



# Non-Financial Statement – Sustainability at GEA 2017

Excerpt from  
Annual Report

## Non-Financial Statement – Sustainability at GEA

### About sustainability reporting

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

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

Sustainability reporting embraces the following subject areas:

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

### Responsibility for the economic performance of the company

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

### Profitability and liquidity

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

## Corporate structure

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

## Service

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

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

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

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

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

Speed is an essential requirement made by the customer in connection with the service business. In the year under review, GEA completed highly promising projects designed to quickly support customers: GEA Remote Eye Wear constitutes a service innovation allowing the company to handle repairs, process optimization or inspections online and with the help of smart glasses – in real time and without travel, while GEA offers parties operating GEA homogenizers the so-called “HOM Upgrade Identification Tool”. If an upgrade is required, the customer merely needs to enter the

respective serial number and, within seconds, GEA will identify the correct part including the respective order number, whereupon delivery will occur as fast as possible. For the purpose of being able to ensure the efficient and swift provision of an even larger number of parts, spare parts for packaging plants and equipment are now integrated into the GEA European Parts Logistics Center located in Cologne, to give but one example.

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

### Economic impacts of climate change

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

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

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

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

In November 2017, the world's largest ammonia heat pump supplying a capacity of 40 megawatts for district heating was put into operation in Malmö, Sweden.

GEA's concept provides a solution that recovers the city's waste water heat using it for heating 10,000 households while considerably reducing the ecological footprint of both the customer and the city.

Thus, the renewable heating system devised by GEA lowers Malmö's carbon dioxide emissions by 50,000 tons

per year, which is equivalent to the emissions generated by around 10,000 motor vehicles. Using ammonia, GEA's heat pump allows the city to save 20 tons of R134a, a gas that has traditionally been used in heat pumps and would have entailed a high GWP (global warming potential) equivalent to 26,000 tons of CO<sub>2</sub>.

## GEA's innovation process

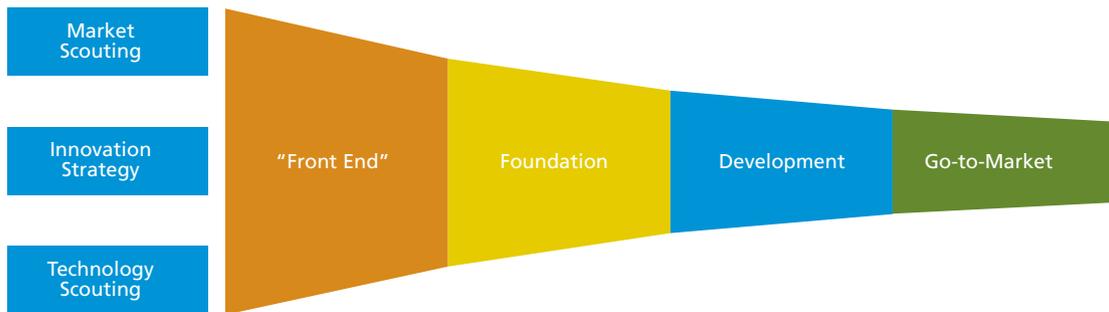
GEA offers a wide range of components, systems and process equipment while never tiring of improving them in terms of resource efficiency, flexibility, quality and costs. GEA has defined around 200 core technologies that offer tremendous potential for optimization, also when combined with other technologies.

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

GEA's innovation management process is as follows:

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### Innovation Management at GEA



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

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

### Best practice: Digi@GEA

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

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

### Best Practice: Brewery 4.0

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

In the field of digitalization, GEA is currently working on the development of a system capable of connecting production technology

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

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

## Responsibility for correct behavior

Compliance as a group-wide basic principle designed to warrant adherence to the law as well as internal corporate policies represents an essential element of corporate governance that impacts each and every area of day-to-day business within the group. All GEA managers and employees are obliged to make sure that no compliance violations are committed in their respective areas of responsibility.

A detailed outline of GEA's Compliance Management System can be found in the Corporate Governance Report (see page 58 ff.) as well as online on GEA's website.

## Human rights

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

## Integrity system (whistleblower system)

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

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

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

The system ensures that all steps involved in processing and resolving the reported cases are documented in a transparent and plausible way. If an incident is reported under the integrity system, this report is assigned to the competent department (e.g. HR), whereupon the respective facts of the case are investigated in order to arrive at a conclusion. Should it be impossible to ultimately clarify the circumstances without additional information that may identify the whistleblower outside the integrity system, the whistleblower is contacted by one of the above departments asking whether a

further probe into the matter is requested. Individual cases reported in 2017 included compliance with safety regulations, purported fraud committed by employees to the detriment of GEA or cases of alleged harassment or discrimination within the group. The competent departments get to the bottom of concrete individual incidents and consider whether enhanced communication or staff management, a change of processes or the use of software may help avoid such cases in the future.

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

### **Preventive processes**

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

### **Training and consulting**

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

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

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

## Audits

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

## Violations

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

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

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

## Supply chain compliance

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

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

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

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

## Responsibility for employees

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

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

## Co-determination

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

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

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

### Disclosure 102-41

Worldwide, around 42 percent of the workforce are covered by collective bargaining agreements.

This data is based on a country-specific survey that was conducted. Starting from the next fiscal year onwards, this data will be compiled on the basis of the new "Workday" Human Resource Management system.

## New personnel management system

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

## Employee engagement survey

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

## Diversity and equal opportunities

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

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

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

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

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

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

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

## German Remuneration Transparency Act

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

## Leadership development

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

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

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

## Work-life balance

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

## Learning and continuous education

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

## Vocational training in Germany

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

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

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

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

## Company pension schemes

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

## Employee mobility

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

## Disaster relief for employees

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

## GEA Aid Commission

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

## Responsibility for quality, safety, health and the environment

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

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

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

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

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

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

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

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

## CSR rating

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

## Certification of the management systems

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

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

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

\*) Comprises manufacturing sites, service and sales offices

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

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

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

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

## Quality and processes

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

## Customer satisfaction surveys 2016 and 2017

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

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

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

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

## Handling serious adverse events, learning process

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

## Workplace health and safety

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

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

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

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

✓ Audited by KPMG

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

### Best practice: 365 days accident free

GEA's Vadodara site in India has continuously reduced the number of industrial accidents since 2011. Finally, in November 2017, the company celebrated a full year of accident-free operation. Established in 2008, when it was still a small production facility employing few workers, the

site located in the western Indian state of Gujarat has meanwhile become one of GEA's most important multipurpose plants operating on a global level. Vadodora's successful and consistent health and safety management sets new standards within the group.

## Health management

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

## Safety management

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

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

## Internal HSE legal compliance audits

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

## Environmental management

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

## Emissions and energy consumption

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

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

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

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

For further information on the method for calculating 2017 CO<sub>2</sub> emissions see the company's website at [gea.com](http://gea.com) under "Explanatory notes to environmental reporting".

Direct Greenhouse Gas Emissions (Scope 1), in tons of CO <sub>2</sub> equivalent	2017 ✓	2016	2015
Business Area Equipment	24,688	24,321	25,001
Business Area Solutions	7,988*	14,341	14,703
Global Corporate Center & Shared Service Center	656	686	614
<b>GEA's total</b>	<b>33,332</b>	<b>39,348</b>	<b>40,318</b>

✓ Audited by KPMG

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

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

✓ Audited by KPMG

Other Indirect Greenhouse Gas Emissions (Scope 3), in tons of CO <sub>2</sub> equivalent	2017 ✓	2016	2015*
<b>GEA's total</b>	<b>15,958</b>	<b>19,167</b>	<b>19,558</b>

✓ Audited by KPMG

\* The 2015 key figure was recalculated with retroactive effect

Total – Greenhouse Gas Emissions (Scope 1, 2, 3), in tons of CO <sub>2</sub> equivalent	2017 ✓	2016	2015
<b>GEA's total</b>	<b>87,801</b>	<b>98,586</b>	<b>102,233</b>

✓ Audited by KPMG

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

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

GEA will continue to improve the quality of energy and CO<sub>2</sub> performance indicators throughout the year 2018. A particular focus will be placed on further automating and formalizing the methods, systems, processes and internal controls governing data collection. Enhanced data quality will serve as a basis for making future decisions in relation to energy and climate management as well as the corresponding targets.

## Water and waste

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

## Products subject to specific regulatory requirements

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

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

## Social responsibility

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

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

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

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

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

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

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

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

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

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

## Reporting profile

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

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

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

**Disclosure  
102-45**

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

**Disclosure  
102-48**

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

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

**Disclosure  
102-46**

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

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

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

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

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

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

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

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

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

**Disclosure  
102-43**

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

The company's reporting addresses the following key issues:

**Disclosure  
102-47**

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

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

**Disclosure 102-49** Now, the innovation process no longer refers to ecological aspects, but is reported under “Impacts of climate change” within the framework of standard “GRI 201: Economic Performance“. This is due to the abolition of the former G4-EN27 indicator governing the aspect ‘products and services’ that was replaced by the introduction of the GRI Standards.

**Disclosure 102-44** This overview outlines the aspects that were given particularly high priority by specific stakeholder groups:

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