



SUSTAINABILITY AT GEA 2018

Excerpt from the Annual Report



Sustainability at GEA

About non-financial reporting

NFS

Once again, GEA's sustainability report for the 2018 fiscal year is in accordance 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.

In 2018, GEA reviewed and rearranged the key topics to make them more palpable and comprehensible while meeting the requirements of the German Commercial Code (ss. 315b-c in conjunction with 289b-e HGB – Handelsgesetzbuch) that govern the disclosure of non-financial information. The combined "non-financial consolidated statement" forms part of this sustainability report. The subject-matters addressed in this statement are marked by a line at the edge as "NFS" (non-financial statement) in the margin. To ascertain the topics to be reported in the non-financial statement, GEA has adjusted its materiality approach. Thus it must also be taken into consideration whether a specific topic is required for understanding GEA's business progress, business results as well as the situation of the company (net assets, financial position, result of operations). Moreover, disclosures allowing people to gain an understanding of the impact of the company's activities must be provided in relation to the respective topic. The following topics are subject to these requirements:

- Occupational health and safety
- Greenhouse gas emissions
- Product quality and safety
- Sustainable product design and innovation
- Compliance management
- Protection of personal data

Under the HGB criteria, human rights are not defined as a material topic; however, GEA considers respect for human rights to be the bedrock of all business activities and an indispensable part of its corporate image. Avoidance of human rights violations is reported in line with the GRI standards.

The respective details are outlined in the materiality analysis on page 90 as well as the reporting profile on page 111 ff.

GEA's business model is described in the corresponding paragraph of the Group Management Report in the chapter on "Fundamental Information about the Group" on pages 24 ff. This also forms part of GEA's non-financial statement.

GEA is obligated to report on all known material risks associated with its own business activities, business relations as well as its products and services if there is a very high probability that the latter absolutely adversely affect non-financial aspects or will do so in the future. No such severe risks were ascertained.

Not all topics GEA regards as material in accordance with the GRI Materiality Analysis also meet the HGB materiality criteria. GEA also discusses these topics within the framework of non-financial reporting, but outside the non-financial statement, without specifically highlighting them.

Unless otherwise indicated, non-financial reporting comprises GEA's worldwide activities. Its contents are based on an analysis of the management systems and the data provided by the operational units and competent departments in the Global Corporate Center. The GRI Content Index is included at the end of the Annual Report (see page 248 ff.).

Non-financial reporting comprises the following chapters:

- Social responsibility
- Responsibility for the environment
- Product stewardship
- Responsible value creation
- Reporting profile

Materiality analysis 2018

Matters acc. to EU CSR Directive	Assignment of material topics to EU CSR Directive matters	Material topics	Non-financial statement
Social matters			
	• •	Occupational health and safety	Occupational health and safety
	• • •	Product quality and safety	Product quality and safety
	• •	Information security	
	• •	Protection of intellectual property	
Environmental matters			
	• •	Greenhouse gas emissions	Greenhouse gas emissions
	• •	Sustainable product design and innovation	Sustainable product design and innovation
	•	Product life cycle/circular economy	
	•	Customer information and support	
Respect of human rights			
	• • •	Human rights	
Employee matters			
	•	Labor and management relations and co-determination	
	• •	Data protection	Protection of personal data
	•	Labor practices incl. training and education	
Diversity policy*			
	• •	Diversity and equal opportunities	
Anti-corruption and bribery matters			
	•	Compliance	Compliance management
	• • • •	Responsible supply chain	
	• • •	Value creation	

• Environmental matters • Social matters • Respect of human rights • Employee matters • Anti-corruption and bribery matters • Board diversity policy

*) see Corporate Governance Report including Corporate Governance Statement

Social responsibility

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. GEA's employees form the bedrock of the future value enhancement of the company.

Detailed headcount figures are provided in the company's financial report (see page 50 f.).

NFS

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

Adopting the "Quality, Health, Safety & Environment (QHSE) Policy" revised in July 2018, GEA's Executive Board has committed to continuing a clear policy regarding quality, health, industrial safety and the environment. In essence, this policy comprises 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 for the benefit of employees, business partners and third parties while avoiding workplace accidents and 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
- Further development of safe, high-quality and environmentally compatible products and services to safeguard and enhance the company's presence in the market while ensuring and improving customer satisfaction
- Further development and expansion of health management and additional schemes designed to prevent occupational diseases
- Promotion of sustainable and responsible procurement while avoiding the purchase of conflict minerals from conflict regions

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

In addition to the above QHSE Policy, the company once again defined tangible targets in and for fiscal year 2018 (see gea.com):

- Integration of 14 companies into GEA's matrix certificate
- Initial certification of two companies
- Zero accidents
- Lost Day Frequency Rate ≤ 6.0
- Lost Day Severity Rate ≤ 130
- Proactive Injury Rate (PAIR) ≥ 65
- Continuous reduction in CO₂ emissions by 1.5 percent.

For more information on target achievement, see pages 92 f., 99 ff. as well as 103.

In the 2018 fiscal year, GEA further strengthened the QHSE organization, mainly due to a larger regional presence. In organizational terms, Quality & HSE (QHSE) is firmly embedded in all areas of the company and comprises three levels of responsibility.

- The central governance function directly reports to GEA's Executive Board. The QHSE governance team devises the global QHSE strategy as well as the corresponding targets while making available general policies and reports. It defines the management system, establishes and supports implementation and complies with statutory and individual requirements of investors, customers 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 policies and providing training.

- On the third level of responsibility, the Regions and Countries implement policies and programs on a local level. Due to legal or cultural differences between the various sites, it is imperative to have a central QHSE contact in each region to be able to share know-how, give feedback and respond to local requirements in a timely fashion.

Health and safety at work

GEA gives top priority to occupational health and safety. Above and beyond legal requirements, GEA feels obligated to protect both its own and customer 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. Within the framework of GEA's QHSE organization, the excellence level makes sure that contracts concluded with customers and suppliers/sub-suppliers are in line with the standards set by GEA, with the governance function providing the respective standard processes.

GEA regards accidents and health hazards to the workforce as intolerable, just like absenteeism, damage to the company's image as well as potential penalties or indemnity payments arising therefrom. Thus, the company pursues a clear zero-accident strategy. The concept for handling risks includes site certification in accordance with OHSAS 18001 (see overview and number of certifications under "Product responsibility", page 103; will be switched to the new ISO 45001 standard in 2019), clear QHSE policy guidelines as well as the continuous improvement of the regional QHSE organization. A review takes place via internal HSE legal compliance audits as well as the future psychological risk assessments within the framework of health management (see page 93 f.). The QHSE targets set for 2018 include the reduction in accidents and the pilot project for the group-wide expansion of the health management scheme, to give but two examples (see gea.com).

While expanding its global QHSE organization, GEA further specified responsibilities in the year under review. In doing so, the company refined the relevant key performance indicators and enhanced data quality, allowing it for the first time to break down occupational accidents and lost days of work by accident site centrally, i.e., whether an accident occurred in one of GEA's production facilities, while performing services or while tending to projects at the site of the customer or at the office.

Compared with the previous year, the number of accidents remained constant. Yet, on account of the larger number of working hours reported, GEA's 2018 Lost Day Frequency Rate experienced a considerable decline to 5.97 accidents per million working hours (previous year: 6.18). In the year under review, a total of 243 accidents (previous year: 242) were reported, with 93 sites – i.e. two thirds of all GEA locations (previous year: 53 percent) – remaining accident free. 2018 was another year without fatal workplace accidents. The Lost Day Severity Rate also substantially decreased to 117.58 days lost after accidents per million hours worked (previous year: 172.18). This implies that the accidents entailed fewer working days lost.

This is due to the consistent implementation of the precautionary approach taken in the field of occupational safety: In line with this policy, GEA has recorded and analyzed near misses worldwide since 2017 to detect potential risks and hazards at an early stage and prevent accidents. Just like real accidents, GEA also subjects near misses to an analysis that entails a targeted follow-up process involving defined responsibilities and a specific set of actions. This approach pays off and is conducive to accomplishing the zero-accident target. As a result, GEA was able to significantly exceed its occupational safety targets set for 2018. Moreover, back in 2017, the company already defined its key safety rules, the so-called "GEA Safety Core Rules", which were translated into 14 different languages; they are designed to train the workforce accordingly while further reinforcing GEA's safety culture.

Key figures occupational safety	2018 ✓	2017 ✓	2016
Number of workplace accidents	243	242	264
BA Equipment	151		
BA Solutions	92		
Number of days lost	4,786	6,716	6,338
BA Equipment	2,984		
BA Solutions	1,802		
Lost Day Frequency Rate ¹	5.97	6.18	6.69
BA Equipment	7.09	8.90	8.44
BA Solutions	4.86	3.37	5.18
Lost Day Severity Rate ²	117.58	172.18	159.82
BA Equipment	140.15	229.37	195.30
BA Solutions	95.11	113.89	130.99
Near misses (Proactive Injury Rate, PAIR) ³	145.76	97.1	
BA Equipment	243.14		
BA Solutions	39.90		
Total Injury Rate, TIR ³	37.88	45.2	
BA Equipment	58.52		
BA Solutions	15.62		
Accident-free entities, as a percentage of all entities ⁴	59.62	53.0	

✓ Audited by KPMG

1) Frequency of accidents: lost time injuries per million working hours; since 2018, GEA counts up to 182 days of time lost pursuant to the European Statistics for Accidents at Work (ESAW); previously, it counted up to 365 days

2) Severity rate: days lost broken down by types of accident per million working hours; since 2018, GEA counts up to 182 days of time lost pursuant to ESAW; previously, it counted up to 365 days

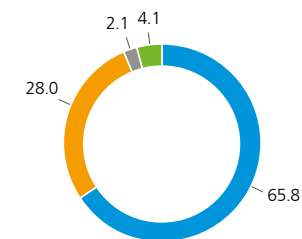
3) per million working hours

4) out of 156 entities

Accidents at work by place of performance

(in %)

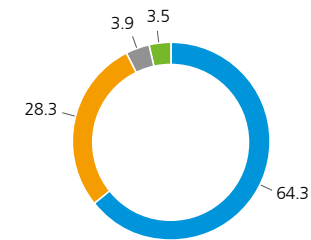
- in the field of production
- during service delivery
- project-related
- in the office



Number of lost days by place of performance

(in %)

- in the field of production
- during service delivery
- project-related
- in the office



Health management

GEA is further expanding its GEA Care health management scheme. Within the framework of a group-wide program, GEA plans to offer stress management and mindfulness training to employees exposed to particular levels of stress and strain. In the year under review, GEA rated a service provider entrusted with the above tasks. A pilot project started in December 2018.

Handling serious incidents, 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, minimize their impact and promptly initiate 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 (also see page 106).

Security management

GEA also fulfils its duty of care to its employees by providing a comprehensive security management. The “Major Incident Management Manual”, for instance, outlines the procedures to be taken in the event of risky incidents that may have a potential impact on GEA’s security, operations or reputation or affect the security, health and life of its employees or other stakeholder groups.

GEA’s security 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 security 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 voluntary security app, GEA employees can also obtain medical and safety-related information about a group site 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 by means of the so-called “travel tracker” while en route. In the event of crises like natural disasters or political unrest, GEA’s security management team may quickly respond and intervene. This way, in 2018, GEA looked after 20,415 employees travelling on business, accompanying them on 52,979 trips. The company’s security

management team stepped in on 25 occasions, while the provision of information and advice regarding security relevant issues sufficed in 16 other cases.

Internal HSE 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 authorized by the Executive Board. This is a voluntary commitment made by GEA. 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 reveals necessary areas for improvement and 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 by the excellence function. The improvement process is not completed until the QHSE governance function has given its final approval. 2018 saw 13 new audits in seven countries (2017: 0). Apart from that, a total of 307 further observations made during the preceding audits between 2013 and 2016 were finalized in 2018.

Labor/management relations and co-determination

Labor/management relations at GEA are characterized by many years of respectful dialogue and mutual interaction between the employer and employee representatives 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 (EWC) has the statutory 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. At the moment, the EWC and GEA's Executive Board jointly further develop and adjust the foundation of EWC work in a new EWC Agreement with the assistance of IndustriALL Global Union, the global union federation.

The "Codes of Conduct" apply worldwide (see below, "Human rights" section). A professional, certified whistleblower system for reporting potential violations of the basic principles of social responsibility is in place and globally available (see below, "integrity system").

Disclosure 102-41

Worldwide, around 48 percent of the workforce are covered by collective agreements. This disclosure is now based on data taken from the new "Workday" human resource management system.

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") that apply to all group employees worldwide. In these Codes, GEA inter alia pledges to respect 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.

It is planned to overhaul and extend this Code in the 2019 financial year. In its "Code of Corporate Responsibility" GEA will commit itself to fair world trade beyond the above principles. The draft includes adherence to the principles of accountability and transparency, the interests of stakeholders, the rule of law, compliance with international standards, human rights as well as ethical conduct.

Moreover, GEA will align its "Code of Corporate Responsibility" with the basic principles and core topics set forth in the "Guidance on social responsibility" (ISO 26000). The new Code of Corporate Responsibility is to apply to all employees worldwide.

Integrity system (whistleblower system)

A professional whistleblower system is an effective tool for ensuring and monitoring compliance with the principles of social responsibility and compliance rules. 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 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 antitrust and competition law, export control regulations, data protection as well as accounting regulations. Breaches of the principles of social responsibility 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 properly documented. 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 obtaining additional information that might compromise the whistleblower's anonymity, the whistleblower is contacted by one of the above departments asking whether a further probe into the matter is requested. 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 five reports falling under the specific remit of Human Resources were filed under the BKMS. They involve four employees. The topics that were addressed include compliance, leadership behavior, style of communication, transparency or a potential need for training executives.

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 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 origin, 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, 57.7 are aged between 30 and 50 while 32.4 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 goal 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.

Member of governing bodies and employees by gender (in %)	12/31/2018	
	thereof men	thereof women
Supervisory Board	58.3	41.7
Executive Board	80.0	20.0
Managers*	89.6	10.4
Total workforce	83.5	16.5

*) 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 general, GEA makes sure that a minimum proportion of female candidates are considered in the selection process when management positions at all levels need to be filled.

Since 2017, GEA has implemented its “Women Career Program” for female high potentials and executives to systematically develop women for leadership positions. In 2018, 15 female employees participated in the program. The latter is aimed at allowing candidates to evaluate themselves, further develop their personalities and specifically plan the next steps in their careers. The female participants are supported by female executives. At the same time, GEA ensures that a 25 percent minimum share of women are represented in the other talent programs.

Additional information on GEA’s diversity concept is provided in the Corporate Governance Report including Corporate Governance Statement on page 64 f.

Labor practices

Talent management and leadership development

To meet the company’s current and future demand for executives, GEA identifies high performers and potentials within the framework of a global, cross-functional and connected talent process. This process aims at specifically developing talents, retaining them for the benefit of the company while assigning them optimum positions within the company.

In 2018, GEA also conducted various talent programs for promoting young talents and executives. The target group of the “First Professional Program” includes employees with leadership potential, while “Professionals on Stage” is designed for executives looking back on several years of experience. 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 seeks to enhance their strategic skills. All in all, in 2018, more than 90 high potentials from different nationalities, functions and business units attended the various programs. 25.8 percent of them were female.

Moreover, GEA offers training for executives. Such courses include “Leading Others”, “Leading Leaders”, “Engaging Employees” and “Leading Virtual Teams” that focus on strengthening leadership skills. Apart from that, the year under review saw the first “GEA Strategic Leadership

Program” that was conducted with senior managers with a focus on strategy, leadership, innovation, customer orientation and digitalization. In addition, since 2018, all young talents and executives have been able to avail themselves of the “GEA Leadership Toolbox”, a constantly growing collection of best practice and tried and tested management and leadership tools. These learning opportunities are rounded off by a wide range of e-learning courses that were updated and aligned with GEA’s current needs in 2018.

In 2018, GEA launched a new international graduate scheme. This program familiarizes young potentials and up-and-coming experts with various cross-divisional facets of GEA, helping them to extend their knowledge within the framework of targeted, individual development activities.

Work-life balance

GEA explicitly endorses a good 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 and offer 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, 3.2 percent of the German workforce took advantage of parental leave, 67.2 percent of them being fathers with 32.8 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, all employees worldwide may avail themselves of GEA’s Learning Center, the central learning and training provider. The latter offers management, sales and project management training as well as GEA product and user training courses; in 2018, 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 10,001 employees, i.e. 53.7 percent of GEA's entire workforce, made use of the learning and training opportunities offered by the company. 3,853 employees attended classroom-based training courses, 920 participated in integrated training initiatives while 1,802 attended trainer-hosted webinars. A total of 20,160 e-learning seminars were delivered; a large number of them were attributable to several compliance and data protection training initiatives. The average time per employee invested in taking part in face-to-face training modules was 1.4 days of learning.

Vocational training in Germany

	12/31/2018	12/31/2017
Apprentices	358	358
Apprentice-employee ratio (in %)	5.8	6.0

In the year under review, GEA trained 358 young people at 13 German sites in ten different commercial and industrial/technical occupations, which fall into different specialty areas depending on the product portfolio of GEA's specific sites. 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 16 combined vocational training and degree programs were realized in cooperation with polytechnics and universities. These combined degree programs cover a period of six semesters and lead to bachelor degrees in various different fields.

For students participating in combined degree programs, GEA has organized the practical phases more internationally with projects in foreign companies.

Company pension schemes

GEA grants its employees pension benefits under defined contribution or defined benefit pension schemes. Depending on the locations and company agreements, employees can jointly design their pension plans with GEA. 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 service 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 know-how 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 allow for the equal treatment of all internationally mobile employees.

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.

Employee engagement survey

In the year under review, GEA implemented a new approach to ascertaining employee satisfaction by conducting a pilot project. For this purpose, GEA employees from departments with potential for improvement were selected and surveyed in June and November, being asked to answer questions regarding their satisfaction with their respective line managers, personal development opportunities, trust in the management, a positive work environment as well as structural topics within the group. The first survey in June achieved a response rate of 70 percent and the November survey also attained a response rate of just under 70 percent.

The first survey revealed a need for action in various areas. While the relationship between employees and line managers was regarded as positive in structural terms, cross-team cooperation was to be improved, for instance the exchange between different corporate divisions. Following the first survey, the findings were analyzed, with measures at team level and feedback for global measures being defined. For this purpose, each executive involved received his or her own evaluation report.

Thereupon, over 200 workshops were conducted, with measures designed to improve staff satisfaction being agreed.

As a result of the two consecutive surveys, GEA mainly plans to improve IT support, the communication of GEA's strategy as well as the allocation of responsibilities. The measures agreed in this context are to be further implemented in 2019. Due to this new process designed to improve the measurement of job satisfaction, GEA is able to respond more swiftly to employee feedback while ensuring the active and continuous involvement of the workforce in the development of the company. Moreover, it is possible to better validate the efficiency of individual measures.

Corporate responsibility

By adopting the statement "Sustainable Value Creation at GEA", 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 on the company's website at gea.com.

As a global player, GEA participates in a multitude of regional and local projects and initiatives while interacting with more than 200 trade and industry associations by discussing technical and market-related topics. For instance, GEA is a member of the "Verband Deutscher Maschinen- und Anlagenbau" (VDMA – German Engineering Association) and also actively involved in the association's "Corporate Responsibility" working group that was established in 2017. A list of GEA's key memberships in organizations is available at gea.com. As a rule, membership matters are handled autonomously by the individual sites as they see fit.

GEA is a founding member of MassChallenge in Switzerland. MassChallenge is a non-governmental organization allowing startups to gain access to a global network of mentors and venture capital investors without actually acquiring any shares in these startups. Meetings with mentors, field trials and workshops also assist GEA's young entrepreneurs in mapping out their business concepts.

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. Information on some of the initiatives is provided on GEA's website at gea.com.

Responsibility for the environment

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 91 f.

Greenhouse gas emissions

As in the previous years, GEA took part in the 2018 survey conducted within the framework of the Carbon Disclosure Project (CDP). The 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 the major listed corporations and their strategies to combat climate change. The results are then made available to current and potential investors. At present, the

group of participants accounts for 50 percent of global market capitalization. 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. In the year under review, GEA managed to significantly enhance the result of the CDP survey and was awarded a B- (management level).

Since 2017, GEA has disclosed the relevant data for the year under review that was audited by KPMG in accordance with ISAE 3000. In addition, GEA changed the way it presents CO₂ equivalents across regions as required by the CDP. The data series comprises the years 2017 (adjusted) and 2018. In 2018, GEA measured the CO₂ emissions released by its 74 largest sites that comprise production, service and administration.

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 fuel 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.

Further information on the method for calculating CO₂ emissions in 2018 is outlined on the company's website at gea.com under "Explanatory notes to environmental reporting". The figures presented are in line with the conversion factors stated in the GHG Protocol/IEA (05/2018) – IEA 2017.

Direct Greenhouse Gas Emissions (Scope 1, in tons of CO ₂ equivalent)	2018 ✓	2017*✓
Asia Pacific (without China)	618	529
China	503	373
DACH & Eastern Europe	19,598	23,772
Latin America	5	9
North America	9,615	7,199
Northern and Central Europe	1,402	1,356
Western Europe, Middle East & Africa	8,242	8,595
GEA's total	39,983	41,833

Indirect Energy-Related Greenhouse Gas Emissions (Scope 2, in tons of CO ₂ equivalent)	2018 ✓	2017*✓
Asia Pacific (without China)	1,561	1,340
China	4,921	4,614
DACH & Eastern Europe	18,326	19,628
Latin America	112	109
North America	6,458	5,513
Northern and Central Europe	2,550	3,472
Western Europe, Middle East & Africa	2,141	2,248
GEA's total	36,068	36,925

Other Indirect Greenhouse Gas Emissions (Scope 3, in tons of CO ₂ equivalent)	2018 ✓	2017*✓
GEA's total	17,267	15,958

Total Greenhouse Gas Emissions (Scope 1, 2, 3, in tons of CO ₂ equivalent)	2018 ✓	2017*✓
GEA's total	93,319	94,716
Ratio of tons CO ₂ equivalent to GEA's revenue	19.32	20.59

✓ Audited by KPMG

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

Compared with the prior year, GEA's operations emitted fewer greenhouse gases (Scope 1) in spite of higher revenues. Mild temperatures in Europe as well as GEA's initiatives designed to optimize energy efficiency at the various sites favorably impacted and reduced the emission of CO₂ equivalents under Scope 1. On the other hand, the company's strong order intake required more business travel, which resulted in a corresponding increase in Scope 3 emissions. All in all, in 2018, GEA was able to lower its greenhouse gas emissions both in absolute terms and in relation to sales. GEA met the target of a 1.5 percent reduction in CO₂ emissions for 2018 that had been agreed with the Executive Board.

In 2018, GEA expanded and further automated the methods, systems, processes and internal controls governing data collection, for instance by introducing a deviation management system. Additional staff as well as a new generation of software ensure that GEA effectively meets its responsibilities in connection with this vital issue.

Water consumption and waste

GEA is not a water-intensive company and generates only very small amounts of hazardous waste – as a consequence, water, wastewater and water-related risks are no major issues that need to be addressed by the company. However, both our customers and our investors request environmental reporting that is as broad as possible in scope, primarily via audits and ESG analyses. For this reason, GEA started recording water consumption and waste generation levels worldwide in the third quarter of 2017 to set up its very first group-wide reporting system covering these topics while also seeking to reinforce the conservation of resources in this area.

In 2018, GEA recorded the volume of water consumed at its 70 largest sites, each of them comprising production, service and administration facilities. Thus, the company managed to establish its first reporting system in this specific area. An overall water consumption of 313,900 cubic meters reveals that GEA is not a water-intensive enterprise. The water was not taken from areas where water is in short supply.

Water	2018
Demand (in thousand cubic meters)	313.9
Municipal and mains water (in thousand cubic meters)	284.8
Water from wells and groundwater (in thousand cubic meters)	29.1
Consumption	
thereof industrial and process water (in thousand cubic meters)	151.6
Wastewater (in thousand cubic meters)	261.6
Share of process water in total water consumption (in %)	48
Share of wastewater in total water consumption (in %)	83
Sites reporting water consumption	70

Just like water consumption, GEA recorded the composition of waste for the very first time in the year under review. Going forward, GEA will expand reporting in this specific field. Metal, which is recycled, accounted for 82 percent of the overall amount of 24,132 tons of waste generated in 2018. Hazardous aqueous substances made up 0.7 percent of overall waste (163 tons). The individual components are shown below:

Waste	2018, in tons
Aqueous rinsing liquids containing hazardous substances	163
Machining emulsions and solutions not containing halogens	427
Packaging material: paper, cardboard	509
Packaging material: plastic	98
Packaging material: wood	1,718
Paper and cardboard	276
Domestic waste	1,157
Metals - recycling	19,784
Total	24,132
Sites reporting waste generation	58

GEA mainly uses metals for processing. Thus, GEA's main focus is on the recycling of metal waste. GEA closely cooperates with suppliers and customers to develop environmentally-friendly packaging while ensuring the proper disposal and recycling of the machines at the end of their lifecycle.

In 2019, GEA will continue to enhance the quality of the data underlying the environmental performance indicators with a focus on methods of disposal.

Products subject to specific 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 farming and coolants for refrigeration systems. Undiluted chemicals for farm technology applications, such as dipping agents for milking hygiene, are processed at 11 GEA facilities worldwide. 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.

Product stewardship

"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 and water savings as well as reductions in emissions or waste increasingly affect the investment decisions made by the 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

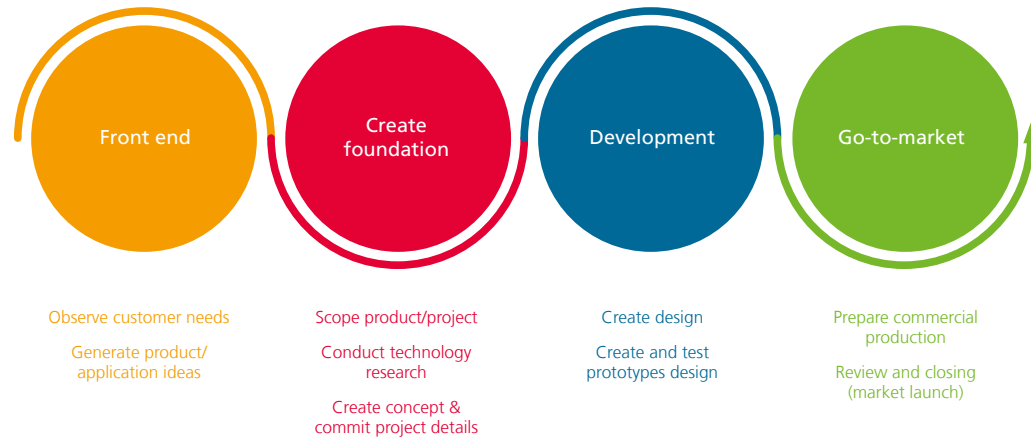
decisions. In turn, the latter have a direct and favorable impact on climate-relevant emissions and the protection of natural resources. More often than not, the economic and ecological criteria governing investment decisions made in GEA's customer industries are virtually identical since lower emissions based on enhanced efficiency also result 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.

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.

Management approach to product quality and safety, sustainable product design and innovation

Even though the customer surveys conducted by GEA have revealed a high degree of satisfaction with the quality and performance of GEA's products, the impact of potential gross risks in this area would be severe (for more information see Opportunities and Risks Report, see page 117). Quality and safety issues may lead to accidents and production losses on the customer side, followed by negative consequences in terms of health protection, reputation and earnings. GEA is tackling such risks on all levels as they touch on the very foundation of its business. The innovation process is followed by a uniform and detailed product development process that applies across the entire group. It incorporates fixed design criteria such as resource efficiency or the consideration of health and safety aspects throughout the entire lifecycle of a product. Moreover, this product development process also takes into account regional or industry-specific guidelines and standards, required approvals or test certificates. Prior to market launch, the design and construction of prototypes is closely validated. Within the framework of the innovation process, the product development process is supplemented by a so-called front end at the very start.

The overall process is as follows:



For instance, ideators are already quizzed about sustainability aspects during the front end phase: emissions, water consumption or the use of chemicals or filter media must be documented.

Quality management, environmental management, occupational health and safety as well as energy management are checked via certifications, their efficacy and performance being guaranteed in the process. GEA set up an internal “Product Safety Committee” for ensuring the safety of its products. GEA’s service division makes sure that the products and process plants are available throughout their entire lifecycles; at the customer’s request, it is also able to prolong service life by modernizing (parts of) the respective equipment. At regular intervals, the suitability and success of the management concepts are measured on the basis of key performance indicators such as quality costs, complaints, customer satisfaction or the number of certified sites.

Product quality and safety as well as sustainable product design in the supply chain are ensured under the “Code of Conduct for Suppliers and Subcontractors” (see “Responsible supply chain”, page 107 f.).

Certification of the management systems

In 2016, GEA had already started clustering sites with integrated management systems under the umbrella of a unified GEA certificate. 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. All GEA companies in possession of one of the above management systems will be gradually integrated into the matrix certificate. Integration priority is subject to the expiry dates of the respective certificates awarded. In the year under review, two further German sites received their initial certification, respectively. GEA met its goal of incorporating 14 entities under the matrix certificate. The respective entities are based in Germany, Denmark, China, New Zealand, India, Ireland, Italy and the USA. Owing to the implementation of the OneGEA organization, the number of certificates is still declining, for instance due to the fact that sites were merged and not all sites are required to continue to hold all certificates as they did before.

The status quo of certifications within the group in 2018 was as follows:

Management system	Number of certificates 2018* ✓	Number of certificates 2017 *	Number of certificates under matrix certificate 2018	Covered by matrix certificate in 2018 (in %)
DIN EN ISO 9001:2015	105	120	86	81.9
DIN EN ISO 14001:2015	30	29	17	56.7
BS OHSAS 18001:2007	25	24	12	48
DIN EN ISO 50001:2011	17	20	5	29.4

✓ Audited by KPMG

*) 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 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 health and safety. It will be switched to the new **ISO 45001** standard in 2019.

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, centrally incorporates business processes and procedural instructions governing the functioning of the GEA 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, such as internal approval processes, are clearly defined and put into practice.

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. For instance, the first steps (“front end”) of innovation management, i.e., the systematic generation of ideas as well as a feasibility check, include problem solving tools and tools for advancing the number and quality of the submitted ideas, the systematic

analysis of market- and technology-driven trends and customer needs, as well as a modern idea management platform.

During the year 2018, GEA continued the rollout of the new innovation management scheme that comprises the innovation process, the state-of-the-art “InnoVate” IT system for generating ideas and letting them mature, as well as defined roles and responsibilities steering the further development of the innovation ideas brought forward.

Selected performance indicators underlying the innovation process (process efficiency and time to market) impact on the remuneration awarded to GEA's Executive Board.

So-called ideation 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 an innovation day covering this field is held at a selected GEA site. There, the topic is presented and jointly refined by all parties involved. Subsequently, the respective campaign theme including the ideas generated during the first workshop are published on the browser-based innovation platform. This allows the experts involved to further develop the topic on an interdisciplinary level. In 2018, GEA conducted eight innovation days, five of which embraced ideation workshops, campaign kick-offs as well as general information about the innovation management framework applied. On three compact days, the focus was on imparting information without any tangible ideation campaign. In 2018, six ideation campaigns were organized in China, India, Latin America and North America, putting emphasis on the most important needs of the respective business entities.

For the purpose of agile innovation management, GEA actively connects with stakeholders from the research and science community. For instance, GEA is involved in the Business Accelerator Program of MassChallenge Switzerland for the purpose of boosting ideas and developments at an early stage. Since 2016, GEA has been one of the founding sponsors playing an active part in the start-up community that mainly focuses on topics like food, health and energy. This type of cooperation promotes product development by pursuing a holistic approach and reaches experts

within and outside of the GEA network. In the year under review, GEA renewed its engagement for another three-year term.

This year, GEA sent a team of its own to MassChallenge in Switzerland to compete with other startups and sharpen their product idea with the assistance of experienced mentors. Young talents worked on a bag filter made from pure natural material unlike the standard polyester bags that are currently installed in dryer housings. Tested in milk spray drying processes, bag filters made from natural material could also be used in many further applications. This would allow the customer to shape their production process in a more sustainable way while reducing waste.

Digitalization, which is actively managed via innovation management, is an integral part of GEA's innovation process. Digital tools change the way ideas are generated and qualified while expediting product development as such. This way, GEA achieves the kind of agility that helps speed up the process of developing functional products. Moreover, these tools give rise to disruptive business ideas that may transfer GEA's application knowhow to previously untapped segments of the market, generating a new type of demand.

Digitalization may pave the way to innovation while simultaneously characterizing the solution. To master the digital challenge, GEA connects with strong partners: suppliers and customers, as well as market players and the science community. So-called cooperative competition aims at creating more added value for all parties involved: In this context, the company's cooperation with the MassChallenge startup MachIQ may serve as an example. This gave rise to an open and independent maintenance management tool for digital services that includes remote maintenance, spare parts distribution on the internet as well as data analysis for technologies serviced by GEA. Apart from that, the portal can be integrated into the majority of ERP systems, thus allowing for seamless digitalization – from the customer to the supplier.

For gauging the success of the resources allocated to the field of innovation across the entire company, GEA relies on key performance indicators during all stages of the innovation process. At the end of 2018, there were approx. 400 (2017: 300) active ideas or projects in the “front end” and

“foundation” phase, with around 230 (2017: 240) future product innovations undergoing the “development” and “go-to-market” phase. In 2018, around 280 new ideas were submitted via the InnoVate Portal, roughly 150 of which resulted from the theme-related ideation campaigns. While approximately 130 ideas and projects were shelved or stopped, GEA was able to launch 60 concrete projects. Most of them have left the innovation process as new, marketable products. This goes to show that ideas undergo a much stricter selection process during GEA's front end phase. What is new is that ideas, which are not immediately taken up, are stored as “inactive” and no longer counted. This way, GEA seeks to make sure that highly promising ideas are evolved more swiftly and purposefully. The key performance indicators are regularly reported to the heads of development, the management bodies as well as the Group Works Council and the group IT committee.

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 32 ff.).

Product life cycle

To avert or mitigate any adverse impact on natural resources in connection with the development and planning, purchase and transport, production, shipping, operation and disposal of products (and, where applicable, process solutions), GEA has begun to record each stage of the product life cycle by taking these aspects into account. In the year under review, the so-called life cycle perspective was taken at GEA's largest German site in Oelde, considering in detail the products manufactured at this facility. In doing so, GEA seeks to make transparent and traceable any potential environmental impacts during each stage of a product's life cycle. Sites that have installed environmental management systems in accordance with ISO 14001:2015 have to produce the corresponding reviews. In the medium term, all product groups and applications are to introduce life cycle assessments.

Serious events in connection with GEA products and plants

Serious incidents such as fatal and severe accidents, fires and explosions as well as environmental and security incidents are reported by means of the “Serious Events Reporting System” (see page 94). The latter also includes all incidents involving GEA products and plants. Such incidents are always recorded and investigated, regardless of whether or not the respective incident was actually caused by a GEA product or a GEA plant. For this purpose, the company relies on a group-wide reporting platform that ensures that the dedicated reporting channels are complied with.

Quality, innovation and service in customer satisfaction surveys

In terms of customer satisfaction, GEA scores highest as regards machine quality and performance as well as technology innovations. This was one of the key findings of the second global customer satisfaction survey initiated by GEA end 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 have since been the basis for improvement processes.

In 2017, the company conducted a follow-up survey by means of almost 600 online interviews in eleven countries in which customers had been less satisfied with GEA's service and complaints management, focusing exactly on these topics. Overall, the findings already revealed a slight improvement; apart from that, GEA was able to gain some useful insights into potential further measures.

Service, satisfaction with the services provided as well as complaints management were the key topics of a customer survey conducted in summer 2018. The findings will feed directly into the current initiatives and improvement projects of the service organization.

GEA Service

The commercial success of our customers hinges on production efficiency, in particular the availability of technologies. State-of-the-art production facilities and plants are highly automated, and even minimal downtime may have a major impact on a customer's productivity.

Faring well at an annual growth rate of approximately five percent and following the successful rollout of several new service products and initiatives, GEA's global service business has experienced a positive development since the launch of the OneGEA organization. GEA seeks recognition as the global leading industrial supplier of life cycle service concepts. GEA's job is to establish, preserve and enhance the customers' performance throughout the entire life cycle of their respective plants or facilities. The organization believes that there is still room for improvement when it comes to meeting customer expectations. Its current strategic initiatives and actions are based on the findings of the customer satisfaction surveys conducted in 2016 and 2017, the event-based customer interviews carried out in the year under review as well as the two internal surveys within the company's own Service organization. Relying on the “Deliver” project launched in 2018, the global Service organization seeks to step up its game and enhance its own execution strength to increase customer satisfaction in the long run. In this context, particular priority is given to improved workflows.

In the year under review, the management system, which structures and handles individual skills and expertise at an organizational, team as well as an individual level, was further tweaked and refined. This “skills management system” supports the provision of adequate training and learning activities and helps identify the right service employee to be entrusted with specific service tasks. Since 2018, the system has provided insights into how the capabilities of the Service organization have evolved in each country or region, broken down by products and applications, respectively. Almost all countries covered by GEA's Service area were assigned so-called training officers. Evaluating the results obtained from the skills management system, they derive training and development measures that are subsequently made available in the GEA Learning Center (see also page 97 f.). In this context, all GEA Service employees have been allocated dedicated learning pathways to boost their personal development.

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 short response times, service level agreements, repair following failure to preventive and predictive maintenance. In this context, digital services like real-time condition monitoring play a more and more important role. For instance, the Milking & Dairy Farming product group has sold more than 1,800 milking robots that are connected to the FarmView and herd management system.

In addition, GEA is expanding its service business by adding digital solutions, since the analysis of continuously measured process parameters by means of highly sophisticated data analysis tools allows for a more stable operation of plants and processes. Thus, GEA OptiPartner comes in where conventional process control measures come up against their limits: in the event of varying or failing raw material quality or ambient conditions. GEA OptiPartner offers a state-of-the-art autopilot control system designed to make production lines more reliable and, thus, more efficient. This digital project spans the entire life cycle of a process plant - from remote services in terms of tuning to software updates and performance monitoring for the purpose of continuous process optimization.

In the year under review, the service business accounted for more than 30 percent of GEA's sales revenues.

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 50,000 companies currently rely on the CSR ratings provided by the collaborative

platform it operates, amongst them the buying organizations of more than 300 leading multinational corporations worldwide. In 2018, GEA continued to improve its EcoVadis CSR rating, remaining at "Silver" by scoring 59 points (2017: "Silver" with 52 points).

Responsible supply chain

Quality, efficiency, safety and appropriate behavior in the conduct of business are of importance to GEA customers, not only in relation to GEA's products and services, but across the entire supply chain. The trust required for engaging in a long-term business relationship may only be ensured by observing fundamental compliance standards and adhering to the basic principles of occupational health and safety while respecting the environment across the entire supply and value chain – which is why these areas are given highest priority. GEA practices a zero-tolerance policy with regard to unethical behavior in business dealings and transactions, in particular in connection with bribery, corruption, money laundering or child and forced labor. GEA expects all its suppliers to abide by comparable standards while exhibiting proper ethical behavior when conducting their business.

The new group structure also allowed the company to establish an optimized procurement organization. In this context, a new procurement portal was set up on GEA's website at gea.com. The registration process requires that suppliers commit themselves to the company's "Code of Conduct for Suppliers and Subcontractors", which GEA released and implemented in fiscal year 2018. It replaces the previously applicable Code of Conduct established by the German Association of Materials Management, Purchasing and Logistics. The Code of Conduct sets forth the basic principles and requirements that are to be met by all suppliers of goods and services, their subcontractors as well as the group entities of the suppliers and subcontractors with regard to their responsibility towards society, the environment and the individuals involved in the production of goods and the provision of services. These obligations encompass the recognition of the fundamental principles of social responsibility enshrined in ISO 26000, compliance with international standards, respect for human rights including the prohibition of child and forced labor as well as discrimination,

the commitment to fair wages and working hours, freedom of association as well as occupational health and safety.

Furthermore, the Code of Conduct lays down the obligations to engage in environmentally sound management, dispense with the use of conflict minerals, honor the principles of fair competition and data privacy, protect intellectual property while also enshrining compliance with foreign trade acts and a ban on corruption, bribery and money-laundering. In the event of GEA becoming aware of or suspecting violations of the Code of Conduct, with GEA notifying the respective supplier accordingly, GEA expects said supplier to investigate and resolve such non-compliance issues as soon as possible and within an agreed timeframe. Should the supplier be unwilling to fix such problems, GEA reserves the right to take legal action as deemed appropriate by the company, including measures aimed at terminating the business relationship for good or any action designed to promote, follow up on and enforce corrective measures.

Key suppliers are visited on an annual basis. In the year under review, the company conducted 492 supplier screenings (previous year: 453). GEA performs its evaluations by visiting suppliers, conducting audits or requesting the voluntary disclosure of information; these activities are undertaken by the country organizations and the two Business Areas alike. During the 2019 fiscal year, the supplier audit system will be overhauled by Procurement and QHSE.

Responsible value creation

All GEA stakeholder groups 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.

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

focusing the group even on cash flow generation, the cash flow driver margin (see page 49) represents one of the 2018 key performance indicators of the group that is also taken into account in the incentive payment system. For this reason, GEA reports this key figure as an indicator of economic performance.

This aspect is inextricably linked to correct behavior. Given the company's quest for sustainable value creation, corporate governance is an essential element of business management that deeply affects each and every aspect of the group's day-to-day operations.

Supply chain topics are addressed in the chapter covering "Supply Chain Management" (see page 30) while supply chain compliance is covered in the chapter on "Product Stewardship" (see page 107 f.).

Compliance management

Compliance represents a group-wide principle governing adherence to the law, legislation as well as internal corporate policies. All GEA 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 60 f.) and at gea.com.

To avoid the serious consequences of potential compliance violations, GEA faces these risks by means of a compliance management system designed for analysis, information and education, control, process definition as well as monitoring purposes that was revised in the year under review. The new system was audited in the areas of anti-corruption and antitrust law as at January 1, 2019, in accordance with audit standard IDW PS 980. The audit was certified on January 29, 2019. In addition, there is a certified reporting system ("Business Keeper Monitoring System", BKMS). The management approach is examined by the group's internal audit function and external auditors by means of internal and external audits.

New Code of Conduct

In July 2018, GEA's Executive Board resolved to enact the new "Code of Conduct" as well as Compliance Policies based thereon – including the Integrity Policy, the Third-Party Policy as well as the Competition Policy. The Code of Conduct supersedes the former "Business Conduct Policy". The corresponding provisions entered into force throughout the group on January 1, 2019. The above policies govern the fight against corruption and money-laundering, conflicts of interest as well as antitrust and competition law at GEA. They are available to all employees worldwide in 17 different languages. Further details are outlined in the Corporate Governance Report, see page 60.

Reporting system and alternative reporting channels

GEA's BKMS integrity system represents a tool designed to ensure compliance with the Code of Conduct. The whistleblower system is available to employees and third parties in nine different languages. It also provides the possibility of filing an IT-based report of potential violations of laws and provisions governing the prevention of corruption and restrictions of competition. Such reports may remain anonymous in countries where this is permitted by law. Only two dedicated employees of the "Compliance and Principle Legal Matters" department as well as one member of the internal audit team may access reports on corruption and restrictions of competition. GEA's integrity system also deals with reports on potential human rights violations (see page 95 f.).

Employees and third parties may also report alleged violations by choosing other channels. For instance, GEA receives reports that are submitted via e-mail or letters addressed to the Executive Board, members of the compliance organization or the Head of Internal Audit. It is common practice and stipulated that the recipient promptly passes such reports on to dedicated members of the compliance organization.

Preventive processes

Processes designed to prevent compliance violations figure prominently in GEA's compliance management scheme. For this reason, individuals in close contact with the customer, such as sales agents, have to undergo a strict risk vetting process for the purpose of corruption prevention prior

to entering into a contract with GEA. Each contract requires prior verification and approval by the legal department. Sponsoring and donations are subject to strict internal authorization requirements.

Training and consulting

GEA has identified approximately 4,300 employees that are exposed to particular compliance risks. As far as anti-corruption and antitrust law are concerned, this group includes all executives, all employees entrusted with sales or purchasing tasks as well as other employees vested with decision-making powers and in direct contact with customers or suppliers. At least once every two years, these employees are to receive classroom-based training in the fields of anti-corruption and antitrust law.

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

- Compliance training courses comprise extensive group training covering topics like fight against corruption and money-laundering, antitrust law as well as conflicts of interest; 2018 saw the initiation of a worldwide training program on the above topics for more than 4,300 employees; a large number of them already received training by the end of the year.
- In addition, 2018 saw the organization of further compliance e-learning courses with a focus on anti-corruption, antitrust law, money-laundering as well as data protection. All employees from the target groups at risk were invited to attend. The group included circa 6,863 attendees in the field of anti-corruption, roughly 6,360 for antitrust law, approximately 6,158 participants as regards money-laundering as well as 15,239 employees that addressed matters of data privacy.

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 to offer a competent point of contact at all times; at regular intervals, they receive intensive fraud prevention, anti-corruption, money-laundering and antitrust training. They serve as points of contact in relation to local compliance issues and provide assistance to the compliance department.

Audit

Within the framework of its standard and special audits, Group Internal Audit also checks compliance aspects. 2018 saw the performance of 21 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 of documentation. This also includes compliance audits in the fields of anti-corruption and export control. In the year under review, Internal Audit performed five additional audits focusing on Executive Board travel expenses as well as three audits looking into the risk management system of both Business Areas, the Global Corporate Center as well as the Shared Service Centers.

Protection of personal data

For an innovative and global enterprise like GEA, information and its use for accomplishing corporate targets is of significant importance. GEA protects the privacy of every individual whose personal data is processed by the company. This includes employees, customers, suppliers, other contracting partners as well as applicants and applies to all GEA companies and specialist departments that handle personal data. Privacy breaches may entail considerable fines and even result in fines and imprisonment in some countries. Thus, the EU General Data Protection Regulation (GDPR), which came into effect on May 25, 2018, provides that non-compliance may be punished by imposing fines of up to four percent of group revenue. Moreover, violations may lead to the exclusion from public contracts. Ultimately, privacy breaches may also damage GEA's reputation in the long run. Therefore, GEA insists on the implementation of data protection requirements and reserves the right to take action against anybody who fails to comply with data protection laws. For instance, this includes disciplinary measures, but also the enforcement of damages.

Subject to individual requirements under labor law and in relation to co-determination at country level, a new data protection policy will be launched in 2019. It specifies guidelines and recommendations for conduct applicable to all employees in order to avoid privacy incidents or

privacy breaches. It forms part of GEA's global compliance principles and is supplemented by classroom-based training for employees working in sensitive areas – around 400 employees received training in 2018 – as well as e-learning measures for all employees who have a user account. The accompanying data protection management system is also to be introduced in 2019. It covers all organizational aspects, i.e., the roles, tasks and responsibilities as regards the processing of personal data, regardless of the type of individuals affected (including employees, customers, suppliers, shareholders etc.) or the technical means for processing them. It also provides for additional reporting channels regarding risks and violations; GEA already complies with the short response times that are legally required.

Compliance with the data protection specifications and the applicable data protection laws is verified on a regular basis. These checks are performed by the respective company data protection officers and further corporate divisions vested with audit rights or assigned external auditors. Third party providers are vetted on the basis of self-declarations, audits and certificates.

Information security and protection of intellectual property

Information security refers to the confidentiality, availability and integrity of information stored and processed by the organization – irrespective of whether this is done via technical or non-technical systems. Information security includes the protection against risks and/or threats, loss avoidance as well as risk minimization. GEA relies on organizational and technical means to protect both its own and information entrusted to it against unauthorized access. Apart from the complete set of tools provided by the specialist departments for information technology and IT security, the company also avails itself of all appropriate legal instruments for the purpose of corporate governance and when concluding agreements. In addition, the protection of trade secrets is also specified in a GEA guideline on information security ("Information Security Policy").

Against the backdrop of digitalization, the transmission of production and process data from the customer to GEA becomes increasingly important, for instance for the purpose of performing predictive maintenance and repair or carrying out remote maintenance. As a rule, the protection of both data and transmission channels is contractually stipulated and ensured in close cooperation between the customer and GEA. In the year under review, GEA did not receive any well-founded complaints regarding a breach of customer privacy and the loss of customer data.

By and large, intellectual property comprises knowhow, ideas, inventions, developments, sketches, plans, results as well as data. Such confidential information, the know-how, patents as well as other intellectual property rights constitute the cornerstones of GEA's technology leadership in systems and processes. As a consequence, the company rigorously protects and defends patent and trademark rights as well as copyright. GEA know-how is only disclosed following the conclusion of written confidentiality and/or non-disclosure agreements. GEA provides patent-related information in the chapter on "Research and Development", see page 35.

NES • Compliance with laws and provisions in the social and economic spheres

If employees violate compliance rules, such non-compliance is punished depending on the degree of fault 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 particularly severe cases, GEA reserves the right to sue the person in question for damages and/or report the violation to the competent authority.

GEA expects all employees to report any signs of compliance violations. Managers must ensure that serious misconduct, particularly in the areas of corruption, competition law and data protection, is reported to the Global Corporate Center Legal & Compliance.

- In the 2018 fiscal year, no fines were imposed on GEA.

Reporting profile

Once again, GEA's sustainability report for the 2018 fiscal year follows the international standards of the Global Reporting Initiative (GRI). The report was prepared in accordance with the "core option" of the GRI Standards.

At the request of GEA's Supervisory Board, KPMG AG Wirtschaftsprüfungsgesellschaft reviewed GEA's combined non-financial consolidated statement for fiscal year 2018 and performed a limited assurance engagement in relation to the statutory disclosures required pursuant to ss. 315b, 315c in conjunction with 289b to 289e HGB (Handelsgesetzbuch – German Commercial Code). This review was in line with the applicable "International Standard on Assurance Engagements" (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information".

Disclosure 102-45

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

Disclosure 102-48

No restatements were made; however, the essential topics were revised and re-defined, see disclosure 102-49.

Disclosure 102-46

In 2018, GEA thoroughly examined and re-arranged the material topics to make them more palpable and comprehensible. For this purpose, the 2016 list of all potential topics was revised and challenged on the basis of practical experience and best practice examples under the direction of the Global

Corporate Center. Prior to that, the known views of the stakeholders were allocated and incorporated. The internal materiality assessment was conducted during a full day workshop involving the Chief Financial Officer as well as experts from the following technical fields: Legal and Compliance, Human Resources, Sales, Procurement/Supply Chain, Controlling, Risk Reporting, Quality, Health, Safety and Environment, Strategy, Communication and Marketing, Research and Development as well as Innovation Management. For assessment purposes, the experts relied on the experience they had gained from their exchange with stakeholder groups closely linked to them as well as their personal knowledge of the industry and competitors. Within the framework of GEA's business-to-business model, the technical departments are the daily contacts for their respective stakeholder groups, which is why they must be regarded as primary sources. Subsequently, the results were aligned and approved with all technical departments involved as well as GEA's entire Executive Board.

To identify the topics to be reported in the non-financial statement, GEA also checked an additional prerequisite in line with ss. 315c in conjunction with 289c (3) HGB, i.e., whether a specific topic is required for understanding GEA's business progress, business results as well as the situation of the company (net assets, financial position, result of operations). Potential risks arising in connection with these topics were ascertained, allocated and assessed.

Disclosure 102-42

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 re-defined the classic stakeholder group, i.e., the “shareholders”, as “investors”. Apart from (potential) investors, this group also includes shareholders, analysts, investment firms as well as rating agencies. All in all, GEA identified the

following stakeholder groups that were re-classified in 2018:

Previous term	Revised term
Capital market	Investors
Customers	Customers
Suppliers/contractors	Industry/peer group
Competitors	Industry/peer group
Local communities	NGOs/civil society
General public/media	NGOs/civil society
Schools/universities	Sustainability experts (scientific community, consulting)
Regulators/authorities	Public authorities/politics
Employees	Employees

Disclosure 102-43

Once again, the company analyzed various sources for the purpose of corroborating the materiality analysis; they included the findings of the 2018 staff engagement surveys, customer interviews as well as internal surveys on “Service” carried out in the year under review. In addition, the capital market's feedback (notably ratings and ESG analysts) on the company's sustainability report was once again subjected to a thorough analysis together with the QHSE experts. Taking into consideration their requirements, the company reported on water consumption and waste – only basic data - for the first time even though, overall, these topics are not material. Every year, GEA participates in the Climate Change Information Request of the Carbon Disclosure Project (CDP). The respective documentation was also taken into account. Moreover, the sustainability reports published by key customers and competitors were also included within the framework of a comparative analysis. 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 factored in.

Disclosure 102-47

The company's reporting in 2018 addresses the following material topics:

- Occupational health and safety
- Labor/management relations and co-determination
- Human rights
- Labor practices incl. training and education
- Emissions
- Product quality and safety
- Sustainable product design and innovation
- Product life cycle/ circular economy
- Customer information and support
- Responsible supply chain
- Value creation
- Compliance
- Data protection
- Information security
- Protection of intellectual property rights

In principle, the material topics that were defined are of group-wide relevance.

In addition, GEA reports on diversity and equal opportunities – supplementing the information on the diversity concept that is provided in the Corporate Governance Report including the Corporate Governance Statement.

Disclosure 102-49

The following topics have changed and/or were re-defined:

2017 topic	2018 topic	Reasons for change
Economic performance	Value creation	Merely editorial change
Procurement practices; environmental assessment/ social assessment of suppliers	Responsible supply chain	Edited summary; proportion of local procurement still reported in the chapter on "Supply chain management"
Socio-economic compliance; anti-corruption	Compliance	Edited summary
-	Data protection; information security; protection of intellectual property rights	Now regarded as material due to significantly higher risks on account of the EU General Data Protection Regulation, increasing digitalization of business processes, products and processes, and due to the growing importance of intellectual property as a distinguishing feature as regards competition
Training	Labor practices	Edited summary of several employee-related topics that were already reported, under a new heading
Impact of climate change	Product quality and safety; sustainable product design and innovation; product life cycle/ circular economy; customer information and support	As a rule, evidence for enhanced efficiency vis-à-vis the customer represents a decisive purchasing argument. Due to the multitude of components and processes, and notably due to the necessity to collect comprehensive operational data outside the company's own sphere of influence, it is impossible to provide global evidence for assessing the impact of climate change in relation to the entire portfolio of products and services. For this reason, the information on product stewardship provided in this report was re-arranged and expanded.

Disclosure 102-44

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

Key topics raised by stakeholders	Investors	Customers	Industry/peer group	NGOs/civil society	Sustainability experts (scientific community, consulting)	Public authorities, politics	Employees
Occupational health and safety	•	•	•	•		•	•
Labor and management relations and co-determination	•			•			•
Human rights	•	•		•	•	•	•
Labor practices incl. training and education							•
Emissions	•	•		•	•	•	•
Product quality and safety	•	•	•			•	
Sustainable product design and innovation	•	•			•	•	•
Product life cycle/circular economy	•	•			•	•	
Customer information and support		•				•	
Responsible supply chain	•	•		•	•	•	
Value creation	•	•					•
Compliance	•	•	•	•	•	•	•
Data protection	•				•	•	•
Information security	•	•					•
Protection of intellectual property	•	•					•



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is one of the largest technology suppliers for food processing and a wide range of other industries. The global group specializes in machinery, plants, as well as process technology and components. GEA provides sustainable solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio.

The company is listed on the German MDAX (G1A, WKN 660 200), the STOXX® Europe 600 Index and selected MSCI Global Sustainability Indexes.

[GEA Group Aktiengesellschaft](#)

Peter-Müller-Straße 12

40468 Düsseldorf

Germany

Phone: +49 211 9136-0

gea.com