of fiscal year	**27,080**	**116,754**	**22,807**	**125,808**
Net carrying amount	**713,429**	**57,890**	**692,445**	**48,510**
thereof net asset	–	238	–	797
thereof net liability	713,429	58,128	692,445	49,307

Past service cost for the fiscal year 2015 includes income from pension obligations of EUR 9.9 million arising from the closure of a business location. When calculating operating EBIT for segment reporting, this effect was adjusted for, as management believes it will not be incurred to the same extent in future fiscal years ("non-recurring items", see section 9.1.). In the fiscal year 2015, payments for settlements in the amount of EUR 11.2 million were incurred.

The net carrying amount of obligations under defined benefit pension plans and supplementary healthcare benefits changed as follows in fiscal years 2016 and 2015:

	12/31/2016		12/31/2015	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Net carrying amount at beginning of fiscal year	**692,445**	**48,510**	**704,721**	**53,048**
Changes through profit or loss	25,238	6,008	23,054	–6,455
Current service cost	11,770	3,180	13,926	3,349
Past service cost	–634	–753	–4,568	–10,886
Gains and losses on settlements	–	1,509	–	–411
Concurrent past service cost and gains and losses on settlements	595	–	–	–
Net interest on net defined benefit liability	13,507	2,072	13,696	1,493
Changes through OCI	31,608	4,879	–7,175	3,388
Return from plan assets in excess interest income	–19	–3,362	109	1,762
Actuarial gains (losses) from changes in demographic assumptions	–	–1,330	–	–1,038
Actuarial gains (losses) resulting from changes in financial assumptions	32,547	9,744	–6,095	71
Actuarial gains (losses) resulting from experience adjustments	–920	–173	–1,189	2,593
Cash-effective changes	–35,715	–5,319	–33,398	–6,617
Employer contributions	–5,197	–4,074	–3,236	–5,695
Payments without settlements	–30,518	–1,245	–30,162	–922
Other changes	–147	3,812	5,243	5,146
Transfer of assets	–147	–	–1,470	–
Changes in combined group due to acquisitions	–	2,907	6,972	1,600
Other changes in combined group	–	213	–259	–
Currency translation	–	692	–	3,546
Funded status/Net carrying amount	**713,429**	**57,890**	**692,445**	**48,510**

The following overview shows the net carrying amount broken down into plans with and without plan assets:

	12/31/2016		12/31/2015	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Present value of funded obligations	193,507	158,351	179,854	160,318
Fair value of plan assets	27,080	116,754	22,807	125,808
Funded status/Net carrying amount of funded obligations	**166,427**	**41,597**	**157,047**	**34,510**
Present value of unfunded obligations	547,002	16,293	535,398	14,000
Funded status/Net carrying amount of unfunded obligations	**547,002**	**16,293**	**535,398**	**14,000**
Funded status/Net carrying amount	**713,429**	**57,890**	**692,445**	**48,510**

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:

	12/31/2016		12/31/2015	
(EUR thousand)	Germany	Other countries	Germany	Other countries
Active employees	226,077	72,025	220,907	77,099
Vested terminated employees	117,135	42,775	99,496	39,449
Pensioners	397,297	59,844	394,849	57,770
Total	**740,509**	**174,644**	**715,252**	**174,318**

Plan assets

The plan assets used to cover the pension obligations were as follows at the respective reporting dates:

	12/31/2016		12/31/2015	
(Percent)	Germany	Other countries	Germany	Other countries
Quoted prices in active marktes	17.6	66.1	8.3	62.6
Equity instruments	0.8	25.8	0.9	24.4
Debt instruments	2.2	35.7	2.8	34.4
Real estate	0.0	0.1	0.0	0.0
Other	14.6	4.5	4.6	3.8
No quoted prices in active marktes	82.4	33.9	91.7	37.4
Equity instruments	0.0	0.8	0.0	0.7
Debt instruments	0.0	0.6	0.0	0.4
Real estate	0.0	0.0	0.0	0.2
Insurance	82.4	32.5	91.6	36.1
Other	0.0	0.0	0.1	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 2017, EUR 5,053 thousand is expected to be added to the plan assets of German pension plans and EUR 4,480 thousand to plans outside Germany.

The actual return on plan assets in 2016 was EUR 7,322 thousand (previous year: EUR 2,358 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.

	12/31/2016		12/31/2015	
(Percent)	Germany	Other countries	Germany	Other countries
Discount factor	1.70	2.71	2.00	3.04
Inflation	1.70	1.12	1.70	0.88
derived: wage and salary growth rate	2.70	1.29	2.70	1.00
derived: pension growth rate	1.39	0.48	1.43	0.23
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, 2016. On this basis, the life expectancy of a 65-year-old pensioner as of the reporting date is 19.30 years for men and 23.36 years for women (previous year: 19.17 years and 23.23 years respectively). 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)	2016	
Increase (+)/ Decrease (-) of DBO	Germany	Other countries
Increase of discount factor by 50 basis points	–54,772	–6,111
Decrease of inflation by 25 basis points	–16,137	–377

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)	2017	2018	2019	2020	2021	2022 - 2026
German plans	32,196	32,073	32,176	32,008	31,846	154,130
Foreign plans	9,147	7,348	7,860	9,021	8,632	42,694

The average weighted duration of pension obligations and supplementary healthcare benefits is:

	12/31/2016		12/31/2015	
(Years)	Germany	Other countries	Germany	Other countries
Duration	15.8	13.6	15.3	11.3

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 17,550 thousand were made in fiscal year 2016 (previous year: EUR 17,084 thousand). Contributions of EUR 44,427 thousand were made to state pension insurance systems (previous year: EUR 45,174 thousand). These contributions are recognized as personnel expenses at the same time as the relevant service is rendered.

Two multi-employer pension plans operated by several employers 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.

In the first plan, neither a surplus nor a deficit would have any effect on the level of future contributions. Contributions amounting to EUR 2,383 thousand (previous year: EUR 2,484 thousand) were made to this multi-employer pension plan in fiscal year 2016. Lower contributions are expected for fiscal year 2017 compared with the previous year.

The second multi-employer pension plan has around 1.2 million beneficiaries, of whom around 500 belong to GEA. The asset/liability ratio of this plan must amount to at least 105 percent. Neither a surplus nor a deficit in the plan would result in additional payments from or into the plan for the participating companies. However, if the minimum funding level is not met, future contributions to be paid by the participating companies may be increased. Contributions amounting to EUR 3,178 thousand (previous year: EUR 3,427 thousand) were made to the multi-employer pension plan in fiscal year 2016. Lower contributions are expected for fiscal year 2017 compared with the previous year.

6.3.3 Share-based payment

Share-based payments in fiscal year 2016 for the group as a whole totaled EUR 3,895 thousand (previous year: EUR 2,356 thousand). The carrying amount of liabilities arising from share-based payment transactions in the complete group amounted to EUR 4,407 thousand as of December 31, 2016 (previous year: EUR 5,158 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 eleventh tranche was issued on July 21, with the subscription period ending on October 31, 2016. 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 eleventh tranche has a 35-month vesting period from the date of grant.

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 2013 tranche expired on June 30, 2016. The TSR comparison over the three-year performance period resulted in a payout ratio of 64.96 percent (previous year: 2012 tranche, 74.2 percent). There was a payment of EUR 3,437 thousand (previous year: EUR 4,424 thousand) in fiscal year 2016.

The number of Performance Shares changed as follows in fiscal year 2016:

(Number of shares)	12/31/2015	Additions	Expired	Paid Out	Changes in consolidated group	12/31/2016
2013 tranche	149,744	–	22,595	127,149	–	–
2014 tranche	115,201	–	8,250	–	–4,708	102,243
2015 tranche	12,397	86,987	1,150	–	–8,961	89,273
2016 tranche	–	99,130	–	–	–	99,130
Total	**277,342**	**186,117**	**31,995**	**127,149**	**–13,669**	**290,646**

The main reason for the additional 86,987 performance shares from the 2015 tranche was that the subscription period for this tranche lasted until January 31, 2016.

The total expense for the group as a whole for fiscal year 2016 amounts to EUR 3,338 thousand (previous year: EUR 1,808 thousand), taking into account the fair value as of December 31, 2016, of EUR 22.25 (previous year: EUR 34.13) for the 2014 tranche, EUR 14.65 (previous year: EUR 15.70) for the 2015 tranche, and EUR 15.15 for the 2016 tranche, as well as EUR 27.03 (previous year: EUR 32.28) for the 2013 tranche (previous year: 2012 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:

	2016			2015		
Tranche	2014	2015	2016	2013	2014	2015
Share price (EUR)	39.57	38.95	38.23	38.71	37.99	37.40
Dividend yield (%)	2.22	2.22	2.22	1.99	1.99	1.99
Risk-free interest rate (%)	–0.892	–0.814	–0.788	–0.396	–0.376	–0.308
Volatility GEA shares (%)	34.98	34.98	34.98	23.64	23.64	23.64

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 1,885 thousand (previous year: EUR 1,825 thousand), the fair value of claims arising from the long-term share price component amounted to EUR 1,722 thousand (previous year: EUR 2,391 thousand) as of the reporting date. The 2013 tranche was paid out in fiscal year 2016 at EUR 1,224 thousand (previous year: EUR 784 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:

	2016		2015	
	2016 tranche	2015 tranche	2015 tranche	2014 tranche
Share price (arithmetic mean) (EUR)	42.25	41.41	39.89	37.65
STOXX TMI IE (arithmetic mean) (index points)	374.78	374.33	373.88	360.21
Risk-free interest (percent)	–0.804	–0.839	–0.350	–0.390
Volatility GEA share (percent)	34.98	34.98	23.53	23.53
Volatility STOXX TMI IE (percent)	18.14	18.14	21.06	21.06
Correlation between GEA share and STOXX TMI IE (percent)	41.63	41.63	86.50	86.50

The calculation of volatilities and correlation is based on historical market data. Risk-free interest rates were determined from German government bond yields.

6.4 Financial liabilities

Financial liabilities as of December 31, 2016, were composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Borrower's note loan	–	89,898
Liabilities to banks	3,439	50,308
Liabilities under finance leases	6,542	30,342
Liabilities from derivatives	257	6,461
Non-current financial liabilities	**10,238**	**177,009**
Borrower's note loan	90,651	697
Bonds	–	282,666
Liabilities to banks	52,406	5,561
Liabilities under finance leases	3,440	3,467
Liabilities from derivatives	19,092	8,142
Liabilities to equity investments	130	202
Current financial liabilities	**165,719**	**300,735**
Total financial liabilities	**175,957**	**477,744**

The financing of GEA as of December 31, 2016 consisted mainly of the following items:

(EUR thousand)	Carrying amount 12/31/2016	Carrying amount 12/31/2015	Notional value 12/31/2016	Fair value 12/31/2016	Maturity
GEA Bond	–	282,666	–	–	April 21, 2016
European Investment Bank	50,181	50,209	50,000	50,285	Partial repayment amounting to 100.000 T EUR on January 14, 2015; Remaining portion on July 14, 2017
Borrower's note loan	90,651	90,595	90,000	92,456	September 19, 2017

Bond

On April 21, 2016, GEA Group Aktiengesellschaft repaid the outstanding amount of EUR 274,739 thousand on the bond issued on April 14, 2011. The bond had a five-year term and a fixed coupon of 4.25 percent.

Borrower's note loans

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.

Liabilities to banks

The maturities of liabilities to banks are as follows:

(EUR thousand)	12/31/2016	12/31/2015
< 1 year	52,406	5,561
1 – 2 years	2,062	50,170
2 – 3 years	1,372	101
3 – 4 years	5	32
4 – 5 years	–	5
Total	**55,845**	**55,869**

Liabilities to banks mainly comprise the EUR 50,000 thousand loan from the European Investment Bank (EIB), which is scheduled for repayment in 2017. 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, 2016.

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 0.5 percent and 1.0 percent, depending on their maturity and financing purpose (previous year: between 0.5 percent and 2.0 percent). The group additionally has foreign currency liabilities in Indian rupees that also bear standard market interest rates in this country of 9.0 percent (previous year: 10.0 percent).

Liabilities to banks totaling EUR 4,131 thousand (previous year: EUR 934 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 855,664 thousand as of December 31, 2016 (previous year: EUR 1,199,350 thousand). Of this amount, cash credit lines of EUR 709,168 thousand (previous year: EUR 770,220 thousand) are unutilized (see section 3). In addition, guarantee credit lines for the performance of contracts, advance payments, and warranty obligations of EUR 1,265,468 thousand (previous year: EUR 1,463,367 thousand) were available to the group as a whole, of which EUR 790,248 thousand (previous year: EUR 981,925 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)	12/31/2016	12/31/2015	12/31/2016	12/31/2015	12/31/2016	12/31/2015
Not later than one year	3,752	3,930	312	463	3,440	3,467
Between one and five years	7,447	15,740	905	3,979	6,542	11,761
Later than five years	–	48,057	–	29,476	–	18,581
Total future payments under finance leases	**11,199**	**67,727**	**1,217**	**33,918**	**9,982**	**33,809**

Liabilities under finance leases relate mainly to land and buildings. The present value of minimum lease payments as of December 31, 2016, relating to leases for land and buildings amounted to EUR 9,729 thousand (previous year: EUR 33,689 thousand). The change compared with the previous year was mainly attributable to the early termination of a leasing contract in fiscal year 2016.

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, 2016:

(EUR thousand)	12/31/2016	12/31/2015
Trade payables	624,817	610,315
thereof to unconsolidated companies	6,252	6,790

Trade payables of EUR 623,882 thousand (previous year: EUR 609,487 thousand) are due within one year. The balance of EUR 935 thousand (previous year: EUR 828 thousand) is due after more than one year.

Trade payables in the amount of EUR 19,628 thousand (previous year: EUR 33,633 thousand) are secured.

6.6 Income tax liabilities

Income tax liabilities relate to current taxes and amount to EUR 33,317 thousand (previous year: EUR 40,743 thousand).

6.7 Other liabilities

Other liabilities as of December 31, 2016, are composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Other non-current liabilities	**48,181**	**63,708**
Payments on account received in respect of orders and construction contracts	269,581	184,470
Gross amount due to customers for contract work	357,873	325,469
Other liabilities to unconsolidated subsidiaries	26,582	25,959
Liabilities from other taxes	60,189	52,822
Other liabilities	98,614	89,037
thereof social security	13,254	15,164
thereof other liabilities to employees	12,073	13,702
Other current liabilities	**812,839**	**677,757**
Total other liabilities	**861,020**	**741,465**

Payments on account received in respect of orders amounting to EUR 43,732 thousand (previous year: EUR 39,217 thousand) and other liabilities amounting to EUR 9,589 thousand (previous year: EUR 9,300 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, 2016, 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 12/31/2016	Amortized cost	Fair value through profit or loss	Fair value recognized in other comprehensive income	Measurement in accordance with other IFRSs	Fair value 12/31/2016
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

(EUR thousand)	Carrying amount 12/31/2015	Measurement in accordance with IAS 39 Amortized cost	Fair value through profit or loss	Fair value recognized in other comprehensive income	Measurement in accordance with other IFRSs	Fair value 12/31/2015
Assets						
Trade receivables	1,118,081	781,209	–	–	336,872	1,118,081
thereof PoC receivables	336,872	–	–	–	336,872	336,872
Income tax receivables	26,082	–	–	–	26,082	26,082
Cash and cash equivalents	1,174,150	1,174,150	–	–	–	1,174,150
Other financial assets	408,743	285,362	7,576	46,311	69,494	408,743
By IAS 39 measurement category						
Loans and receivables	2,218,975	2,218,975	–	–	–	2,218,975
thereof cash and cash equivalents	1,174,150	1,174,150	–	–	–	1,174,150
thereof trade receivables	781,209	781,209	–	–	–	781,209
thereof other financial assets	263,616	263,616	–	–	–	263,616
Available-for-sale investments	68,057	21,746	–	46,311	–	68,057
Financial assets at fair value through profit or loss (derivatives not included in a recognized hedging relationship)	7,576	–	7,576	–	–	7,576
Liabilities						
Trade payables	610,315	610,315	–	–	–	610,315
Financial liabilities	477,744	429,332	12,307	2,296	33,809	485,453
thereof liabilities under finance leases	33,809	–	–	–	33,809	33,809
thereof derivatives included in hedging relationships	2,296	–	–	2,296	–	2,296
Income tax liabilities	40,743	–	–	–	40,743	40,743
Other liabilities	741,465	139,221	6,097	–	596,147	740,200
By IAS 39 measurement category						
Financial liabilities at amortized cost	1,178,868	1,178,868	–	–	–	1,185,312
thereof trade payables	610,315	610,315	–	–	–	610,315
thereof bonds and other securitized liabilities	373,261	373,261	–	–	–	380,437
thereof liabilities to banks	55,869	55,869	–	–	–	56,402
thereof loan liabilities to unconsolidated subsidiaries	202	202	–	–	–	202
thereof other liabilities to affiliated companies	25,959	25,959	–	–	–	25,959
thereof other liabilities	113,262	113,262	–	–	–	111,997
Financial liabilities at fair value through profit or loss (derivatives not included in a hedging relationship and contingent consideration)	18,404	–	18,404	–	–	18,404

The fair values of the financial instruments recognized under assets held for sale and liabilities held for sale are not presented separately, since their carrying amounts represent reasonable approximations of their fair value.

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	12/31/2016				12/31/2015			
	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	3,416	–	3,416	–	7,576	–	7,576	–
Available-for-sale financial assets valued at fair value	9,098	–	–	9,098	9,311	–	–	9,311
Other financial assets	–	–	–	–	37,000	37,000	–	–
Financial liabilities measured at fair value								
Derivatives included in hedging relationships	1,042	–	1,042	–	2,296	–	2,296	–
Derivatives not included in hedging relationships	18,307	–	18,307	–	12,307	–	12,307	–
Contingent consideration	641	–	–	641	6,097	–	–	6,097
Financial liabilities not measured at fair value								
Bonds	–	–	–	–	282,666	286,043	–	–
Borrower's note loan	90,651	–	92,456	–	90,595	–	94,394	–
Liabilities to banks	55,845	–	55,949	–	55,869	–	56,402	–
Other financial liabilities	76,106	–	6,091	69,847	76,208	–	–	74,943

There were no transfers into or out of the levels of the fair value hierarchy in fiscal year 2016.

The fair value of the bond and the other financial assets from the previous year was calculated on the basis of quoted bid prices on an active market and therefore categorized within Level 1. The fair value includes the interest deferred as of the reporting date.

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 are shares of limited partners transferred in the course of a company acquisition that qualify as borrowed capital under the IFRS. 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 financial instruments; 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 2016:

(EUR thousand)	
Fair value 12/31/2015	**9,311**
Redemption	–606
Interest income	166
Currency translation	558
Revaluation	–331
Fair value 12/31/2016	**9,098**

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 –669 thousand as of the reporting date (previous year: EUR –338 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
12/31/2016				
Receivables from derivatives	3,186	3,186	3,158	28
Liabilities from derivatives	14,595	14,595	3,158	11,437
12/31/2015				
Receivables from derivatives	6,951	6,951	5,969	982
Liabilities from derivatives	13,534	13,534	5,969	7,565

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.

	12/31/2016		12/31/2015	
(EUR thousand)	Notional value	Fair value	Notional value	Fair value
Assets				
Currency derivatives not included in a hedging relationship	209,064	3,373	701,136	7,576
Interest rate and cross-currency derivatives not included in a hedging relationship	6,424	43	–	–
Total	**215,488**	**3,416**	**701,136**	**7,576**
Equity and liabilities				
Currency derivatives not included in a hedging relationship	889,525	15,603	293,436	8,357
Interest rate and cross-currency derivatives not included in a hedging relationship	21,744	2,704	33,535	3,950
Interest rate and cross-currency derivatives included in a cash flow hedge	50,000	1,042	50,000	2,296
Total	**961,269**	**19,349**	**376,971**	**14,603**

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 the previous year, foreign currency risks from future sale and procurement transactions were also included in cash flow hedges in the course of the year. Fair value hedges are recognized to hedge changes in the fair value of assets, liabilities, or firm commitments. As in the previous year, the group had not entered into any fair value hedges as of December 31, 2016.

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, 2016, the group as a whole recognized gains of EUR 0 thousand (previous year: EUR 0 thousand) and losses of EUR 740 thousand (previous year: EUR 2,023 thousand) from currency and interest rate derivatives directly in equity.

In the course of fiscal year 2015, EUR –4,614 thousand was recognized in the income statement due to the hedged items being recognized in the balance sheet, and EUR 8,753 thousand was offset against the cost of assets. The amounts recognized in the income statement resulted in an increase in revenue of EUR 1,742 thousand. In addition, gains of EUR 7,744 thousand and losses of EUR –14,099 thousand were reported in net exchange rate gains/losses. In fiscal year 2016, no currency derivatives were designated as cash flow hedges. EUR 0 thousand (previous year: EUR 0 thousand) from interest rate derivatives was recognized in net interest income.

As in the previous year, there was no significant hedge ineffectiveness.

100 percent (previous year: 55 percent) of the hedged cash flows from the underlying transactions designated at the reporting date are expected to fall due in the following year. In the previous year, the other 45 percent were falling due by 2017. If financial assets are hedged, the derivatives are recognized in the income statement at the same time as the hedged items are recognized in the income statement and balance sheet. If financial liabilities from procurement transactions are hedged, the derivatives are recognized in the income statement when the purchased goods or services are recognized in the income statement.

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:

	12/31/2016			12/31/2015		
(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	31,301	6,195	–4,067	–39,406	8,484	–7,139
Available-for-sale investments	1,769	89	–149	–1,315	75	–1,011
Financial assets/liabilities at fair value through profit or loss	22,320	–437	–	41,442	301	–
Financial liabilities at amortized cost	–56,607	–15,998	–	–34,003	–27,169	–
Total	**–1,217**	**–10,151**	**–4,216**	**–33,282**	**–18,309**	**–8,150**

7. Consolidated Income Statement Disclosures

7.1 Revenue

Revenue is composed of the following items:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
From construction contracts	2,212,385	2,160,765
From sale of goods and services	892,905	1,087,586
From service agreements	1,386,604	1,350,918
Total	**4,491,894**	**4,599,269**

7.2 Other income

Other income is composed of the following items:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Exchange rate gains	247,214	197,610
Gains on the measurement of foreign currency derivatives	68,996	133,511
Rental and lease income	2,655	3,392
Income from payments received on reversals previously written off	3,011	2,424
Income from disposal of non-current assets	9,771	1,487
Income from compensation payments and cost reimbursements	2,635	2,110
Miscellaneous other income	48,994	51,607
Total	**383,276**	**392,141**

7.3 Other expenses

Other expenses are composed of the following items:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Exchange rate losses	263,836	247,618
Losses on the measurement of foreign currency derivatives	46,239	92,370
Bad debt allowances on trade receivables	7,078	9,563
Restructuring expenses	3,560	1,263
Cost of money transfers and payment transactions	1,091	1,404
Losses on the disposal of non-current assets	1,157	696
Miscellaneous other expenses	29,451	30,706
Total	**352,412**	**383,620**

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 2016, restructuring provisions amounting to EUR 2.0 million (previous year: EUR 125.6 million) were recorded for the "Fit for 2020" project. EUR –1.5 million of these provisions (previous year: EUR 109.9 million) was attributable to expenses for contractual and anticipated redundancy payments, while EUR 0.4 million (previous year: EUR 7.4 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 2016 for the restructuring measures planned in the context of the "Fit for 2020" project. The restructuring provisions recognized as of December 31, 2016 amounted to EUR 34.9 million (previous year: EUR 90.2 million), of which EUR 33.9 million (previous year: EUR 85.3 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 2,714 thousand in the reporting period to EUR 2,196,296 thousand (previous year: EUR 2,193,582 thousand). Cost of materials amounted to 48.5 percent of gross revenue and was therefore higher than the previous year's figure of 47.7 percent.

Personnel expenses

Personnel expenses fell by EUR 116,958 thousand in 2016 to EUR 1,275,008 thousand (previous year: EUR 1,391,966 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 1,044,818 thousand (previous year: EUR 1,175,641 thousand) as well as social security contributions and expenses for post-employment benefits of EUR 230,190 thousand (previous year: EUR 216,325 thousand). The ratio of personnel expenses to gross revenue thus fell to 28.2 percent (previous year: 30.3 percent). The decrease is largely due to additional personnel expenses for severance payments in the context of the restructuring measures in the previous year.

Depreciation, amortization, and impairment losses

Depreciation, amortization, and impairment losses totaling EUR 119,640 thousand (previous year: EUR 119,407 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 149 thousand in the reporting period (previous year: EUR 1,011 thousand). Of this amount, EUR 149 thousand (previous year: EUR 1,011 thousand) was attributable to non-current financial assets. Impairment losses on equity investments and marketable securities are contained in the financial expenses item. Inventories were written down by EUR 15,783 thousand (previous year: EUR 11,694 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)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Income from profit transfer agreements	388	–
Income from other equity investments	115	2,499
thereof from unconsolidated subsidiaries	–	2,413
Total	**503**	**2,499**

Interest income

Interest and similar income is composed of the following items:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Interest income on receivables, cash investments, and marketable securities	6,885	10,038
thereof from unconsolidated subsidiaries	350	306
Other interest income	972	1,437
Total	**7,857**	**11,475**

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)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Loans and receivables	6,195	8,484
Available-for-sale investments	89	75
Financial assets at fair value through profit or loss	1,542	2,916
Financial assets not measured in accordance with IAS 39	31	–
Total	**7,857**	**11,475**

7.7 Financial and interest expenses

Financial expenses

Financial expenses for fiscal year 2016 amounted to EUR 271 thousand (previous year: EUR 1,861 thousand) and comprised impairment losses on equity investments in unconsolidated companies of EUR 149 thousand (previous year: EUR 1,011 thousand) and expenses from loss absorption of EUR 122 thousand (previous year: EUR 850 thousand).

Interest expense

Interest and similar expenses comprised the following items:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Interest expenses on liabilities to banks	9,264	18,664
Interest cost from discount unwinding on pension and medical care obligations	15,373	14,952
Interest cost from discount unwinding on discounted provisions and other employee benefit obligations	8,417	3,143
Other interest expenses	11,622	14,154
thereof to unconsolidated subsidiaries	17	232
Total interest expenses	**44,676**	**50,913**

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)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Financial liabilities at amortized cost	15,998	27,169
Financial liabilities at fair value through profit or loss	1,979	2,615
Financial liabilities not measured in accordance with IAS 39	26,699	21,129
Total	**44,676**	**50,913**

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 4.6 percent in fiscal year 2016 (previous year: 4.4 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 2016 or in the previous year.

In fiscal year 2016, expenses totaling EUR 1,091 thousand (previous year: EUR 1,404 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)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Current taxes	57,792	61,428
Germany	15,297	1,694
Other countries	42,495	59,734
Deferred taxes	23,836	–55,670
thereof related to temporary dfferences	18,145	–6,242
Total	**81,628**	**5,758**

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 23.31 percent (previous year: 2.13 percent):

	01/01/2016 – 12/31/2016		01/01/2015 – 12/31/2015	
	(EUR thousand)	(%)	(EUR thousand)	(%)
Profit before tax	**350,228**	**–**	**270,007**	**–**
Expected tax expense	105,068	30.00	81,002	30.00
Non-tax deductible expense	9,280	2.65	4,633	1.72
Tax-exempt income	–2,833	–0.81	–4,476	–1.66
Change in valuation allowances	–28,995	–8.28	–71,648	–26.54
Change in tax rates	–447	–0.12	–1,052	–0.39
Foreign tax rate differences	–2,233	–0.64	–3,648	–1.35
Other	1,788	0.51	947	0.35
Income tax and effective tax rate	**81,628**	**23.31**	**5,758**	**2.13**

The change in valuation allowances in the amount of EUR –28,995 thousand (previous year: EUR –71,648 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. In the previous year, additional allowances could be reversed in Germany due to a special effect in discontinued operations.

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 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)	12/31/2016	12/31/2015
Current deferred tax assets	69,343	67,022
Non-current deferred tax assets	432,774	424,097
Total deferred tax assets	**502,117**	**491,119**
Current deferred tax liabilities	53,764	40,891
Non-current deferred tax liabilities	91,166	70,279
Total deferred tax liabilities	**144,930**	**111,170**
Net deferred tax assets	**357,187**	**379,949**

Deferred tax assets and liabilities as of December 31, 2016, and 2015, are composed of the following items:

	Deferred tax assets		Deferred tax liabilities	
(EUR thousand)	2016	2015	2016	2015
Property, plant and equipment	9,756	6,849	23,337	23,757
Investment property	–	226	–	–
Goodwill	10,070	14,767	36,697	35,177
Other intangible assets	411	505	91,738	80,550
Other non-current financial assets	2,366	835	5,778	5,110
Non-current assets	**22,603**	**23,182**	**157,550**	**144,594**
Inventories	27,406	32,274	2,707	1,522
Trade receivables	5,922	6,505	52,930	46,150
Other current financial assets	3,270	5,601	13,654	11,010
Cash and cash equivalents	–	–	73	59
Current assets	**36,598**	**44,380**	**69,364**	**58,741**
Total assets	**59,201**	**67,562**	**226,914**	**203,335**
Non-current provisions	22,390	17,456	113	152
Non-current employee benefit obligations	130,571	119,498	736	378
Non-current financial liabilities	484	5,963	2,448	496
Other non-current liabilities	321	458	2,627	2,314
Non-current liabilities	**153,766**	**143,375**	**5,924**	**3,340**
Current provisions	25,514	22,042	2,442	2,081
Current employee benefit obligations	10,309	14,914	527	728
Current financial liabilities	8,724	8,349	1,280	1,492
Trade payables	6,519	4,103	5,209	5,156
Other current liabilities	7,467	12,016	1,765	7,405
Current liabilities	**58,533**	**61,424**	**11,223**	**16,862**
Total equity and liabilities	**212,299**	**204,799**	**17,147**	**20,202**
Valuation allowances on temporary differences	–2,336	–3,052	–	–
Deferred taxes on temporary differences	**269,164**	**269,309**	**244,061**	**223,537**
Tax loss carryforwards	982,584	998,200	–	–
Valuation allowances on tax loss carryforwards	–650,500	–664,023	–	–
Offsetting of deferred taxes	–99,131	–112,367	–99,131	–112,367
Recognized deferred taxes	**502,117**	**491,119**	**144,930**	**111,170**

In addition to changes of EUR –23,836 thousand recognized in profit or loss (previous year: EUR 55,670 thousand), changes in deferred taxes resulted mainly from changes of EUR 15,764 thousand (previous year: EUR 14,080 thousand) recognized in other comprehensive income, including currency translation effects of foreign operations. Furthermore, EUR 2,138 thousand was recognized in the tax result from discontinued operations. The amount of EUR –24,400 thousand recognized in the tax result from discontinued operations in the previous year largely related to income from the settlement of disputes in connection with the former business activities of mg technologies ag. In the reporting period, further deferred taxes amounting to EUR –16,828 thousand (previous year: EUR –16,104 thousand) from initial consolidations were directly recorded in equity.

Deferred tax liabilities of EUR 1,708 thousand (previous year: EUR 1,352 thousand) were recognized as of December 31, 2016, for expected dividend payments from subsidiaries. In addition, as of December 31, 2016, deferred tax liabilities of EUR 913 thousand (previous year: EUR 1,288 thousand) were recognized for withholding taxes likely to occur.

No deferred taxes were recognized for taxable temporary differences arising from investments in subsidiaries in the amount of EUR 503,530 thousand (previous year: EUR 431,867 thousand) as of December 31, 2016, 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, 2016, GEA recognized deferred tax assets in the amount of EUR 332,084 thousand (previous year: EUR 334,177 thousand) on tax loss carryforwards:

(EUR thousand)	12/31/2016	12/31/2015
Deferred tax assets on domestic tax loss carryforwards		
Corporate income tax	75,939	77,000
Trade tax	91,535	72,024
Deferred tax assets on foreign tax loss carryforwards	164,610	185,153
Total	**332,084**	**334,177**

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 1,501,312 thousand (previous year: EUR 1,501,961 thousand) and trade tax loss carryforwards in the amount of EUR 825,937 thousand (previous year: EUR 1,020,728 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 28.5 million in fiscal year 2016 (previous year: EUR 158.1 million) against expenses of EUR 25.3 million (previous year: EUR 20.4 million). The pre-tax profit from discontinued operations thus amounted to EUR 3.2 million (previous year: EUR 137.7 million). This mainly resulted from the development of residual risks in connection with businesses sold by GEA in previous years. The previous year's result includes inflows from the settlement of a dispute in connection with the former business activities of mg technologies ag in the amount of EUR 148.4 million.

All told, profit after tax from these discontinued operations of EUR 15,975 thousand (previous year: EUR 97,617 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 12,756 thousand. In the previous year, a tax expense was posted in the amount of EUR 40,046 thousand.

7.10 Earnings per share

Earnings per share are calculated as follows:

(EUR thousand)	01/01/2016 - 12/31/2016	01/01/2015 - 12/31/2015
Profit for the period attributable to shareholders of GEA Group Aktiengesellschaft	284,555	361,857
thereof from continuing operations	268,580	264,240
thereof from discontinued operations	15,975	97,617
Weighted average number of shares outstanding (thousand)	192,495	192,495
Basic and diluted earnings per share (EUR)		
from profit for the period	1.48	1.88
thereof attributable to continuing operations	1.40	1.37
thereof attributable to discontinued operations	0.08	0.51

7.11 Appropriation of net profit

GEA Group Aktiengesellschaft reported net income for the fiscal year of EUR 259,637 thousand in accordance with the HGB (previous year: EUR 142,666 thousand). The Executive Board and the Supervisory Board of GEA Group Aktiengesellschaft have transferred the sum of EUR 105,000 thousand to other retained earnings (previous year: withdrawal of EUR 10,000 thousand). Including the profit brought forward of EUR 468 thousand (previous year: EUR 1,799 thousand), the net retained profits amounted to EUR 155,105 thousand (previous year: EUR 154,464 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)	2016	2015
Dividend payment to shareholders	153,996	153,996
Profit carried forward	1,109	468
Total	**155,105**	**154,464**

The dividend payment corresponds to the payment of a dividend of 80 cents per share for a total of 192,495,476 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 December 22, 2009, 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)	2016	2015	2016	2015
Guarantees for prepayments	7,319	10,497	949	919
Warranties	762	1,087	496	880
Performance guarantees	21,136	30,124	148,317	145,672
Other declarations of liability	464	318	9,468	21,387
Total	**29,681**	**42,026**	**159,230**	**168,858**
thereof attributable to GEA Heat Exchangers	20,149	26,275	50,759	63,646
thereof attributable to Lurgi/Lentjes	84	2,913	102,631	99,369

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 and Lentjes 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 3,551 thousand resulting from joint ventures (previous year: EUR 9,228 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, 2016, are composed of the following items:

(EUR thousand)	12/31/2016	12/31/2015
Rental and lease obligations	107,816	105,718
Purchase commitments	103,283	103,309
Total	**211,099**	**209,027**

Rental and lease agreements

The obligations under rental and lease agreements of the group as a whole amount to EUR 107,816 thousand (previous year: EUR 105,718 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)	12/31/2016	12/31/2015
Not later than one year	35,669	32,824
Between one and five years	57,551	51,676
Later than five years	14,596	21,218
Total	**107,816**	**105,718**

The expenses related to rental and lease agreements of the group as a whole in fiscal year 2016 amounted to EUR 53,702 thousand (previous year: EUR 54,971 thousand). Of this amount, EUR 10,047 thousand (previous year: EUR 11,476 thousand) was attributable to variable rents, which are primarily adjusted based on consumer price indexes. Subleases resulted in income of EUR 93 thousand for the group as a whole in the fiscal year (previous year: EUR 106 thousand). These subleases give rise to claims for rental income of EUR 39 thousand (previous year: EUR 406 thousand) over the coming years.

Sale and leaseback transactions relating to buildings resulted in future payments for the group as a whole of EUR 26,399 thousand at the reporting date (previous year: EUR 29,288 thousand).

Purchase commitments

EUR 97,709 thousand (previous year: EUR 101,530 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 at the Düsseldorf Regional Court. 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 is asserting various claims under company law, in particular for equity substitution, which amount to approximately EUR 18 million including possible interest. 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 expenses that exceed the amounts that may have been set aside for them.

9. Segment Reporting

9.1 Operating segments

GEA's business activities are divided into the following two business areas:

Business Area Equipment (BA-E)

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. The product range also extends to dairy equipment, feeding systems, and slurry engineering.

Business Area Solutions (BA-S)

The Business Area Solutions combines all group activities that largely consist of customer-specific and modular solutions provided within the scope of 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 dairy processing, baking, brewing, food, beverages, pharma, and chemical industries.

The administrative functions bundled in the Global Corporate Center and the Shared Service Center do not constitute independent operating segments. Their income and expenses and assets and liabilities are charged to the business areas, if allocatable. 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.

In the fiscal year 2016, the method of allocating intra-group services was aligned to the new group structure. In addition, an updated arm's length comparison revealed that the intra-group trademark fee charged by GEA Group Aktiengesellschaft to key manufacturing companies needed to be increased. These adjustments to internal price allocation gave rise to a change in the way earnings are reported between the business areas and the other business activities. This change is the primary reason for the improvement in earnings of the group's other business activities compared with the previous year.

(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**
01/01/2015 – 12/31/2015					
Order intake[1]	2,293.0	2,495.6	–	–198.5	**4,590.1**
External revenue	2,141.7	2,457.6	–	–	**4,599.3**
Intersegment revenue	182.0	17.7	–	–199.6	**–**
Total revenue	2,323.7	2,475.2	–	–199.6	**4,599.3**
Share of profit or loss of equity-accounted investments	1.6	1.0	–	–	**2.6**
Operating EBITDA[2]	381.8	255.3	81.4	–97.6	**621.0**
as % of revenue	16.4	10.3	–	–	**13.5**
EBITDA	308.8	202.6	16.0	–97.6	**429.8**
Operating EBIT[2]	326.8	234.8	74.7	–97.6	**538.8**
as % of revenue	14.1	9.5	–	–	**11.7**
EBIT	227.1	170.5	9.3	–97.5	**309.4**
as % of revenue	9.8	6.9	–	–	**6.7**
ROCE in %[3]	14.7	33.1	–	–	**14.6**
Interest income	5.4	5.6	28.7	–28.2	**11.5**
Interest expense	33.3	10.7	35.1	–28.2	**50.9**
Income taxes	33.1	42.5	–16.9	–52.8	**5.8**
Profit or loss from discontinued operations	–	–	139.1	–41.5	**97.6**
Segment assets	3,507.0	2,902.4	4,413.5	–4,701.6	**6,121.2**
Segment liabilities	1,618.4	1,866.3	2,635.8	–2,843.5	**3,277.0**
Carrying amount of equity-accounted investments	8.0	5.1	–1.7	5.3	**16.6**
Working capital (reporting date)[4]	524.6	42.6	–18.3	–2.1	**546.8**
Additions in property, plant, and equipment, intangible assets, and goodwill	103.0	161.8	5.9	–0.2	**270.4**
Depreciation and amortization	73.4	27.7	6.7	–0.1	**107.7**
Impairment losses	8.4	4.3	0.0	–	**12.7**
Additions to provisions	142.3	131.7	43.3	2.8	**320.1**

1) Unaudited supplemental information
2) Before effects of purchase price allocations and adjustments (see page 206 f.)
3) ROCE = EBIT/capital employed 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 intercompany revenue and interest income and expense. Intersegment revenue is calculated using standard market prices.

Sales (EUR million)	2016	2015
Sales from construction contracts		
BA Equipment	372.4	290.9
BA Solutions	1,853.8	1,884.0
Consolidation	–13.9	–14.2
Total revenue from construction contracts	**2,212.4**	**2,160.8**
Sales components		
BA Equipment	1,006.1	1,151.4
BA Solutions	32.0	85.7
Consolidation	–145.3	–149.4
Total Sales components	**892.9**	**1,087.6**
Total Sales from service agreements		
BA Equipment	883.6	881.4
BA Solutions	539.9	505.5
Consolidation	–36.9	–36.0
Total revenue from service agreements	**1,386.6**	**1,350.9**
Total revenue	**4,491.9**	**4,599.3**

Out of total restructuring expenses of EUR 2.0 million, EUR –7.4 million was attributable to the Business Area Equipment, and EUR 5.4 million to the Business Area Solutions. The remaining EUR 4.0 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. In the period under review, strategy projects comprised the "Fit for 2020" project including implementation of the Shared Service Center, the "OneGEA Finance" project which aims to align the financial information and management system to the new fully functional OneGEA organization, and several projects relating to the management of company acquisitions.

In accordance with this definition, operating EBIT for 2016 was adjusted for expenses for strategy projects totaling EUR 68.3 million (previous year: EUR 197.4 million). The adjustments consist of expenses amounting to EUR 60.1 million (previous year: EUR 192.6 million) for the "Fit for 2020" project including implementation of the Shared Service Center. These expenses include restructuring expenses of EUR 2.0 million (previous year: EUR 125.6 million). The other expenses for the "Fit for 2020" project include outlay in connection with the implementation of the Shared Service Center, external consulting fees, personnel expenses for project-related incentives, travel costs, and grants for relocation. Moreover, in the previous year, the figures were adjusted for income from pension obligations of EUR 9.9 million arising from the closure of a business location, and for ongoing personnel expenses of EUR 4.6 million for employees in the "Fit for 2020" project team who had taken on a new position at GEA at the end of the project.

The other expenses for strategy projects amounting to EUR 3.7 million are attributable to scheduled and completed company acquisitions (previous year: EUR 0 million).

In addition, the "OneGEA Finance" project was identified as a strategic project during the fiscal year. For the most part, the EUR 4.5 million outlay for this project consisted of external consultants' fees.

Moreover, in the previous year, personnel expenses of EUR 4.8 million were adjusted in respect of employees who left the company during that fiscal year and were not replaced.

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)	2016	2015	Change in %
Operating EBITDA*	**566.3**	**621.0**	**–8.8**
Depreciation of property, plant, and equipment, investment property, and amortization of intangible assets	–83.1	–80.7	–
Impairment losses and reversals of impairment losses on property, plant, and equipment, investment property, intangible assets, and goodwill	1.9	–0.4	–
Other impairment losses and reversals of impairment losses	–0.1	–1.0	–
Operating EBIT*	**485.0**	**538.8**	**–10.0**
Depreciation and amortization on capitalization of purchase price allocation	–33.3	–26.9	–
Impairment losses and reversals on capitalization of purchase price allocation	4.3	–3.9	–
Realization of step-up amounts on inventories	–0.6	–1.2	–
Adjustments	–68.3	–197.4	–
EBIT	**387.0**	**309.4**	**25.1**

*) Before effects of purchase price allocations and adjustments (see page 206 f.)

The following table shows the reconciliation of EBITDA to EBIT:

Reconciliation of EBITDA to EBIT (EUR million)	2016	2015
EBITDA	**500.6**	**429.8**
Depreciation of property, plant, and equipment, investment property, and amortization of intangible assets (see notes 5.1, 5.2, 5.4)	–116.4	–107.7
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)	3.0	–11.7
Impairment losses and reversals of impairment losses on non-current financial assets	–0.1	–1.0
EBIT	**387.0**	**309.4**

The following table shows the reconciliation of working capital to total assets:

Reconciliation of working capital to total assets (EUR million)	12/31/2016	12/31/2015
Working capital (reporting date)	**749.9**	**546.8**
Working capital (reporting date) of Ruhr-Zink	–0.4	–0.3
Non-current assets	2,979.8	2,873.9
Income tax receivables	25.8	26.1
Other current financial assets	165.9	372.3
Cash and cash equivalents	929.1	1,174.2
Assets held for sale	5.4	8.1
plus trade payables	624.8	610.3
plus advance payments in respect of orders and construction contracts	269.6	184.5
plus gross amount due to customers for contract work	357.9	325.5
Total assets	**6,107.9**	**6,121.2**

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 Europe	Latin America	North America	**Total**
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**
01/01/2015 – 12/31/2015								
External revenue	449.3	1,138.7	465.1	752.9	679.9	276.6	836.8	**4,599.3**
Non-current assets (property, plant and equipment, intangible assets, and investment property)	1,186.9	131.4	50.9	223.0	543.1	2.7	191.7	**2,329.7**

In the reporting period, revenue of EUR 725.6 million (previous year: EUR 767.5 million) was attributable to the United States of America and EUR 380.8 million (previous year: EUR 451.1 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 419.2 million (previous year: EUR 438.3 million) as of the reporting date, and in Italy to EUR 310.0 million (previous year: EUR 190.4 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 2016 included outflows of EUR 1,229 thousand (outflows previous year: EUR 22,559 thousand) from other discontinued operations. Cash flow from investing activities of discontinued operations comprises cash flows in connection with operations sold in prior years and, in the previous year, inflows from the settlement of a dispute in connection with the former business activities of mg technologies ag.

10.2 Government grants

Government grants related to income amounting to EUR 923 thousand were received in fiscal year 2016 (previous year: EUR 1,201 thousand). Of this amount, grants related to assets of EUR 211 thousand (previous year: EUR 171 thousand) were deducted from the carrying amounts of the assets concerned. In fiscal year 2016, expenses of EUR 394 thousand (previous year: EUR 28 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
01/01/2016 – 12/31/2016			
Unconsolidated subsidiaries	38,657	1,846	8,494
Joint ventures	16,219	–	–
Total	**54,876**	**1,846**	**8,494**
01/01/2015 – 12/31/2015			
Unconsolidated subsidiaries	32,257	1,574	1,823
Joint ventures	9,739	–	–
Total	**41,996**	**1,574**	**1,823**

Related party transactions resulted in the following outstanding items in the group as a whole as of December 31, 2016:

(EUR thousand)	Trade receivables	Trade payables	Other receivables	Other liabilities
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	26,433
12/31/2015				
Unconsolidated subsidiaries	11,638	6,790	14,238	25,959
Joint ventures	2,715	–	–	–
Total	**14,353**	**6,790**	**14,238**	**25,959**
thereof current	14,353	6,790	13,381	25,959

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 10,071 thousand in fiscal year 2016 (previous year: EUR 9,543 thousand). This is composed of the following components:

(EUR thousand)	2016	2015
Short-term employee benefits	7,318	7,094
Post-employment benefits	2,156	1,900
Share-based payments	597	549
Total	**10,071**	**9,543**

Former Executive Board members and their surviving dependents received remuneration from GEA amounting to EUR 6,892 thousand (previous year: EUR 4,992 thousand). Pension provisions were recognized for former Executive Board members and their surviving dependents in accordance with IFRSs totaling EUR 69,547 thousand (previous year: EUR 62,458 thousand).

In fiscal 2016, the expenses incurred for the Supervisory Board amounted to EUR 1,217 thousand (previous year EUR 1,168 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, 2017, the Executive Board of GEA Group Aktiengesellschaft with the approval of the Supervisory Board, in applying powers granted to it by the Annual General Meeting of April 16, 2015 to acquire and appropriate treasury shares, decided that the company should purchase treasury shares with a total value of up to EUR 450 million (net of incidental purchase costs) on the stock exchange during the period from March 1, 2017 to February 28, 2018. Based on the share price applicable at the time (EUR 38.16; Xetra closing price of February 3, 2017), this sum corresponded to up to 11,792,452 shares or 6.13 percent of the company's registered share capital. The shares are to be bought back so that they can be retired.

12. Supplemental Disclosures in Accordance with Section 315a 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 16, 2016, 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*	2016	2015
DACH & Eastern Europe	6,375	6,744
North and Central Europe	2,957	3,213
Asia Pacific	2,911	3,018
Western Europe, Middle East & Africa	2,704	2,612
North America	1,743	1,961
Latin America	374	369
Continuing operations	**17,064**	**17,917**
DACH & Eastern Europe	1	–
Discontinued operations	**1**	**–**
Total	**17,065**	**17,917**

*) 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*	2016	2015
DACH & Eastern Europe	6,301	6,667
North and Central Europe	2,924	3,118
Asia Pacific	2,867	2,901
Western Europe, Middle East & Africa	2,727	2,664
North America	1,709	1,829
Latin America	409	354
Continuing operations	**16,937**	**17,533**
DACH & Eastern Europe	1	1
Discontinued operations	**1**	**1**
Total	**16,938**	**17,534**

*) 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 2016 are broken down as follows:

(EUR thousand)	2016	2015
Audit	4,948	4,922
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	2,573	2,148
Other audit related services	87	27
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	15	23
Tax consulting services	1,171	1,318
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	54	66
Other services	2,275	1,344
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	2,078	1,269
Total	**8,481**	**7,611**
thereof KPMG Wirtschaftsprüfungsgesellschaft AG	**4,720**	**3,506**

EUR 46 thousand of the fees listed for audits in fiscal 2016 was attributable to the audit of the 2015 consolidated financial statements.

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 Colby Pty. Ltd.	Chatswood	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.	Olen	100,00
GEA Process Engineering N.V.	Halle	100,00
GEA Westfalia Separator Belgium N.V.	Schoten	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
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
Nu-Con (Shanghai) Trading Co., Ltd.	Shanghai	100,00
Columbia		
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 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 Refrigeration Czech Republic s.r.o.	Prague	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 Bischoff Oy	Helsinki	100,00
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 Ced.	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 Energietechnik Anlagen- und Betriebs-GmbH	Düsseldorf	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 Food Solutions GmbH	Düsseldorf	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 NIRO GmbH	Müllheim	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

	Head Office	Share (%)
GEA Verwaltungs AG	Düsseldorf	100,00
GEA Westfalia Separator Group GmbH	Oelde	100,00
GEA Wiegand GmbH	Ettlingen	100,00
Hilge GmbH & Co. KG	Bodenheim	94,00
Hilge International Verwaltungs GmbH	Bodenheim	100,00
Kupferbergbau Stadtberge zu Niedermarsberg GmbH	Lennestadt	100,00
LL Plant Engineering AG	Ratingen	100,00
mg Altersversorgung GmbH	Düsseldorf	100,00
mg capital gmbh	Düsseldorf	100,00
MG Stahlhandel GmbH	Düsseldorf	100,00
mg venture capital ag i.L.	Bochum	100,00
mg vv Projektgesellschaft Hornpottweg GmbH	Frankfurt am Main	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
GEA COMAS S.p.A.	Torrebelvicino	100,00
GEA Food Solutions Italy S.r.l.	Grumello del Monte	100,00

	Head Office	Share (%)
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
Pelacci S.R.L. i.L.	Sala Baganza	67,00
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	100,00
GEA Process Engineering Ltd.	Penrose	100,00
GEA Westfalia Separator NZ Ltd.	Mount Wellington	100,00
Nigeria		
GEA West Africa Limited	Lagos	100,00
Norway		
GEA Norway AS	Oslo	100,00
Panama		
GEA Central America S.A.	Panama	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
Serbia		
GEA EEC Serbia d.o.o. Beograd (Zemun)	Belgrade	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.	Capetown	100,00
GEA Food Solutions South Africa (Pty) Ltd.	Midrand	100,00
GEA Process Engineering (Pty) Ltd.	Midrand	100,00
GEA Westfalia Separator South 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.	Granollers	100,00
GEA Process Engineering S.A.	Alcobendas	100,00
GEA Refrigeration Ibérica S.A.	Alcobendas	100,00
GEA Westfalia Separator Ibérica, S.A.	Granollers	100,00
Sweden		
GEA Exergy AB	Gothenburg	100,00
GEA Sweden AB	Gothenburg	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 Pharma Systems AG	Bubendorf	100,00
GEA Suisse AG	Ittigen	100,00
Taiwan		
GEA Process Engineering Taiwan Ltd.	Taipeh	100,00

	Head Office	Share (%)
Thailand		
CFS Asia Ltd.	Bangkok	100,00
GEA Process Engineering (Thailand) Co., Ltd.	Bangkok	100,00
GEA Refrigeration (Thailand) Co. Ltd.	Nonthaburi	99,9994
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
United Arab Emirates		
GEA Food Solutions Middle East FZE	Dubai	100,00
GEA Middle East FZE	Dubai	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 Process Engineering, Inc.	Columbia	100,00
GEA Refrigeration North America, Inc.	York	100,00
Niro Sterner, Inc.	Columbia	100,00
Wolfking LLC	Frisco	100,00
Vietnam		
GEA Refrigeration Vietnam Co. Ltd.	Ho Chi Min City	100,00

Accociated Companies

Argentina		
IMAI S.A.	Buenos Aires	20,00
Germany		
Polyamid 2000 Handels- und Produktionsgesellschaft Premnitz AG i.I.	Premnitz	49,90
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

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 Energietechnik Anlagen- und Betriebs-GmbH, Düsseldorf
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 Niro GmbH, Mullheim
GEA Real Estate GmbH, Frankfurt am Main
GEA Brewery Systems GmbH, Kitzingen
GEA Refrigeration Technologies GmbH, Düsseldorf
GEA TDS GmbH, Sarstedt
GEA Tuchenhagen GmbH, Büchen
GEA Westfalia Separator Group GmbH, Oelde
GEA Wiegand GmbH, Ettlingen
Hilge GmbH & Co. KG, Bodenheim
LL Plant Engineering AG, Ratingen
mg Altersversorgung GmbH, Düsseldorf
mg capital gmbh, Düsseldorf
mg vv Projektgesellschaft Hornpottweg GmbH, Frankfurt am Main
Paul Pollrich GmbH, Herne
ZiAG Plant Engineering GmbH, Frankfurt am Main

Düsseldorf, March 1, 2017

Jürg Oleas Dr. Helmut Schmale Steffen Bersch Niels Erik Olsen

Auditors' Report

We have audited the consolidated financial statements prepared by GEA Group Aktiengesellschaft, Düsseldorf, comprising the consolidated balance sheet, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated cash flow statement, the consolidated statement of changes in equity and the notes to the consolidated financial statements, together with the report on the situation of the Company and the Group (combined Group management report) for the financial year from January 1 to December 31, 2016. The preparation of the consolidated financial statements and the combined Group management report in accordance with IFRS as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315a (1) of the German Commercial Code [HGB] as well as the supplementary provisions of the Articles of Association are the responsibility of the Company's Executive Board. Our responsibility is to express an opinion on the consolidated financial statements and on the combined Group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors [IDW]. Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the combined Group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the combined Group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Executive Board, as well as evaluating the overall presentation of the consolidated financial statements and the combined Group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on our audit findings, the consolidated financial statements comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to Section 315a (1) HGB and the supplementary provisions of the Articles of Association, and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The combined Group management report is consistent with the consolidated financial statements, complies with the German statutory requirements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Düsseldorf, March 1, 2017

KPMG AG
Wirtschaftsprüfungsgesellschaft

Guido Moesta	Dr. Markus Zeimes
Wirtschaftsprüfer	Wirtschaftsprüfer
(German public auditor)	(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 1, 2017

The Executive Board

Jürg Oleas	Dr. Helmut Schmale	Steffen Bersch	Niels Erik Olsen

The Company's Executive Bodies and their Appointments

Executive Board

Jürg Oleas, Meerbusch (Germany)/Eich (Switzerland), CEO – Chairman of the Executive Board

a) - LL Plant Engineering AG, Ratingen, Germany, Chairman of the Supervisory Board
b) - GEA Process Engineering A/S, Søborg, Denmark, Chairman of the Supervisory Board (until March 11, 2016)
- RUAG Holding AG, Bern, Switzerland, Member of the Board of Directors
- BIH SA, Jona, Switzerland, Member of the Board of Directors (until April 8, 2016)
- Schweizerische Cement-Industrie-Aktiengesellschaft, Jona, Switzerland, Member of the Board of Directors (until April 5, 2016)
- Lafarge Holcim Ltd., Jona, Switzerland Member of the Board of Directors (from May 12, 2016)

Dr. Helmut Schmale, Bochum, Germany, CFO – Chief Financial Officer

a) - LL Plant Engineering AG, Ratingen, Germany, Deputy Chairman of the Supervisory Board (from July 1, 2016)
b) - GEA North America, Inc., Delaware, U.S.A., Chairman of the Board of Directors
- Commerzbank AG, Frankfurt am Main, Germany, Member of the Northwest Regional Advisory Board (until December 31, 2016)

Steffen Bersch, Münster, Germany, Member of the Executive Board

Niels Erik Olsen, Hilleroed, Denmark, Member of the Executive Board

b) - GEA Process Engineering A/S, Søborg, Denmark, Chairman of the Supervisory Board (from March 11, 2016)
- Grundfos Holding A/S, Bjerringbro, Denmark, Member of the Board of Directors (from November 9, 2016)

Dr. Stephan Petri, Essen, Germany (until June 30, 2016), Human Resources & Legal, Revision – Member of the Executive Board

a) - LL Plant Engineering AG, Ratingen, Germany, Deputy Chairman of the Supervisory Board (until June 30, 2016)
- GEA Farm Technologies GmbH, Bönen, Germany, Chairman of the Supervisory Board (until June 30, 2016)
- GEA Westfalia Separator Group GmbH, Oelde, Germany, Chairman of the Supervisory Board (until June 30, 2016)

Supervisory Board

Dr. Jürgen Heraeus, Maintal, Germany, Chairman of the Supervisory Board (until April 20, 2016), Chairman of the Supervisory Board of Heraeus Holding GmbH

a) - Heraeus Holding GmbH, Hanau, Germany, Chairman of the Supervisory Board
- Hauck & Aufhäuser Privatbankiers KGaA, Frankfurt am Main, Germany, Member of the Supervisory Board (until September 9, 2016)
- Messer Group GmbH, Sulzbach, Germany, Chairman of the Supervisory Board

Dr. Helmut Perlet, Munich, Germany, Chairman of the Supervisory Board (from April 20, 2016), Chairman of the Supervisory Board of Allianz SE

a) - Allianz SE, Munich, Germany, Chairman of the Supervisory Board
- Commerzbank AG, Frankfurt am Main, Germany, Member of the Supervisory Board

Reinhold Siegers, Mönchengladbach, Germany, Deputy Chairman of the Supervisory Board (until September 29, 2016), Deputy Chairman of the Works Council of GEA Group Aktiengesellschaft (until November 30, 2016)

Kurt-Jürgen Löw, Ebernhahn, Germany, Deputy Chairman of the Supervisory Board (from October 18, 2016), 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

a) - Nestlé Deutschland AG, Frankfurt am Main, Germany, Chairman of the Supervisory Board
- Bertelsmann SE & Co. KGaA/Bertelsmann Management SE, Gütersloh, Germany, Member of the Supervisory Board
b) - Lonza S.A., Basel, Switzerland, Member of the Board of Directors
- Givaudan S.A., Vernier, Switzerland, Member of the Board of Directors

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,
(from September 29, 2016),
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 (from April 20, 2016),
Vice President, Asset Management, Orica Ltd., USA
(until October 13, 2016)

Supervisory Board committees of GEA Group Aktiengesellschaft (as of December 31, 2016)

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 2016	Q1 2015	Q2 2016	Q2 2015	Q3 2016	Q3 2015	Q4 2016	Q4 2015	**2016**	**2015**	**2014**
Order intake (EUR million)											
BA Equipment	570.4	586.5	617.2	573.0	561.6	546.9	597.6	586.6	**2,346.8**	**2,293.0**	**2,295.1**
BA Solutions	622.2	588.3	658.6	628.9	568.5	573.7	685.3	704.6	**2,534.6**	**2,495.6**	**2,423.4**
GEA	1,144.3	1,127.5	1,222.1	1,148.8	1,083.9	1,068.3	1,223.3	1,245.5	**4,673.6**	**4,590.1**	**4,519.6**
Revenue (EUR million)											
BA Equipment	490.8	527.0	570.9	587.9	566.8	558.9	633.7	650.0	**2,262.2**	**2,323.7**	**2,307.6**
BA Solutions	495.5	526.0	633.7	612.9	585.0	594.4	711.6	741.9	**2,425.7**	**2,475.2**	**2,404.3**
GEA	941.2	1,006.4	1,156.9	1,150.1	1,100.8	1,106.6	1,293.0	1,336.2	**4,491.9**	**4,599.3**	**4,515.7**
EBITDA (EUR million)											
BA Equipment	72.4	64.5	88.5	27.6	88.6	90.4	122.2	126.4	**371.8**	**308.8**	**340.7**
BA Solutions	22.6	31.7	62.5	31.1	15.9	45.1	62.3	94.6	**163.3**	**202.6**	**264.5**
GEA	85.2	93.0	137.3	6.4	100.4	110.4	177.7	220.0	**500.6**	**429.8**	**539.9**
Operating EBITDA* (EUR million)											
BA Equipment	72.3	67.4	86.0	84.5	91.3	92.4	133.9	137.6	**383.5**	**381.8**	**351.1**
BA Solutions	26.5	32.3	61.7	58.1	18.5	51.9	76.7	113.1	**183.5**	**255.3**	**265.8**
GEA	93.9	98.2	145.2	139.3	112.7	143.7	214.5	239.8	**566.3**	**621.0**	**590.7**
Operating EBITDA margin* (%)											
BA Equipment	14.7	12.8	15.1	14.4	16.1	16.5	21.1	21.2	**17.0**	**16.4**	**15.2**
BA Solutions	5.3	6.1	9.7	9.5	3.2	8.7	10.8	15.2	**7.6**	**10.3**	**11.1**
GEA	10.0	9.8	12.6	12.1	10.2	13.0	16.6	17.9	**12.6**	**13.5**	**13.1**

*) Before effects of purchase price allocations from revalued assets and liabilities and before one-offs

GRI Content Index

GEA's sustainability report for the fiscal year 2016 was drawn up in line with the G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) in accordance with the "Core" option. It is released as a combined report and forms part of this GEA Annual Report 2016. The report was submitted to the GRI Materiality Disclosures Service. GRI has confirmed the accuracy of the G4 Materiality Disclosures (G4-17 to G4-27).

		Page

General Standard Disclosures

Strategy and Analysis

G4-1	Statement from the most senior decision-maker of the organization	5

Organizational Profile

G4-3	Name of the organization	13
G4-4	Primary brands, products, and services	13-15
G4-5	Location of the organization's headquarters	228
G4-6	Countries where the organization operates	23
G4-7	Nature of ownership and legal form	92 f.
G4-8	Markets served	29-31
G4-9	Scale of the organization	32-35, 92
G4-10	Workforce	41, 211 f.
G4-11	Employees covered by collective bargaining agreements	98 f.
G4-12	Supply chain	19 f.
G4-13	Significant changes regarding size, structure, ownership, or supply chain	26
G4-14	Precautionary approach or principle addressed	75-86
G4-15	Subscription/endorsement of externally developed economic, environmental and social charters, principles, or other initiatives	98, 99, 106, 109 f.
G4-16	Membership of associations and national or international advocacy organizations	109

Identified Material Aspects and Boundaries

G4-17	Entities included in the consolidated financial statements	111
G4-18	Process for defining the report content and the Aspect Boundaries	111
G4-19	Material Aspects	112 f.
G4-20	Aspect Boundaries within the organization	113
G4-21	Aspect Boundaries outside the organization	113
G4-22	Restatements of information provided in previous reports	111
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	111

Stakeholder Engagement

G4-24	List of stakeholder groups engaged	112
G4-25	Basis for identification and selection of stakeholders	111
G4-26	Approach to stakeholder engagement	111
G4-27	Key topics and concerns raised through stakeholder engagement	113

		Page

Report Profile

G4-28	Reporting period	13
G4-29	Date of most recent previous report	111
G4-30	Reporting cycle	13
G4-31	Contact point for questions regarding the report	228
G4-32	"in accordance" option, GRI Content Index, reference to the External Assurance Report	94, 225-227, 111
G4-33	External assurance	111

Governance

G4-34	Governance structure	13-15, 18, 53 f.

Ethics and Integrity

G4-56	Organization's values, principles, standards and norms of behaviour	50-56, 96-98

Specific Standard Disclosures – Category: Economic

Aspect: Economic Performance

G4-DMA		95
G4-EC1	Direct economic value generated and distributed	32-35, 37, 39

Aspect: Procurement Practices

G4-DMA		19
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	20

Specific Standard Disclosures – Category: Environmental

Aspect: Emissions

G4-DMA		106
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	106
G4-EN16	Energy indirect GHG emissions (Scope 2)	106
G4-EN17	Other indirect GHG emissions (Scope 3)	106

Aspect: Products and Services

G4-DMA		108
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	107 f.

Aspect: Supplier Environmental Assessment

G4-DMA		98
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	98

Specific Standard Disclosures – Category: Social

Labor Practices and Decent Work

Aspect: Labor/Management Relations

G4-DMA		98 f.
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	98 f.

		Page
Aspect: Occupational Health and Safety		
G4-DMA		104
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	104 f.
Aspect: Training and Education		
G4-DMA		101
G4-LA9	Average hours of training per year per employee by gender, and by employee category	101
Aspect: Diversity and Equal Opportunity		
G4-DMA		99 f.
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	99
Aspect: Supplier Assessment for Labor Practices		
G4-DMA		98
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	98

Human Rights

Aspect: Assessment		
G4-DMA		96
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	97
Aspect: Supplier Human Rights Assessment		
G4-DMA		98
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	98

Society

Aspect: Anti-corruption		
G4-DMA		96-98
G4-SO4	Communication and training on anti-corruption policies and procedures	97
Aspect: Compliance		
G4-DMA		96 f.
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	97
Aspect: Supplier Assessment for Impacts on Society		
G4-DMA		98
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	

Financial Calendar

April 20, 2017 .... Annual Shareholders' Meeting for 2016
May 9, 2017 .... Quarterly Statement for the period to March 31, 2017
July 26, 2017 .... Half-yearly Financial Report for the period to June 30, 2017
October 26, 2017 .... Quarterly Statement for the period to September 30, 2017

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

Communication, Marketing & Branding

Phone +49 (0)211 9136-1492
Fax +49 (0)211 9136-31492
Mail pr@gea.com

Investor Relations

Phone +49 (0)211 9136-1082
Fax +49 (0)211 9136-31082
Mail ir@gea.com

Imprint

Published by: GEA Group Aktiengesellschaft
Peter-Müller-Straße 12
40468 Düsseldorf
Germany
gea.com

Layout: kPaD Andreas Dillhöfer

Printed by: Griebsch & Rochol Druck, Hamm

This report is printed on environment-friendly FSC® paper. The printing company used by us has its own environmental management system and uses state-of-the-art technology. Printing inks containing heavy metals are not used.

Picture credits: Denis Ignatov (P. 4), GEA

This report includes forward-looking statements on GEA Group Aktiengesellschaft, its subsidiaries and associates, and on the economic and political conditions that may influence the business performance of GEA. All these statements are based on assumptions made by the Executive Board using information available to it at the time. Should these assumptions prove to be wholly or partly incorrect, or should further risks arise, actual business performance may differ from that expected. The Executive Board therefore cannot assume any liability for the statements made.

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

We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales and 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.

GEA Group Aktiengesellschaft
Peter-Müller-Straße 12
40468 Düsseldorf
Germany
Phone: +49 211 9136-0