

# SUSTAINABILITY REPORT 2020

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Stefan Klebert  
reflects on  
fiscal year 2020

## STEFAN KLEBERT

CHAIRMAN OF THE EXECUTIVE BOARD, GEA

# Dear Readers,

GEA's commitment to "engineering for a better world" highlights the central focus of sustainability in our business. Major global trends such as world population growth, urbanization, the rise of the middle class and the increasing demand for high-quality foods, beverages and pharmaceutical products call for production methods that are highly efficient and use less valuable resources. As an engineering company that primarily serves the food and pharmaceutical industries, we are harnessing our innovative strength to meet these challenges.

The Covid-19 pandemic has made it abundantly clear that one of the keys to sustainable global development is a resilient and adaptable healthcare system – one that is capable of bringing vaccines and medicines to market quickly and in large quantities. GEA is making major contributions in this area. In fact, we are one of the few companies worldwide that has what it takes to satisfy the extremely demanding production requirements of the biotech industry. Our vast experience in the design, scale-up, construction and process integration of pharmaceutical facilities has never been more in demand. Our separators are used to produce Covid-19 vaccines and we are working on additional solutions with our customers.

In addition to our involvement in vaccine production during the crisis year 2020, we also played a leading role as a provider of technology across diverse system-relevant industries. We ensured our customers could meet critical supply requirements, such as manufacturing food and hygiene products safely and getting them to consumers all around the world – even under the most challenging conditions. This came down largely to our plant and machinery engineering combined with our comprehensive service portfolio. We

owe our employees a tremendous thank you for making this possible; their unwavering commitment and boundless drive to innovate have steered, and continue to steer, GEA successfully through the crisis.

Despite the enormous challenges posed by the pandemic, we have continued to focus on our sustainability goals. In the CDP climate change assessment, GEA repeated the excellent result of the previous year with an “A-” rating, once again achieving the “Leadership” level. The CDP assessment recognizes companies that rigorously engage to address the environmental impact of their business and provide transparent disclosure of their efforts. In 2020, CDP also rated GEA for the first time in the “water security” category, which focuses on responsible resource stewardship. Our “A List” score here places GEA among other global leaders in CDP’s sustainability ranking, underscoring our commitment to environmental protection.

Positive feedback from our stakeholders has made us even more determined to continue our efforts to become more sustainable and expand our sustainability strategy accordingly. Going forward, we intend to strengthen our commitment to sustainability and increase visibility. To that end, we present our first-ever stand-alone GEA Sustainability Report, which fully adheres to the standards of the Global Reporting Initiative (GRI). In it we disclose detailed information on more topics than is required in the non-financial group statement. This includes human rights matters in our supply chain as well as an analysis of our prudent waste and water management activities. We’ve also included several cases that illustrate how we put our corporate mission – “engineering for a better world” – into practice.

In the end, it requires the strength of sound companies like GEA to drive sustainable innovation. As a technology and quality leader, we embrace this global responsibility. It is our contribution to a more sustainable world.

Sincerely,



Stefan Klebert

## Highlights 2020

**A**  
 CDP Water security rating  
 (Leadership Level)

**A-**  
 CDP Climate rating  
 (Leadership Level)

**Silver**  
 ecovadis  
 Sustainability rating

**-29.3%**  
 Reduction of greenhouse gas emissions  
 (Scope 1 and 2 market-based) in relation  
 to revenues (base year 2015)

**80.9%**  
 Recycling rate  
 for all waste in 2020



**JOHANNES GILOTH**  
CHIEF OPERATING OFFICER, GEA

## Interview

**Becoming more sustainable is the challenge we all face.  
What is GEA already getting right?**

Naturally, our own production is designed to be as sustainable as possible. We provide a safe and motivating work environment for our employees and take ownership of upstream and downstream steps along the entire value chain. This is our duty.

GEA always seeks to fulfill its obligations. We also look for opportunities to go the extra mile whenever we can. For example, we are helping mitigate the effects of major trends such as urbanization, population growth and climate change, because in the long run they will reshape our world as we know it. We also take into account consumer needs and demands, which are increasingly driven by the desire for more sustainably-manufactured products. That's why GEA is developing solutions for processing alternative proteins and fats, and working with partners to reduce and even eliminate the use of plastic in packaging. The world's population is growing quickly, therefore we have to find a way to feed everyone while also combatting the wasting of resources. Food safety, animal welfare, emission control, eco-friendly heating and refrigeration technology – these issues all have a significant impact on our business. If you look at the pharma sector, which is now under even more pressure to manufacture vaccines and medicines, GEA is a vital technology partner here and across all essential industries.

COO Johannes Giloth is responsible for Corporate Responsibility and QHSE at GEA, which includes sustainability. His executive mandate also encompasses worldwide purchasing activities, global production and supply chain.

GEA is here to stay. We serve a wide range of customers in markets of systemic importance, where we proactively contribute sustainable solutions. That's how we put our corporate purpose of "engineering for a better world" into practice. And we're very proud of that.

### What do customers expect of GEA when it comes to sustainability?

Our customers expect us to use our process expertise and technical solutions to help them minimize their ecological footprint. They need our support to meet the growing demand for food, beverages and vaccines which are produced ethically and efficiently using environmentally-friendly manufacturing processes that minimize emissions. As their industrial technology partner, we want to help them achieve this transformation; it's one that they must make because of changing market conditions and consumption habits, and as a result of shifting supply chains and pressure to comply with more stringent climate legislation.



## EUR 10 trillion

potential revenue from green technology  
for mechanical engineering sector

### What are the implications of the European Green Deal for the engineering sector?

The EU Commission's Green Deal represents a huge opportunity for the engineering industry. After all, with stricter environmental regulations and a call for green technologies, industry will be forced to invest in new plants with lower carbon emissions. That's where GEA engineering comes in. We enable the supply of energy from renewable sources, the feeding of energy into heating or refrigerating cycles so it is not wasted, and offer process expertise and efficient machines that cut emissions from production plants – that's our daily business. And this means we are in a key position to help industry reduce its carbon footprint.

According to the German mechanical and plant engineering association, VDMA, the potential revenue to be leveraged from this transformation by 2050 amounts to EUR 10 trillion worldwide. This figure is sure to increase as tougher climate targets are introduced. For example, the EU recently increased its targeted reduction of greenhouse gas emissions from 40 to 55 percent compared with 1990 levels. This will drive even more demand for green technologies.



### How is GEA positioned in the area of green technologies?

Our "green technologies" include a cross-section of environmental technologies and services dedicated to protecting the environment and conserving resources. And of course we take into account criteria such as energy, water and material consumption, heating cycles and emissions when we design machines and plants for customers.

In the long run, it simply makes sense to consider the entire life cycle of our products, including those areas where we obviously have less influence, which includes the operations of our component suppliers and the point at which our machines are taken over by customers through to the recycling stage. GEA is committed to obtaining a complete picture and is therefore working on a carbon pricing concept that accounts for the entire service life of our solutions. While the goal remains to be able to label machines as "100 percent green technology", in the meantime we will continue to deploy solutions that minimize industry and society's carbon footprint as much as possible. GEA is already very good at this.

### Has the Covid-19 pandemic forced GEA to alter its timetable related to its own sustainability goals?

The need to be more sustainable has become an even more pressing issue for all of us. The pandemic has put healthcare systems around the world – and entire economies – to the test. Never before have our interdependencies been so patently obvious. Only with a robust business model can we help the economy to recover and, in the process, give society the breathing space it needs to do things like combat the virus. In the end, a business model is only resilient if it is sustainable. We have to play the long game, be agile and drive innovation much more aggressively.

For engineers, the challenge is taking advantage of the increased opportunities provided by digitalization to improve the way we evaluate performance data and then take informed decisions. For example, when intervening at a customer facility before a production process goes wrong or correcting plans before plants are built. What was standard practice in our service business for many years thanks to life cycle optimization can, of course, be tackled much more holistically. A good example is when a consumer supermarket purchase triggers the manufacturer to order new ingredients just-in-time. Our goal is to use digital solutions to enable our customers to manufacture with maximum efficiency, flexibility and longevity. I believe that a resilient business model has to include extensive digitalization. It's fair to say that the coronavirus has accelerated our schedule.

### This report includes several examples of how GEA lives its company purpose: “Engineering for a better world.” What is an example that really stands out for you?

I'm most inspired by those examples where GEA demonstrates that engineering involves more than just supplying components or plants. In London, we were part of a team that built the Bunhill 2 Energy Centre in Islington. A revolutionary district heating project, the new center harnesses waste heat from the London Underground network to supply heat and hot water to the surrounding community. GEA designed and manufactured the heat pump that captures the energy from the waste heat from the underground tunnels. The concept is both ingenious and unique, and has the potential to become a global benchmark. This shows how, by looking at things as a process, we can deliver so much more for our customers – such as paving the way for communities to achieve climate neutrality.



# From the field

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# Critical support for the biopharma industry

## GEA technologies used to manufacture Covid-19 vaccines

Since February 2020, the Covid-19 pandemic has placed enormous pressure on the pharmaceutical industry to develop and manufacture vaccines, vital medicines and process blood plasma. Backed by more than 50 years of experience in the design of modular technologies and fully integrated end-to-end process lines, GEA helps manufacturers keep pace with the challenges they face.

As a reliable partner to the heavily regulated biotechnology and pharmaceutical sectors, GEA swiftly translates new developments into marketable processes and systems via a sophisticated configurator to create bespoke plant layouts. Using augmented reality technology, GEA integrates each component, regardless of supplier, visualizing and optimizing complex plants for customers even before building begins. This accelerates the planning process, minimizes costly or time-consuming changes and negates the expensive and time-intensive pre-engineering phase. The addition of GEA automation and process controls increases plant efficiency, safety and transparency.

[+ Read the full story](#)



# Less freshwater consumption in production

## Product recovery systems ensure the effective use of raw materials and drive down water consumption

Along with the KPIs companies set for themselves, government regulation as well as consumer and investor demand mean industrial freshwater consumption is under constant scrutiny. Many manufacturers process large quantities of liquids, particularly those producing care products, food or beverages, which heavily impacts fresh water consumption.

By integrating a GEA product recovery system, our customers ensure their raw materials are processed with minimal waste, given valuable product residues are pushed out before pipe cleaning. This minimizes the amount of water required during cleaning and keeps more valuable product in the process as less is lost with the wastewater. Whether retrofitted or integrated in a new plant, GEA pigging systems are an investment that pays back in dividends – both in terms of increased profit and greater sustainability.

[+ Read the full story](#)



# Reusing waste heat for greener living

## Heat pumps help cities reduce their carbon footprint and deliver affordable energy to residents

In cities and communities around the world, traditional methods of heating and cooling have become increasingly expensive and contribute to carbon emissions. Yet, as the world becomes more urbanized, the need for refrigeration technologies has increased. At the same time, municipalities are under increasing pressure to reduce their carbon footprint and proactively looking for more sustainable and affordable energy solutions.

Islington Council in central London took on this challenge, successfully leveraging waste heat from the London Underground to provide low-cost and more planet-friendly heating for its residents and several large facilities. A GEA customized heat pump system provides the technological bridge that makes this process possible. The project, which is part of Islington's overall strategy to achieve carbon-neutrality, is a global benchmark for future district heating installations.

[+ Watch the video](#)

# Healthy beverages, healthy footprint

## Efficient processes and reuse of resources ensure carbon-neutral production

Global smoothie and drinks manufacturer, innocent is building a production facility in the Netherlands to service the European market. The new plant, which will not rely on the burning of any fossil fuels on-site, is set to become an industry prototype by achieving carbon-neutral production.

By partnering with GEA, which has both process and refrigeration expertise, innocent will achieve significant operating efficiencies. The integration of GEA heat pump technology enables the reuse of waste heat across the production process. Combining resource-saving cleaning-in-place and automation technologies will also greatly reduce water usage, energy demand, waste streams and minimize product losses. The integrated plant design and control system takes unnecessary pressure off the workforce.

[+ Read the full story](#)



# About the group

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# About the group

## GEA at a glance

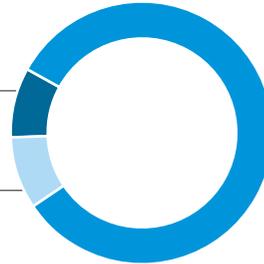
“Engineering for a better world”: This is the driving principle behind GEA’s workforce. As one of the largest industrial systems suppliers, GEA solutions and services make an important contribution to a sustainable future, particularly in the food, beverage and pharmaceutical sectors. Across the globe, GEA plants, processes and components contribute significantly to the reduction of CO<sub>2</sub> emissions, plastic usage and food waste in production.

GEA Group Aktiengesellschaft is listed on the German MDAX and the STOXX® Europe 600 Index. It also ranks among the companies included in the DAX 50 ESG and MSCI Global Sustainability indexes.

### Shareholder structure

**9.5%** Kuwait Investment Office

**8.5%** Oliver Capital (principal shareholder of Groupe Bruxelles Lambert)



**82.0%** free float



Order intake

**4,703**

EUR million

Previous year: EUR 4,931 million

Revenue

**4,635**

EUR million

Previous year: EUR 4,880 million

EBITDA  
before restructuring measures

**532**

EUR million

Previous year: EUR 479 million

EBITDA  
before restructuring measures

**11.5**

percent of revenue

Previous year: 9.8 percent

Dividend proposal

**0.85**

EUR per share

Previous year: EUR 0.85

Employees

**18,232**

(Full-time equivalents)

Previous year: 18,490

## New group structure encompasses technology families

Since January 1, 2020, GEA has operated under the new divisional group structure, which replaces the previous heterogeneous segments. The five divisions combine similar or complementary technologies, which in turn are divided into business units and rank among the market leaders in their respective disciplines.

### 1) Separation & Flow Technologies Division

Separation & Flow Technologies encompasses process engineering components and machines that are at the heart of so many production processes: separators, decanters, homogenizers, valves and pumps.

### 2) Liquid & Powder Technologies Division

Liquid & Powder Technologies provides, among other things, process solutions for the dairy, beverage, food, chemical and other industries. The portfolio includes liquid processing and filling, concentration, purification, drying, powder handling and packaging, as well as systems for emission control.

### 3) Food & Healthcare Technologies Division

Food & Healthcare Technologies provides solutions for food processing, covering preparation, marinating and further processing of meat, poultry, seafood and vegan products, pasta production, baking, slicing, packaging, confectionery as well as frozen food processing. For the pharmaceutical industry, the product range includes granulation systems and tablet presses.

### 4) Farm Technologies Division

Farm Technologies offers integrated customer solutions for efficient and high-quality milk production and livestock farming, including automatic milking and feeding systems, conventional milking solutions, manure handling and digital herd management tools.

### 5) Refrigeration Technologies Division

Refrigeration Technologies provides as a global specialist in industrial refrigeration and heating sustainable energy solutions for a wide array of industries including food, beverage, dairy, and oil and gas.



## Corporate structure

In addition to the operational divisions, GEA maintains three further organizational areas with responsibility for the areas of management, procurement, production and supply chain as well as sales.

## Global Corporate Center

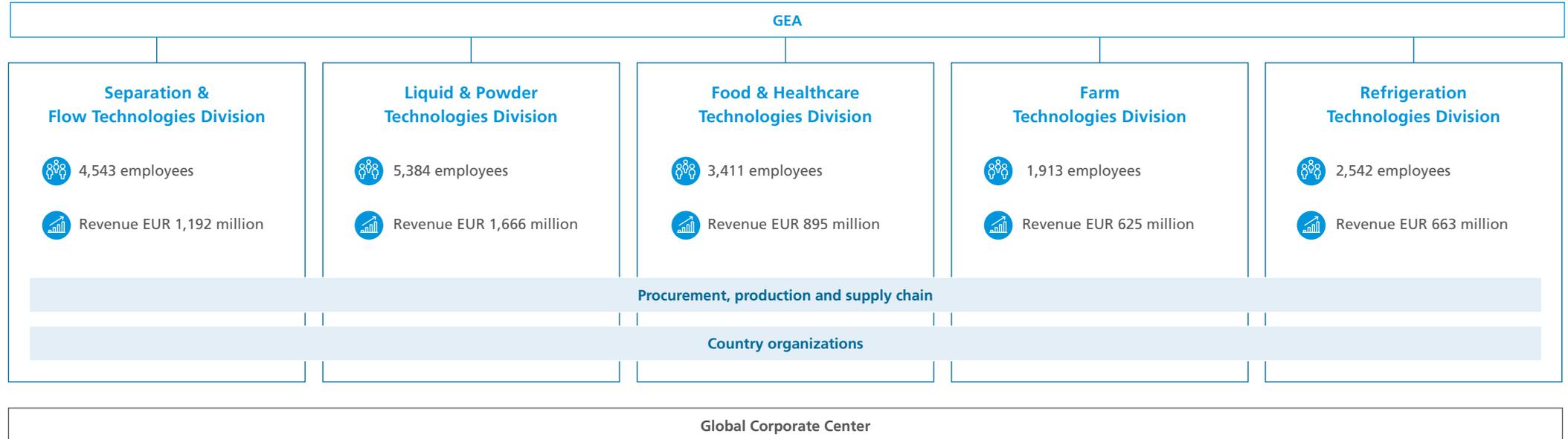
Central management and administrative functions, together with standardized administrative processes, are bundled within the Global Corporate Center (GCC). The Global Corporate Center performs the principal management functions for the entire group. GEA makes partial use of a Shared Service Center (SSC) for the areas of IT, Finance and Human Resources.

## Procurement, production and supply chain

As per January 1, 2020, GEA established the new office of the COO (Chief Operating Officer) as a separate Executive Board role that encompasses GEA's procurement, production and supply chain activities. In the area of procurement, the focus was on creating a global procurement organization that has clearly defined responsibilities and interfaces, and generating cost savings. In the area of production, the focus was on optimizing the production network and increasing operational productivity at individual manufacturing plants.

## Country organizations

Sales to customers and local service activities are unified under the umbrella of a single country organization. The countries cooperate with the divisions in a matrix structure and are assigned to specific regions. The country organizations stand ready to serve their respective customers as a central point of contact, offering them local access to an extensive portfolio of products and services.

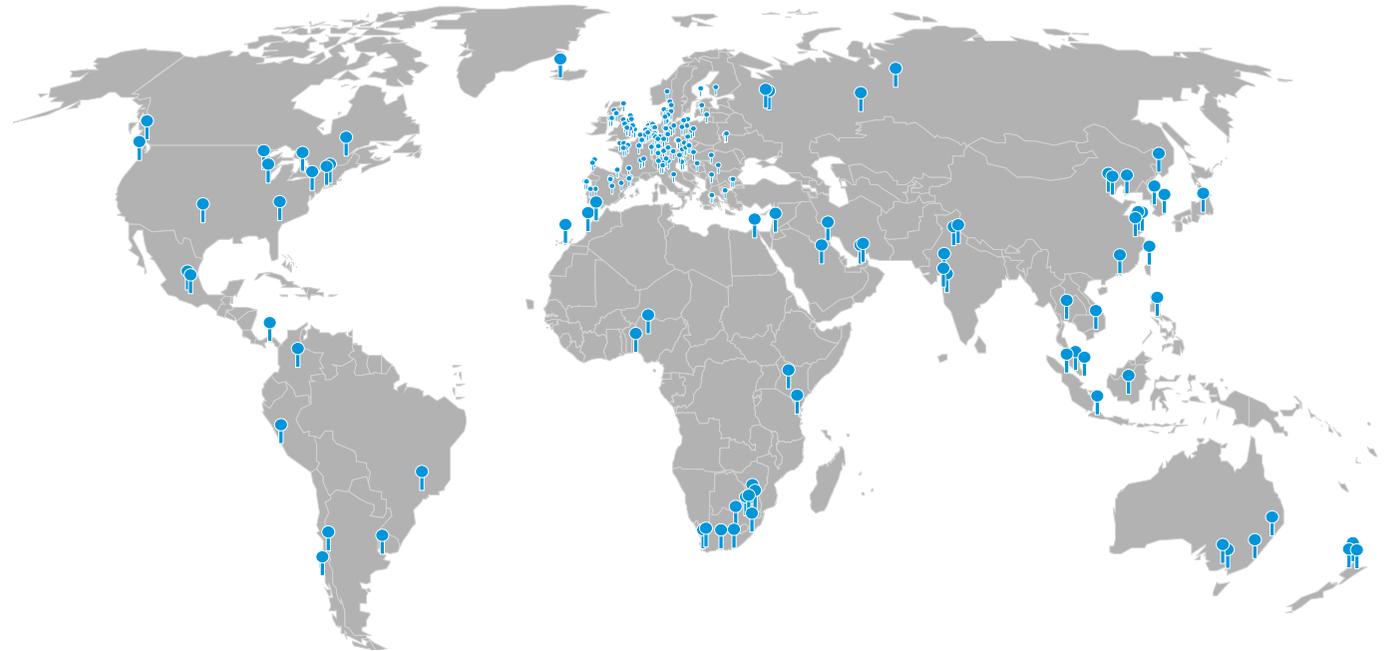


## Global Executive Committee

GEA established a new committee known as the Global Executive Committee (GEC) at the start of fiscal year 2020 in order to increase the involvement of the division CEOs and regional CEOs, who are responsible for the operating business in all critical strategic and operational corporate decisions. By increasing the participation of key managers, the GEC ensures that all decisions are implemented much more quickly. The committee comprises the Executive Board, division CEOs, regional CEOs and the Chief Human Resources Officer. With 13 managers drawn from eight nationalities, the group sends a strong signal on the issue of diversity.

## Strong global presence

GEA is represented in more than 50 countries. Following the restructuring, GEA also bundles its activities at country level so that it can offer a central point of contact to customers on the ground.



### North America



1,618



865 million



19

### Latin America



553



305 million



7

### Northern and Central Europe



3,040



604 million



13

### Western Europe, Middle East & Africa



3,132



781 million



17

### DACH & Eastern Europe



6,883



1,022 million



22

### Asia Pacific



3,005



1,058 million



23



GEA sites, sales  
offices, service and  
other sites



Employees in 2020  
(full-time equivalents)



2020 revenue in EUR



Regional breakdown  
of 2020 revenue

## GEA in fiscal year 2020

GEA successfully navigated the challenges of fiscal year 2020 (January 1 to December 31), a year dominated by the global Covid-19 pandemic. The company was quick to respond to these exceptional circumstances and took swift precautions to ensure the safety of its employees and the continuation of business operations.

In addition, GEA further strengthened its position by pushing ahead with the implementation of efficiency measures. Despite the expected declines in order intake and revenue due to the pandemic, GEA was able to generate higher profit margins and considerably increase EBITDA before restructuring expenses thanks to these measures. Consequently, the group met, and in some cases even exceeded, its targets for revenue, earnings and return on capital employed (ROCE) in the past fiscal year. Major financial performance indicators, such as net working capital, free cash flow and liquidity, showed sustainable improvements.



### Revenue

At EUR 4.64 billion, revenue declined by 5.0 percent. At constant exchange rates, revenue declined by 2.6 percent. The change was therefore in line with the initial forecast of a slight decline in revenue on a currency-adjusted basis.

### EBITDA before restructuring measures

GEA generated EBITDA before restructuring measures of EUR 532 million. Adjusted for exchange rate effects, EBITDA came in at EUR 542 million, exceeding both the guidance range of between EUR 430 and 480 million issued in March 2020 and the higher expectations that emerged later in the year. At the end of July, guidance was raised to the upper end of the range. GEA again raised its guidance to more than EUR 500 million in early November.

### Return on capital employed (ROCE)

GEA achieved a ROCE of 17.1 percent. This figure significantly exceeds the guidance range of between 9.0 and 11.0 percent issued in March 2020. GEA also raised its ROCE guidance range to between 12.0 and 14.0 percent in July and again in early November to between 15.0 and 17.0 percent.

### Financial position and net assets

GEA remains in a very strong financial position. Given the market volatility and other factors, management of liquidity and centralized financial management remain crucial to the company's continued success. Net liquidity including the discontinued operations was EUR 402 million as of December 31, 2020, compared to EUR 28 million at the end of the previous year. Aside from realized EBITDA, this significant increase in liquidity is due to the considerable reduction in net working capital. The largest cash outflows are attributable to the dividend paid as well as to investments in property, plant and equipment and intangible assets of EUR 153 million and EUR 98 million, respectively.

Compared to December 31, 2020, the balance sheet was reduced slightly by EUR 24 million or 0.4 percent. Especially, cash and cash equivalents increased, while in contrast, inventories, trade receivables and construction contract receivables were significantly down. Equity was reduced by EUR 169 million. Whereas consolidated net income of EUR 97 million had a positive effect, the dividend payment (EUR 153 million), lower interest rates in the measurement of pension provisions (EUR 32 million) and effects from currency translation (EUR 81 million) reduced equity. Consequently, the equity ratio fell to 33.8 percent at the end of the fiscal year, compared to 36.6 percent on December 31, 2019.

# Sustainability at GEA

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# Sustainability at GEA

## Process technology that makes a difference

As an international engineering company, GEA focuses on process technology and components for high-performance and efficient production processes in a variety of end markets.

The group is a specialist in the core technologies of these sectors and a leader in many of its markets worldwide. GEA sustains its technological leadership by consistently fostering an innovation-led culture. The company values profitability over volume and is committed to consistent portfolio and cost management. Active risk management, stability through diversification and a focus on the markets of the future are binding requirements for all of GEA's business units.

Global megatrends support the group's long-term stability. Increasing urbanization is reducing the amount of agricultural land available to feed the world's steadily growing population, while demographic

change is making health and nutrition more important for consumers. These trends highlight the need to find alternatives to conventional food sources.

As well as being in the best interest of manufacturers, efficient and resource-friendly production processes are now also high on the list of consumer requirements. As a global leader, notably in food processing technology and a leading innovator in many other industry sectors, GEA believes it has a responsibility to help meet these challenges.

GEA brings its holistic approach to the discussion of how responsibility can be integrated into industry's value creation processes. By continuously improving the efficiency of its products and process solutions, the company enables itself and its customers to foster sustainable business practices and contribute to protecting the natural environment.

For GEA, sustainability means managing its business and its economic, ecological and societal impacts in a responsible manner. That's why GEA's core value proposition, "engineering for a better world", combines sustainability with value creation.



**The group's sense of responsibility is reflected in its mission statement: GEA aims to be the world's most respected industrial technology group by providing innovative solutions for sustainable processes which improve people's everyday lives.**



World population expected to grow by two billion between 2019 and 2050



Increasing demand for safe food



Greater focus on healthy, functional and personalized diets



Number of people living in cities to grow by one billion between 2018 and 2030



Number of people aged 65+ to double between 2015 and 2030



Growing demand for alternative sources of protein

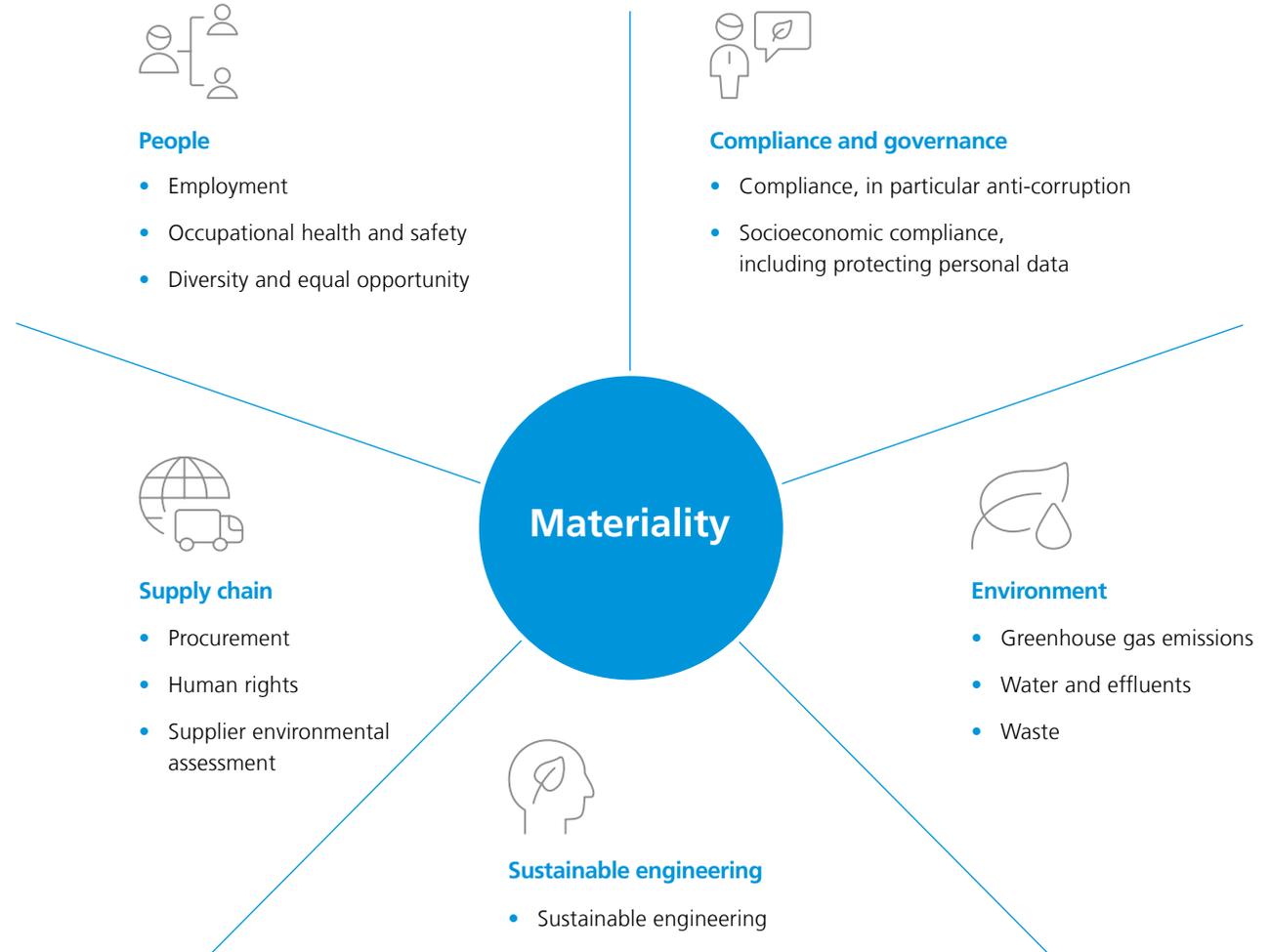
## Material topics

Since fiscal year 2016, GEA has annually identified topics relevant to understanding the company's economic, environmental and social impact. Alongside this internal analysis, the company takes into account the expectations and interests of its key stakeholders which includes investors, employees, customers, suppliers, civil society and regulators. The full Sustainability Report for fiscal year 2020 has been prepared in accordance with the GRI standards: Core option.

Twelve material topics were defined in the Materiality Analysis 2020 (see also Reporting Profile, see [page 84 ff.](#)), which were assigned to five topic areas for the report.

The subjects covered by non-financial reporting 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 and disclosures on GEA's contribution to the UN SDGs (Sustainable Development Goals), the TCFD (Task Force on Climate-related Financial Disclosures) Index, and the SASB (Sustainable Accounting Standards Board) Index can be found at [page 83 ff.](#)

Details about the materiality analysis are contained in the Reporting profile (see [page 73](#)).



## Audit

Pursuant to section 315b (3) sentence 1 of the German Commercial Code (HGB), the non-financial group statement forms part of the management report in the Annual Report 2020. For the purpose of determining which topics will be covered in the non-financial group statement, GEA has taken into consideration the extent to which a specific topic is required for understanding GEA's business progress, business results and the situation of the company (net assets, financial position and results of operations) pursuant to section 315c in conjunction with section 289c (3) of the HGB. The following topics meet these requirements:

- compliance, in particular anti-corruption
- protection of personal data
- human rights
- sustainable engineering
- occupational health and safety
- greenhouse gas emissions

At the request of GEA's Supervisory Board, KPMG AG Wirtschaftsprüfungsgesellschaft reviewed GEA's non-financial group statement for fiscal year 2020 and performed a limited assurance engagement according to Sections 315b and 315c in conjunction with Sections 289c to 289e of the German Commercial Code (HGB). This review was in line with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information."

Furthermore, stakeholders encouraged GEA to include fiscal year figures for 2020, in accordance with ISAE 3000, on the topics of:

- water withdrawal and
- waste.

## Key

**NFGS** A blue line in the margin indicates content that has been audited in accordance with ISAE 3000 and is part of the non-financial group statement (NFGS).

 Link

 Page references

### Target attainment 2020

-  Target not attained
-  Target partially attained
-  Target attained

## Basic principles

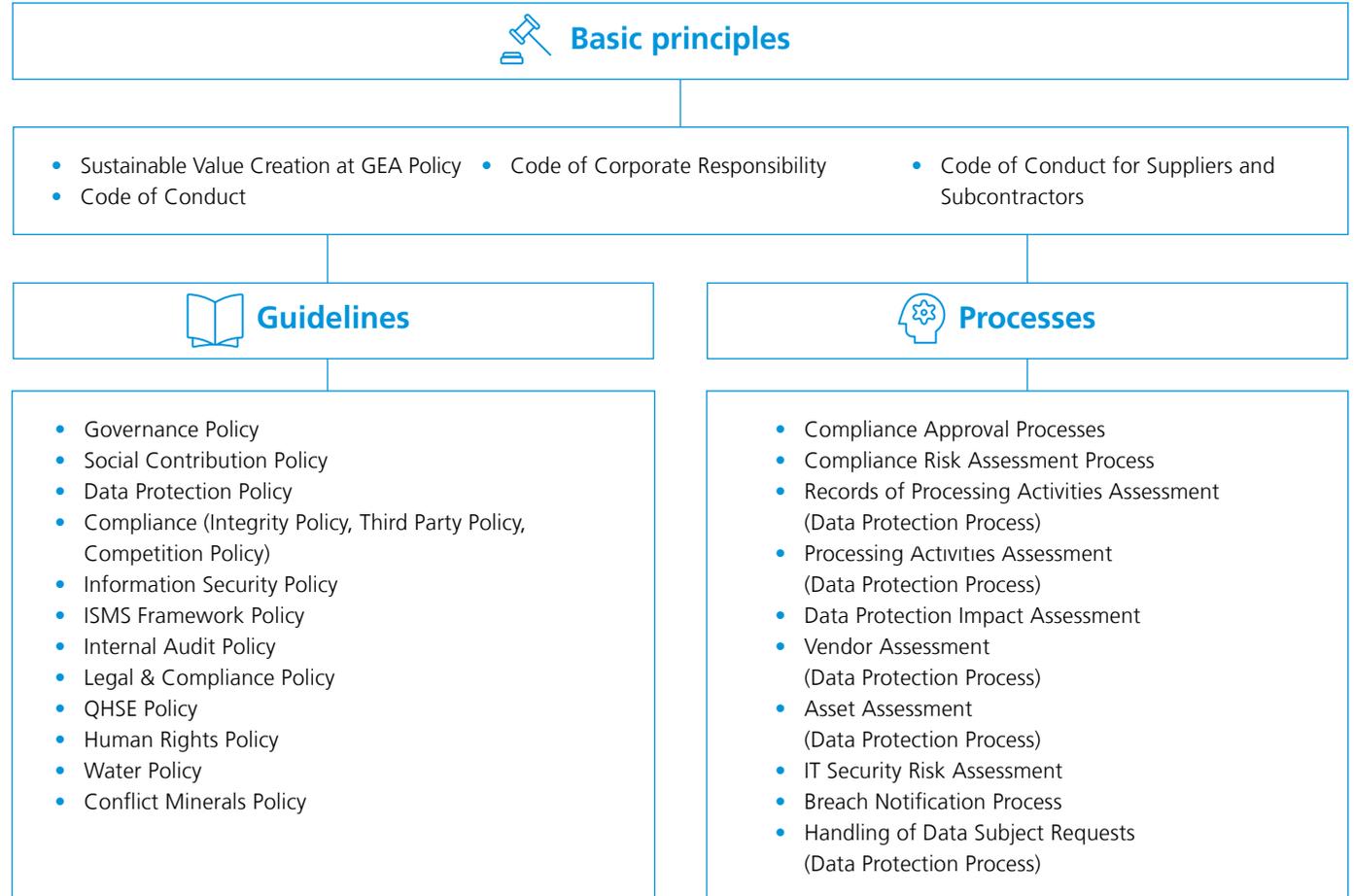
By adopting the policy of “Sustainable Value Creation at GEA”, the Executive Board defined the group’s ambitions and targets in terms of sustainability, incorporating them into GEA’s values and creating a strategic vision that applies globally. It is available at the corporate website [gea.com](https://gea.com).

Integrity and responsible corporate governance are reflected in the GEA Values, which pave the way for a common corporate identity.

- Excellence
- Passion
- Integrity
- Responsibility
- GEA-versity

These values encapsulate the management philosophy which is focused on being an industrial technology and market leader. GEA employees should be enthusiastic, committed, creative, respectful and reliable. They should value the opportunity to work with people regardless of borders, cultures, genders, disciplines and position.

## Toolkit for sustainability management



In 2017, the group formulated its policy of “Sustainable Value Creation at GEA” on the basis of the GEA Values. Sustainability and value creation are inseparable at GEA. They guide the group’s decision making and development. For GEA, sustainability means managing its business and its economic, ecological and societal impacts in a responsible manner, as well as reporting its efforts in the interest of transparency.

GEA takes responsibility throughout the value chain and contributes to sustainable business practices and the protection of the natural environment through ongoing improvements to the efficiency of its products and process solutions. The company is committed to critically reviewing the impact of its business operations on sustainability issues such as the conservation of natural resources, human rights and anti-corruption. This is expressed in its corporate purpose: “engineering for a better world”.

NFGS

The “GEA Code of Conduct” (see [page 32](#)) outlines the values, principles and policies that guide GEA’s corporate conduct. This Code of Conduct reflects the company’s objective of ensuring group-wide compliance with standards while creating a work environment that rewards integrity, respect, and fair and responsible conduct. The Code of Conduct applies to all employees and bodies of GEA world-wide.

The “Code of Corporate Responsibility” encompasses both ethical and legal standards that are binding on all group employees world-wide. As a successful international engineering group with more than 18,000 employees and operating activities in more than 50 countries,



GEA has been a partner and supplier to the world’s most important biopharmaceutical companies for decades.

GEA’s commitment to international fair trade is a crucial factor in achieving global economic growth. GEA fully recognizes the “Guidance on social responsibility” (ISO 26000) and aligns all its actions with the principles of social responsibility as well as the core subjects covered in the guidance.

The “Code of Conduct for Suppliers and Subcontractors” (see [page 69](#)) outlines GEA’s principles and requirements that must 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/or the rendering of services.

## Organization

Since 2019, responsibility for sustainability in the organization lies with the Executive Board and is assigned to the Corporate Responsibility & Quality, Health, Safety & Environment (CR & QHSE) unit. The department reports directly to the Chief Operating Officer of GEA Group Aktiengesellschaft. Sustainability targets are an integral part of the remuneration system of the Executive Board of GEA Group Aktiengesellschaft, see [+ GEA Annual Report](#), chapter “Remuneration Report.”

The CR & QHSE department is structured as follows:

- The department is made up of the specialist areas Corporate Responsibility, Quality Management, Occupational Health & Safety, Environment & Energy, Certifications & Audits, Travel Security & Health, and QHSE Data Analyst & Projects.
- The GEA divisions and some of the major business units within the divisions have their own QHSE organizations.
- In addition, each of the GEA regions and the multi-purpose sites (production sites capable of manufacturing several product lines) have their own QHSE function.
- A Corporate Responsibility Council – made up of the relevant departments of the Global Corporate Center as well as the CR & QHSE representatives – has been newly founded to ensure the exchange of information across business areas and establish overarching strategic goals and guidelines.

- In the 2021 fiscal year, GEA will review and further optimize the organizational integration of its sustainability function in the context of streamlining its strategic focus.

### Integrated management approach to quality, health, safety at work and the environment

The “Quality, Health, Safety & Environment (QHSE) Policy” was last revised and updated in August 2019. GEA thus committed itself to pursuing a clear policy in terms of quality, health, safety and the environment. It applies throughout the group and covers the following key points:

- Identification, analysis and effective management of opportunities and risks arising in connection with business operations
- Compliance with all legal and industry-specific requirements, applicable regulations and national standards
- Further development of safe, high-quality and environmentally friendly products and services to safeguard and continuously enhance customer satisfaction and the company’s market presence
- Further development of safe, efficient and environmentally friendly technologies, tools and methods

- Creation and continuous development of a safe and healthy working environment for all employees, business partners and third parties to prevent occupational accidents and diseases
- Definition and active pursuit of measures designed to prevent accidents and appropriately manage emergencies, incidents and their respective impact
- Prevention of environmental accidents and pollution
- Reduction in CO<sub>2</sub> emissions, effluents and waste
- Promotion of sustainable and responsible procurement, including avoiding the purchase of conflict minerals

As an integrated management approach, the QHSE Policy covers all stages in the value creation chain: from the supply chain to internal business practices, including product manufacturing, product service life and the end of the product life cycle.

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. They are displayed at all sites and are available to the public on the company’s website, [+ gea.com](#). CR & QHSE management (see subsection “Organization”) provide regular reports on all of these matters to the Group Works Council and the European Works Council, where they coordinate with the employee representatives.

In addition, there are numerous policies covering specific areas, which are reported on under material topics.

## Sustainability targets and key performance indicators\*

Areas	SDGs	Target attainment 2020	2020 targets	2025 targets	2050 targets
<b>Sustainable engineering</b> page 40			Expanding the scope of life cycle analyses and product end-of-life design to assess carbon footprint during use (scope 3)	Continuous improvement of all management systems and certification of all production sites	
<b>People</b> Prevention and expansion of health services at all sites page 56				Enhancement of "GEA Care" health management program	
Lost day frequency rate (Accidents with period of absence per million hours worked) page 54			≤ 5.6	≤ 5.0	0
Lost day severity rate (Days lost after accidents per million hours worked) page 55			≤ 120	≤ 110	0
Pro-active injury rate (PAIR) page 55			≥ 100	≥ 200	
<b>Environment</b> Carbon emissions page 60			-2.1% compared with the previous year as a percentage of revenue (scope 1 and scope 2)	-19.1% compared with base year 2015 (scope 1 and scope 2)	-52.4% compared with base year 2015 (scope 1 and scope 2) -2)
Water withdrawal page 61			-2.1% per EUR 1 million of revenue	-13.8% per EUR 1 million of revenue, base year 2018	-49.3% per EUR 1 million of revenue, base year 2018
Waste Reduce overall waste, use resources and materials efficiently, improve recyclability of production waste and promote recycling page 63			-2.1% per EUR 1 million of revenue	-13.8% per EUR 1 million of revenue, base year 2018	-49.3% per EUR 1 million of revenue, base year 2018
<b>Supply chain</b> Integrate standards and values in the supply chain as the basis for long-term partnerships with contractors			Monitor the number of signatories to the Supplier Code of Conduct and assess compliance in the supply chain page 69	Continue to integrate social and ethical standards into the supply chain Meet GEA targets and help partners implement standards	
Work closely with customers, NGOs and other bodies to support sustainable development			Publish a human rights policy which follows the UN Guiding Principles on Business and Human Rights page 35		
			Sign up to the UN Global Compact in 2021		
			Implement the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas page 70		
			Continue to expand documentation and measures related to human rights to meet the requirements of the NAP page 35 ff.		

Note: please refer to the relevant sections and the Facts and figures within the appendix for details, see page 82. Information about the SDGs is provided in the notes, see page 88.

\*) GEA plans to revise and adjust the targets in 2021 as part of a broader sustainability strategy.

## Navigating the Covid-19 pandemic

Like many other companies, GEA spent 2020 in crisis management mode in response to the Covid-19 pandemic. One of the keys to sustainable global development is a resilient and adaptable health-care system that can protect both individuals and the wider economy against risks. GEA wasted no time in establishing a crisis management team to keep its workforce safe and which allowed GEA to continue production even under the extraordinary circumstances of a global pandemic. This team is responsible for ensuring safe working conditions at all sites worldwide. As a result, most GEA sites were able to continue supplying customers.

NFGS

GEA began receiving information about the coronavirus situation in Wuhan, China, from the travel security services in early January 2020. It immediately provided all relevant details to those traveling to the Wuhan region as well as to local employees. The situation evolved very rapidly, first only in China, where GEA established a local crisis team to be able to respond quickly and appropriately to any changes and provide the best possible protection to GEA employees. Following numerous local measures and travel warnings for China, it became apparent from the rapid spread of the virus in northern Italy in February that Covid-19 had become a global pandemic.



With the support of the Executive Board, a global crisis team was quickly put in place and a task force established to assist local crisis teams at GEA sites through processes and procedures. Together with the specialist risk consultancy Control Risks, draft pandemic response plans were prepared and made available to the local crisis teams to ensure a uniform global approach. All GEA sites and country organizations put together local crisis teams in order to customize and implement their pandemic response plans accordingly.

In addition, a group-wide dashboard was set up to provide the global crisis team with an overview of all current developments at GEA. Information, such as up-to-date case numbers, project delays and supplies of hygiene products, can be checked on the dashboard at any time. This enables GEA's global crisis team to provide an effective and targeted response to new developments.

Furthermore, during the second half of the year, the local crisis teams were not only tirelessly working on compliance with local laws and protection standards, but also – first and foremost – on protecting employees and ensuring that they have a safe working environment. This ultimately serves to protect the company as a whole. During the pandemic, GEA has also continually provided local support by donating protective masks, e.g. in Italy, Germany and Spain.

To ensure employee safety, canteens were closed at an early stage, including at GEA's largest site in Oelde, which has around 1,900 employees. To assess the circumstances and safety measures in the event of the potential reopening of canteens, GEA commissioned software partner Dassault Systèmes to simulate the canteen operations in their entirety. A digital twin of the canteen mapped the air currents and the impact of the ventilation system on the transport of potentially contaminated aerosols. The results of the simulation help tailor the hygiene concept, for example by revising the design of the entry and exit, adjusting the seating arrangements and implementing safety measures in the kitchen area.

## Management system certification

At GEA, quality management, environmental management, occupational health and safety, and energy management are based on international standards supplemented by GEA-specific standards and regulations, such as the GEA Safety Core Rules, GEA Environmental Core Rules and globally applicable process descriptions (see “Integrated management approach to quality, health, safety at work and the environment” for information on the QHSE Policy, [page 25](#)). This framework policy, which was developed alongside QHSE experts at the divisional and country level, is implemented in all GEA entities with the support of the global QHSE organizations, independent of any certification. In total, GEA has 180 different ISO management system certificates.

Management system certification is mandatory for production sites. In 2016, GEA began clustering its sites with integrated management systems under the umbrella of a single GEA certificate. GEA Group Aktiengesellschaft, headquartered in Düsseldorf, is certified to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 and thus leads the group in the number of certified sites. Certification under ISO 50001:2018 is performed at site level. Unrelated to certification, energy-efficiency measures, energy projects and measuring energy consumption are grouped and performed in cooperation with CR & QHSE. Energy audits under the Energiedienstleistungsgesetz (EDL-G – German Energy Services Act) were performed as planned and the measures identified in the audits implemented.



An external surveillance audit of the umbrella certificate – under ISO 9001, ISO 14001 and ISO 45001 – was performed in the year under review. In total, 18 sites were successfully audited on the basis of random sampling. Due to the rapid developments associated with Covid-19, many of the audits were performed remotely.

As planned, further GEA companies are being brought under the umbrella certificate. To achieve this, a certification plan for the production sites was agreed in cooperation with the divisions and business units. The aim is to cover all production sites with the three management systems ISO 9001, ISO 14001 and ISO 45001 by 2025.

In the year under review, GEA Food Solutions Bakel BV was certified under ISO 14001 and ISO 45001 for the first time, and GEA Westfalia Separator Mexicana S.A. was awarded ISO 9001 certification. In 2020, the certifications within the group were as follows

- [page 76](#).

## Quality and processes

One of the key areas of GEA's business development strategy is the consolidation of its ERP landscape, which currently comprises 67 different ERP systems. This fundamental transformation will be driven by the group-wide “globalBPM” (global Business Process Management) initiative which GEA launched in 2020 in a strategic partnership with SAP application software experts. globalBPM and SAP will harmonize GEA's ERP systems and business processes to create a smart corporate infrastructure that will form the backbone for GEA's corporate decision making going forward. GEA intends to establish a “single source of truth” by 2025, which will be the key to gaining competitive advantages, benefiting from new business opportunities and advancing digital innovations.

The company already uses the “Process Description and Procedure Platform” (PPP) as a central repository for written information about business processes and procedural instructions which afford an insight into how GEA operates. GEA's aim is to provide all of its employees with consistent information about local and central processes. The system uses a defined approval workflow to greenlight processes based on roles and responsibilities, with an automated reminder function to ensure that the validity of these processes is regularly reviewed. The online documentation platform can be accessed by any GEA employee. Processes and documentation are updated and added by the relevant organizational units across the group.

## ESG ratings

The term “ESG” encompasses criteria from the environmental, social and governance fields.

GEA regularly participates in the annual EcoVadis CSR performance monitoring scheme. According to EcoVadis, the procurement and CSR experts from more than 450 leading multinational corporations worldwide currently rely on the CSR ratings provided by this platform. The current EcoVadis CSR “Silver” rating, with 60 points awarded in 2019, remains valid until 2021.

In the year under review, GEA was awarded an A– (leadership) in the CDP (formerly the “Carbon Disclosure Project”) sustainability rankings. Its overall score puts GEA in the leading group at sector and regional level. “Leadership” level recognizes companies that stand out in areas such as the completeness and transparency of their reporting. GEA was evaluated by CDP in the “water security” category of its sustainability rankings for the first time in 2020, receiving the highest possible leadership level rating (A List) for its responsible water stewardship.



Climate Change: A–  
Water Security: A



Medium risk: 25.8  
DAX 50 ESG Index



MSCI Global Sustainability Indices rating: A



Total Sustainability Score: 47  
Percentile Ranking: 74



Rating: C



Moderate / Silver: 60 points



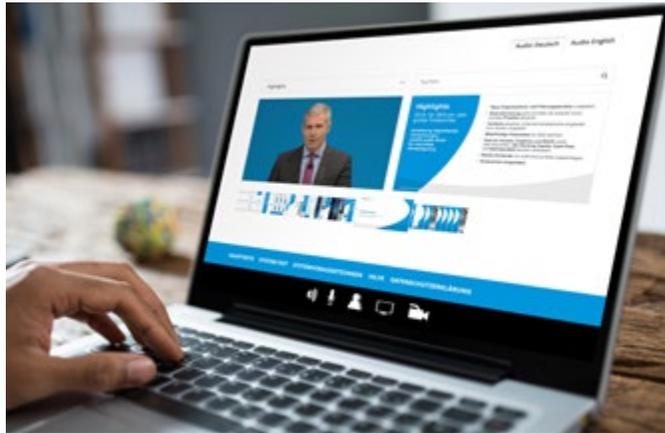
# Compliance and governance

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# Compliance and governance

GEA would not be one of the world's industrial technology leaders had it not, from the outset, championed the principles of integrity, fairness and compliance as the greatest assets in its sphere of activity. Ultimately, GEA owes its success as much to responsible corporate governance as to technological expertise.

GEA's dealings with its employees, business partners and the general public are defined by care, fairness, transparency, ethical conduct and respect for the interests of all stakeholders. This is how GEA safeguards its strong reputation as a trustworthy business partner.



**In 2020, we worked intensively on our new compliance organization. We appointed the compliance managers and local compliance officers, expanded our training content in the fields of anti-corruption, antitrust law and anti-money-laundering, and rolled out our Compliance Risk Management system. With our comprehensive organization supported by extensive documentation and communication, we ensure that GEA's business dealings worldwide are conducted in accordance with local laws and our high standards of compliance.**

**Stephan Petri**, Chief Compliance Officer, GEA

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## Compliance management

All stakeholder groups expect GEA to provide a safe working environment, effective and innovative products, appropriate shareholder value and safe investments, value generation both within and outside of the company, and social engagement.

Proper conduct is an essential part of this. Corporate governance represents a key factor in the effort to sustainably generate added value and permeates to every area of the group's day-to-day activities.

Compliance represents a group-wide principle established to ensure adherence to the rule of law as well as internal corporate policies. All GEA employees are required to ensure that there are no compliance violations in their respective areas of responsibility. A detailed outline of GEA's Compliance Management System can be found in the [GEA Annual Report 2020](#), chapter "Corporate Governance Statement" and at the corporate website [gea.com](#).

To avoid the serious consequences of potential compliance breaches, GEA manages these risks by means of a compliance management system designed for the purposes of analysis, information and clarification, control, process definition, and monitoring. This system was updated in the year under review. The appropriateness and implementation of the compliance management system for the subareas of anti-corruption and antitrust law was audited in accordance with IDW PS 980 as of the reporting date at December 31, 2018; it was certified on January 29, 2019. In addition, there is a certified reporting system

(“Business Keeper Monitoring System”, BKMS). The management approach is verified via internal and external audits conducted by Group Internal Audit and/or external auditors.



6,580

Compliance e-learnings in total

### Compliance handbook

A Code of Conduct and related compliance policies consisting of the Integrity Policy, Third Party Policy and Competition Policy – together forming the Compliance Handbook – apply within the group. These policies govern anti-corruption and anti-money-laundering, conflicts of interest as well as antitrust and competition law at GEA. They are available to all employees worldwide in 18 different languages. Further details can be found [GEA Annual Report 2020](#), in the chapter “Corporate Governance Statement”.

### Preventive processes

Processes designed to prevent compliance violations play a major role in GEA’s compliance management system. For this reason, individuals in close contact with customers, such as sales agents, must undergo a strict risk vetting process for anti-corruption purposes prior to entering into a contract with GEA. Each sales agent contract requires prior verification and approval by the legal department. Numerous other matters, such as contracts carrying antitrust risks, invitations and gifts, conflicts of interest, or sponsorship and donations are subject to strict internal approval and reporting requirements. To meet these approval and reporting obligations, GEA has introduced various IT tools that make it possible to document the relevant issues in audit-compliant format.

In 2020, GEA installed a structured system to identify hypothetical compliance risks (Compliance Risk Assessment). Using this system, compliance risks are analyzed on a continuous basis and, where necessary, additional measures are introduced to mitigate the risks at the companies concerned.

### Training and consulting

GEA has identified more than 4,000 employees that are exposed to particular compliance risks. In the context of anti-corruption and antitrust law, this group includes all managers, 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. These employees should receive face-to-face training in the fields of anti-corruption and antitrust law at least once every two years. Face-to-face training means that the person delivering the

training and those receiving the training participate at the same time; this may be in the form of physical attendance at a lesson or through online media.

Compliance training was again carried out throughout the year under review:

- Compliance training courses comprise extensive group training in topics such as anti-corruption and anti-money-laundering, antitrust law as well as conflicts of interest. In 2020, the 2018/2019 training initiative was completed with 1,968 e-learning training units and 27 face-to-face training units.
- As part of the 2020/2021 training initiative for compliance e-learning courses focusing on anti-corruption, antitrust, money laundering and data protection, anti-trust law, money laundering and data protection, 4,585 training units have already been completed.

A Compliance Executive within each division is responsible for ensuring implementation of GEA’s compliance requirements. Compliance Managers are appointed for all legal entities whose units operate and manage their own business, i.e. generate revenue and/or have employees. These compliance regulators receive training on anti-corruption, anti-money-laundering and antitrust matters, as well as other subjects. They serve as points of contact for local compliance issues and assist the compliance department with its duties. Where necessary, the Compliance Executives and Compliance Managers are advised and supported by divisional Compliance Officers, who are part of to the global GEA Legal and Compliance Department.

## Audits

As part of its standard and special audits, Group Internal Audit also checks certain aspects of compliance. In the year under review, a total of 20 audits were performed at GEA entities worldwide. Due to the coronavirus pandemic, a number of the audits were carried out remotely or by expert third parties on site. 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 additional audits focusing on the risk management system at GEA Group.

## Compliance with laws and regulations in the social and economic sphere

If employees breach compliance rules, they are penalized according to the degree of fault and severity of the violation. The sanctions imposed range from a reprimand to a warning letter to, ultimately, 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 Global Corporate Center Legal & Compliance.

In the 2020 fiscal year, no significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area were imposed on GEA.

## Integrity system and alternative reporting channels

GEA's integrity (whistleblower) system is a tool designed to ensure compliance with the Code of Conduct. It is available to employees and third parties in nine different languages and makes it possible to submit IT-based reports of potential violations of laws and rules governing the prevention of corruption and the restriction of competition. Such reports may remain anonymous in countries where permitted by law. Only selected employees of the "Compliance and Principle Legal Matters" department and members of the Internal Audit team may access reports on corruption and competition restrictions. GEA's Integrity System also allows for reports on potential human rights violations (category: violation of the principles of social responsibility under the Code of Corporate Responsibility) being filed (see [page 37](#)).

Employees and third parties may also use other channels to report alleged violations. For example, GEA receives reports submitted by email or letters addressed to the Executive Board, members of the compliance organization or the Head of Internal Audit. It is common practice and stipulated in a guideline that the recipient promptly pass on such reports to dedicated members of the compliance organization.

## Tax compliance

GEA recognizes that the subject of taxation is a key component of responsible corporate governance through which organizations contribute to the economies of the countries in which they operate. GEA follows a well-defined and transparent tax strategy, with profits taxed in the countries in which they arise; see [GEA Annual Report 2020](#), chapter "Corporate Governance Statement."

## Protection of personal data

For an innovative, global enterprise like GEA, information and its use are of significant importance in accomplishing corporate goals. GEA protects the privacy of every individual whose personal data it processes. This includes employees, customers, suppliers, other contracting partners as well as job applicants and applies to all GEA companies and specialist departments that handle personal data. Data privacy violations may entail considerable penalties and even result in fines and imprisonment in some countries. The EU General Data Protection Regulation (GDPR), which entered into force on May 25, 2018, specifies that such violations may be punished by fines of up to four percent of group revenue. In addition, violations could lead to exclusion from public contracts. Ultimately, privacy violations could damage GEA's reputation over the long term. GEA therefore requires adherence to data protection regulations and reserves the right to take action against anyone who fails to comply with data protection laws. Such actions may include, for example, disciplinary measures or claims for damages.

The company's Data Protection Policy, which was introduced in 2019, sets forth guidelines and conduct recommendations for all employees with a view to avoiding data privacy incidents or violations. It forms part of GEA's global compliance principles and is supplemented by classroom-based training for employees working in sensitive areas as well as e-learning for all employees with a user account. The corresponding data management system was also introduced in 2019. This system covers all organizational aspects, i.e. the roles, tasks and responsibilities related to the processing of personal data, regardless of the type of individuals affected (including employees, customers, suppliers, shareholders, etc.) or the technical means of processing such data. It also includes additional channels for reporting risks and

violations; GEA already complies with the legally required short response times.

Compliance with data protection requirements and the applicable data protection laws is reviewed on a regular basis. These reviews are performed by the company's data protection officers and other business units with audit rights, or by external auditors engaged for this purpose. Third-party suppliers are reviewed by means of self-declarations, audits and certifications. By December 31, 2020, more than 3,000 relationships with suppliers and subcontractors had been reviewed with regard to data protection compliance. 552 suppliers and subcontractors had their contracts amended to ensure compliance with the GDPR. During the period 2020/21, an independent auditor will review the appropriateness of the data protection management system in accordance with audit standard IDW PS 980. The review will cover processes, key performance indicators and target achievement.

GEA also has a Group Data Protection Officer who coordinates and supports data protection initiatives across the group as a whole. The Group Data Protection Officer also reports directly to the Executive Board.



**Without security, neither the internal digitalization of GEA's production nor the digitalization of our customer products will be successful. The launch of the global security program is a clear signal to our customers that we are working hard to protect our and their business information and will address potential security risks efficiently.**

**Iskro Mollov**, Chief Information Security Officer, GEA

## Information security and protection of intellectual property

The objective of information security is to protect commercially sensitive information – both our own and what we receive from customers and partners – by guaranteeing the confidentiality, integrity and availability of this information. Confidentiality means preventing or minimizing unauthorized access to information; integrity ensures that information is reliable and accurate; and availability refers to the ability of authorized persons to access data, objects and resources promptly and without restriction.

The protection of information is governed by GEA's Information Security Policy, which is based on the ISO 27001 standard. It comprises a series of regulations for information security at the highest level and outlines the company's approach to information security management. Consideration is given to the requirements that derive from the business strategy, external regulations and contracts as well as the current and projected security threat environment. The policy also includes targeted measures in each category.

The policy framework for the Information Security Management System (ISMS) describes preventive, detection, reactive and remedial security measures to provide protection against internal and external attacks. The ISMS allows GEA to counter the ever-increasing number of security threats by using effective methods to protect sensitive information of all kinds – intellectual property (copyrights, trademarks, patents and trade secrets), strategic and personal data, pricing information as well as other specialist knowledge processed by GEA irrespective of format (physical, electronic or verbal) – against theft, loss, unauthorized disclosure, illegal access, misuse, amendment and destruction.

The Chief Information Security Officer (CISO) is the global process owner of the ISMS and is responsible for defining the level of security. He continuously monitors the status of the security level and regularly reports to the Executive Board and to the GEA Supervisory Board's Audit Committee. The CISO performs this role independently and in compliance with statutory requirements, applicable international standards and industry-specific regulations. He compiles and monitors information security policies, requirements, processes and procedures. In addition, the CISO is responsible for improving the level of global information security and for ensuring that the ISMS is up to date and effective. The Executive Board, the Chief Compliance Officer or the CISO can request information security investigations. Beneath the level of GEA's global ISMS, all managing directors are responsible for maintaining an appropriate ISMS for their respective entity.

During the year under review, no complaints about infringement of protection or loss of customer data were identified at GEA.

Intellectual property essentially comprises know-how, ideas, inventions, developments, sketches, plans, results and data. This confidential information, know-how, patents and other intellectual property rights constitute the backbone of GEA's technology leadership in systems and processes. As a consequence, the company rigorously protects and defends its patents, trademarks and copyrights. GEA only shares its know-how following the conclusion of written confidentiality and/or non-disclosure agreements.

In fiscal year 2020, GEA filed applications for a total of 53 (previous year: 73) new patent families as a result of its extensive research and development activities. Overall, GEA holds around 1,000 patent families comprising approximately 5,100 individual patents. These cover



## 53 new patent families

filed in key technologies

all of GEA's key technologies and processes, including separation, drying, homogenization, crystallization, granulation, purification, cooling, freezing, dairy processing, filling and packaging.

### NFGS • Human rights

The Federal Republic of Germany declared its support for the United Nations Guiding Principles on Business and Human Rights in 2013 and thus adopted the German National Action Plan on Business and Human Rights (NAP) in 2016. This entails an expectation that all companies take responsibility for human rights in their global supply and value chains. Since 2018, 50 percent of all companies with more than 500 employees have been annually audited to check their adherence to the specific requirement to implement duty of care with regard to human rights. The duty of care comprises the following elements: policy statement on the respect of human rights, procedures for identifying actual and potential adverse impacts on human rights, measures to avoid potential adverse impacts and review of efficacy, reporting, grievance mechanism.

### Management approach / Policy statement on the respect of human rights

As a first step, GEA implemented its Code of Corporate Responsibility (see [page 24](#)) in 2019 as a globally binding set of group regulations in an increasingly complex business environment. This Code of Corporate Responsibility sets out GEA's values in accordance with ISO 26000 and includes fundamental rules to be implemented. In this document, GEA undertakes to respect human rights, without compromise: "GEA respects universal human rights and supports its compliance with its regional impact and its business partners."

To further strengthen its stance on human rights, the Executive Board of GEA Group Aktiengesellschaft implemented guidelines on human rights in the year under review. These guidelines underpin GEA's unwavering respect of human rights, as well as fair, sustainable and environmentally sound business practices. The requirements apply to GEA's own employees as well as its conduct in respect of suppliers and subcontractors in the value chain. These guidelines are based on the International Bill of Human Rights, consisting of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, the principles of the United Nations Global Compact and the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multi-national Enterprises.

Furthermore, the group-wide compliance management system and GEA's corporate values require all employees to apply the principles of fairness and respect at work in their conduct toward colleagues, business partners and members of the community. Human rights are thus an essential component of responsible corporate governance.

GEA opposes any kind of forced labor and prohibits child labor. With regard to child labor, the "Workday" human resource management system is regularly checked for employees under the age of 18. At the end of the year, 53 employees were younger than 18. In general, these were trainees in Germany. GEA has no employees under the age of 16. In addition, the "Code of Corporate Responsibility" acknowledges the right to a fair living wage/remuneration. GEA also opposes violence in any form.

The Code of Corporate Responsibility is provided to all group employees as a hard copy and/or made available electronically. All employees have the right to address or object to issues, problems or violations in connection with the agreed principles without fear of disadvantage or penalty. Employees and third parties may use the whistleblower system or – at their discretion – report to the signatories, namely the Executive Board, the Group Works Council and the European Works Council.

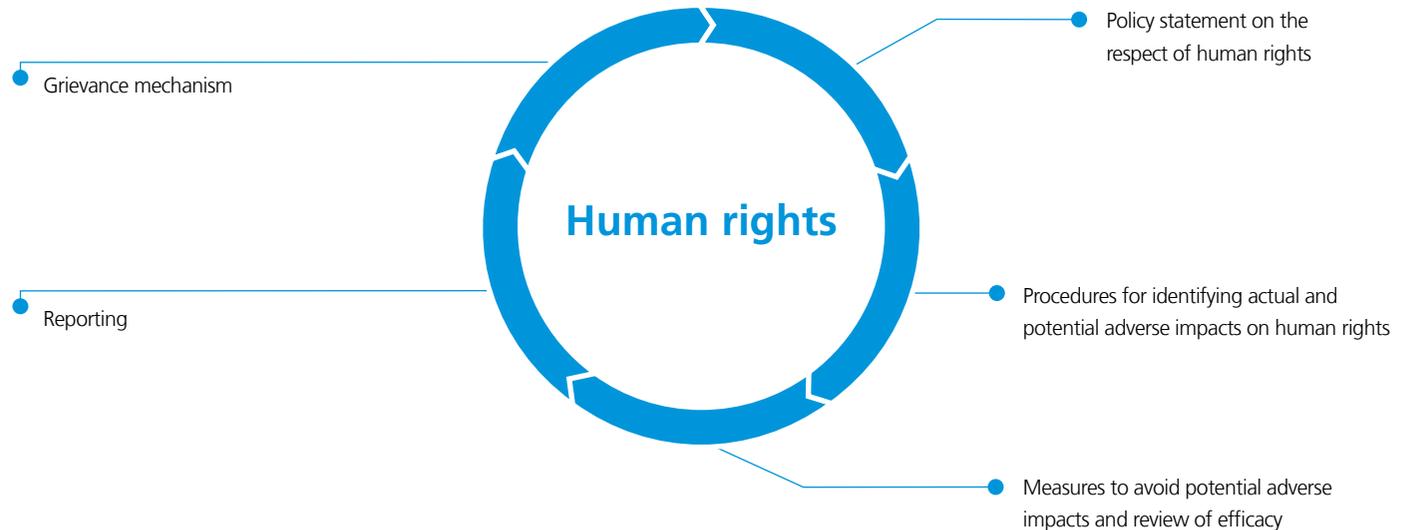
Online training on business ethics as well as responsible and nondiscriminatory behavior is available to all employees worldwide through GEA's Learning Center.

### Procedures for identifying actual and potential adverse impacts on human rights

To ensure and monitor adherence to the Code of Corporate Responsibility and the compliance rules, GEA reorganized its risk analysis process in the year under review. Risk analysis is currently being integrated into the existing Compliance Risk Assessment system. This defines a standard process through which the number of GEA sites to be audited in detail (site audit) is determined annually. The aim is to conduct an in-depth audit of more than 30 sites each year. Sites not

currently audited must present a corresponding status report on the subject of human rights every year. A tool is used to systematically conduct and evaluate the risk analysis; completeness is also verified.

To actively counter the risk of human rights violations, GEA put together a training package on the subject of human rights and ethical principles in the year under review. This was made available as an online training program at the end of the year. Participation is mandatory for the specified group.



## Measures to avoid potential adverse impacts and review of efficacy

To avoid any potential negative impact, GEA intends to implement measures derived from the findings of the site-based risk analysis both throughout the group and in its supply chain. In the future, a team made up of members from the Corporate Responsibility & QHSE and the Legal & Compliance departments will analyze the findings of the audits conducted and surveys received, and collate any risks identified. Together with those responsible at the respective sites, corresponding measures will then be devised to avoid the potential negative impact. Implementation will then be overseen by Corporate Responsibility & QHSE and reviewed during the next regular risk analysis. The process is defined internally, documented accordingly and will be conducted for the first time in 2021.

## Reporting

In the future, the findings of the due diligence audit will be transparently reported in the Annual/Sustainability Report and at the corporate website [+ gea.com](https://www.gea.com) as soon as the results of the enhanced 2021 risk analysis are available. Internally, the issue of human rights will be included in the Corporate Responsibility & QHSE department's reporting and made available to employees on the intranet. Active communication with employees will also be ensured through the introduction of the new guidelines on human rights, the CR & QHSE organization, and internal communication channels.

## Grievance mechanism

Since 2014, GEA has offered its employees – and third parties – a secure portal for reporting violations in the form of the certified Business Keeper Monitoring System (BKMS) (see integrity system [+ page 33 f.](#)).

This [+ integrity system](#) includes selected reporting categories that represent a specific risk for the company, its employees and all other stakeholder groups. These categories include corruption, fraud and breach of trust, money laundering, as well as violations of antitrust and competition law, export control regulations, data protection and accounting regulations. Breaches of the Code of Social Responsibility are covered by a distinct reporting category, which also includes reports on potential human rights violations.



**Integrity system**  
available in 9 languages



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 whistleblower protection and 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. All reports received are treated confidentially for the protection of both the whistleblower and the accused. Should the whistleblower prefer to submit their report anonymously, they may do so, provided that it is permitted to do so in their respective country.

The system ensures that all steps involved in processing and resolving the reported cases are properly documented. When an incident is reported using the integrity system, this report is assigned to the relevant department (e.g., HR), which investigates the relevant facts in order to arrive at a conclusion. If it proves impossible to ultimately clarify the circumstances without obtaining additional information that could compromise the whistleblower's anonymity, the whistleblower is contacted by one of the above departments to find out whether they wish further investigation to proceed. The competent departments clarify specific individual incidents and consider whether enhanced communication or employee management, procedural changes, or the use of software could help avoid such cases in the future.

In the year under review, three reports that fall within the remit of Human Resources were entered in the BKMS. Issues including management conduct, communication style and employee interactions were addressed.

### SMETA (Sedex Members' Ethical Trade Audits)

GEA works closely with selected customers to define the sites to undergo a SMETA audit. In the year under review, the Covid-19 pandemic caused delays and no new external SMETA audits were carried out at GEA sites beyond the six audits already available. SMETA, the Sedex Members' Ethical Trade Audit, outlines an audit procedure based on best practice in the field of corporate social responsibility. It takes into account respect for human rights, health and safety, environmental sustainability, and business integrity. At the same time, SMETA defines a uniform reporting format to ensure that the information provided is meaningful and allows comparability. Each audit report is entered into the Sedex (Supplier Ethical Data Exchange) database. According to Sedex, this international platform has more than 60,000 members from 180 countries and 35 industries and seeks to support enterprises in the fields of supplier management and

- risk mitigation.

To find out more about social responsibility and human rights in the supply chain, including conflict minerals, see "Supply chain", [page 69 f.](#)



# Sustainable engineering

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# Sustainable engineering

As one of the world's leading industrial technology companies, GEA is committed to addressing the pressing issues that affect people and societies worldwide. With its outstanding application and process expertise backed by innovative strength, GEA can help overcome collective challenges such as climate change and feeding the world's population. By turning these highly complex global issues triggered by megatrends and shifting patterns of consumption into advantages – and business opportunities – GEA can create sustainable value while helping customers look to the future with greater confidence.

This is why “sustainable engineering” describes what lies at the heart of sustainable value creation at GEA – it's in our DNA, so to speak.

**NFGS** “Engineering for a better world” embodies GEA's core value proposition. Apart from responsibly shaping its own value creation processes, the company fosters sustainable business practices and contributes to the protection of the natural environment by offering its customers efficient products and process solutions. Reducing water and energy consumption, as well as greenhouse gas emissions, are issues frequently addressed by customers through ambitious targets, for example, achieving climate neutrality or reducing their ecological footprint. However, they not only expect GEA products to help them achieve their sustainability targets. Customers also expect that the cost of a product will allow for efficient production over the product's entire lifespan.

The sustainability performance of GEA and its products is a major factor in the supplier selection process along-side quality and product security. To ensure the safety of its products, GEA has set up internal product safety committees within its divisions.

## Targets

**2020**

Expanding the scope of life cycle analyses and product end-of-life plans

**2025**

Continuous improvement of all management systems and certification of all production sites

## Trends & Drivers



Urbanization and the growing middle class

## Opportunities for GEA

Process technology for processed food, ready-made meals, enriched lifestyle food, beverages and medicines



Improved food safety and quality

Certified hygienic/aseptic processing and components that meet strict industry standards



Energy scarcity and stricter environmental regulations

Intelligent solutions for resource-efficient technologies, energy-saving machines and processes

## Organization

Since the 2020 fiscal year, GEA's new organizational structure has included a “Global Technology” unit, which is dedicated to GEA's strategic focus on technology. Global Technology is headed by the new Chief Technology Officer (CTO), who reports directly to the Executive Board. The unit aims to ensure that GEA's technology portfolio will continue to keep pace with market trends and customer requirements in the future. Global Technology is divided into four priority areas: innovation, engineering excellence, digitalization and intellectual property rights.

GEA uses product development and innovation – elements of its technology strategy – to navigate the complex range of issues covered by sustainable engineering.

## Product development process

A single detailed product development process applies across the entire group and is linked to the innovation process. Alongside product functionality and cost-effectiveness, GEA considers sustainability to be a key factor in product and process development, since decisions in the development phase have a lasting impact well beyond company boundaries and must therefore be able to withstand critical scrutiny with regard to sustainability. Consequently, GEA goes beyond product development from a functional perspective and instead takes a holistic approach to innovation. Ecological considerations such as water and energy consumption, waste streams, circular economy and avoiding the use of plastic are thus already taken into account in the specification and concept stage of the development process. In addition to resource efficiency, the fixed design criteria include user health and safety considerations across the entire product life cycle. Regional or industry-specific guidelines and standards, required approvals and test certificates are also taken into account in the process. In GEA's development process, achievement of the target sustainability effects and their technical parameters is ensured through a system of key performance indicators based on milestones. This integrated development process also ensures that the product life cycle and its peripheral interactions – particularly transport and resource-efficient maintenance – are taken into account. Prior to market launch, prototype design and construction undergo validation. The product development process – as part of the innovation process – is supplemented by a “front-end” from the outset.

## GEA innovation process

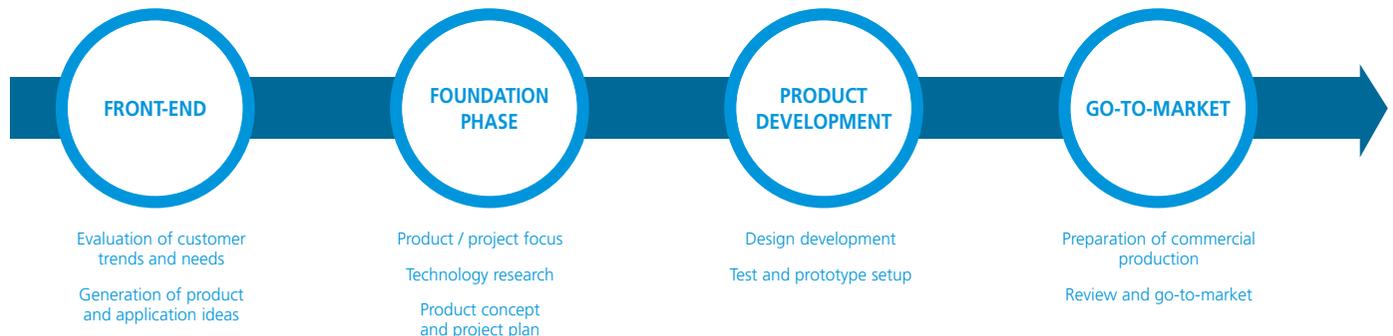
GEA offers a wide range of components, systems and process equipment, whose resource efficiency, flexibility, quality and operating costs are continuously being improved. GEA has defined around 200 core technologies that offer tremendous potential for optimization, including in combination with other technologies.

GEA's innovation management system comprises its innovation process, the “InnoVate” IT system for generating ideas and allowing them to mature, as well as defined roles and responsibilities for the further development of innovative ideas. The innovation management front-end, i.e. the systematic generation of ideas and feasibility checks, includes tools for problem solving and advancing the number

and quality of the ideas put forward, the systematic analysis of market- and technology-driven trends and customer needs, as well as an ideas platform.

## Key figures from the innovation process

For gauging the success of the resources allocated to the field of innovation across the entire company, GEA relies on key performance indicators at all stages of the innovation process. At the end of 2020, there were 337 (2019: 324) active ideas or projects in the “front-end” and “foundation” phase, with 148 (2019: 159) future product innovations in the “development” and “go-to-market” phase. Updated figures are provided to the company's development managers and management boards on an ongoing basis.



## Customer surveys

GEA conducts global customer satisfaction surveys on a regular basis. More recently, these surveys have been increasingly event-driven, i.e. they are conducted immediately following a business event with GEA. This form of customer satisfaction survey was rolled out to other countries in the 2020 fiscal year, with a focus on implementing a fully automated event-based approach. A standardized company-wide reporting dashboard was established to measure, analyze and visualize customer satisfaction globally, regionally and divisionally. This will allow GEA to respond quickly to feedback.

GEA increased its customer satisfaction levels in 2020 overall. Its Net Promoter Score, which measures how likely customers would be to recommend a product or service, improved significantly to 55 (2019: 34).



NFGS

## Technology strategy and climate footprint

GEA's business decisions, as well as those of its customer industries, are guided by the United Nations Sustainable Development Goals (SDGs). Sustainable industrialization and supporting innovation and sustainable production are therefore essential prerequisites for technological development that meets future generations' expectations with regard to environmental impact and the use of resources. In the food industry, in particular, sustainable production is becoming increasingly important for consumers. This is one of the reasons why GEA's food industry customers follow their own strict sustainability strategies, which impacts the supply chain and thus affects GEA as well.

GEA's technology strategy ensures that research and development activities across the group are better networked and aligned with customer needs and global industry trends. This strategy is based on several pillars. The primary focus of the "Innovation/Sustainability" pillar is to harness technological progress to deliver "engineering for a better world" by developing new technologies with a reduced ecological footprint, thus helping our customers become more sustainable in their operations. In the near future, there will be greater demand for food as well as new processing and production methods. This is the basis for the "Innovation / New Food" pillar, which aims to ensure more sustainable food production that uses fewer natural resources and satisfies future consumer preferences.

GEA is a technology leader today, but we also want to retain that position going forward. This is why we are driven by exploring what GEA can do differently and where we can demonstrate the courage to take risks and engage in disruption. Our technology strategy feeds directly into our mission of "engineering for a better world". "Innovations for Sustainability" and "New Food" are our priorities. This is the only way for us to remain relevant and competitive.

**Thorvald Ullum**, Chief Technology Officer, GEA

In devising its technology strategy, GEA's definition of sustainable products and processes goes beyond simply meeting its industrial customers' demands for cost-effectiveness, efficiency and sustainability. GEA also takes end consumers' views into consideration – at least indirectly – when making decisions about technology. GEA aims to measure significant criteria such as water and energy consumption, waste streams, circular economy and avoiding the use of plastic through key performance indicators.



Automatic loading and unloading systems for freeze dryers like the ALUS® minimize the risk of contamination in the vaccine production process by minimizing human involvement.

GEA uses a trend radar to evaluate the contribution made by technology trends or new technologies to its sustainable development goals and their significance for the (future) product portfolio. In addition, GEA reviews the ideas and products against the SDGs during the development process.

Climate change and the finite nature of resources offer considerable opportunities to GEA for the sale of efficient process engineering components and equipment. Due to the wide variety of components and processes and, in particular, the need to gather comprehensive operating data outside the company's own sphere of influence, it is not possible to obtain concrete global evidence regarding the climate footprint of the entire product and service portfolio during its service life. GEA therefore continued to work on enhancing its climate reporting in 2020. Internal projects to quantify greenhouse gas emissions along the entire value chain (upstream/downstream) are currently underway. A subproject has been set up to calculate and simulate the climate footprint of GEA products during their service life. The findings are expected in fiscal year 2021.

## Sustainable products and projects in 2020

GEA's primary goal is to deliver solutions that offer outstanding product and process efficiency. "Engineering for a better world" involves minimizing energy use, conserving natural resources and achieving a high degree of recyclability. Recent examples include:



### Innovative brine filtration reduces waste

Brining fish, meat and sausage products can be combined with other preservative measures such as drying, smoking and heating to produce food with an extended shelf life. The GEA ScreenFilter permits passive brine filtration using gravity and avoids protein activation that can clog injection needles. This system is therefore ideal for lighter brines used to enhance flavor and extend the shelf life of high-quality food products such as ham, poultry and bacon. The special design of the filter tank allows manufacturers to preserve food using less brine.

[+ Read more](#)



### Sustainable milk production

With the help of sustainable GEA technology, Brazilian dairy farm Fazenda Trevisan now produces and processes 13,000 liters of milk daily for the region. By converting the free stall barn to optimize animal living conditions, the family-run business was able to substantially increase milk output. Sustainability was also a factor in the processing of manure which is converted into a liquid and is a valuable resource which replaces artificial fertilizers and is used in the farm's on-site biogas plant to generate electricity. Fazenda Trevisan's own dairy plant is able to rapidly process raw milk into high-quality packaged dairy products. The fully automated GEA production line optimizes the workload for employees and ensures the highly efficient, economical use of energy, water and process control and plant hygiene inputs. By processing the milk directly on the farm, transport routes and cooling times are minimized, reducing Fazenda Trevisan's environmental impact.

[+ Read more](#)



### GEA Sustainable Energy Solutions: an integrated solution for milk processing, refrigeration and heating

Liquid milk production is a highly competitive business. The Aurivo site in County Donegal Ireland produces and packages 120 million liters of milk annually for a range of brands. With the help of new milk processing systems combined with energy-saving refrigeration and heat pump systems from GEA, the site's hourly milk processing capacity was increased by 80 percent. At the same time, energy consumption for processing, heating and refrigeration fell by around 12 percent, while CO<sub>2</sub> emissions were cut by as much as 80 percent. The successful project highlights the benefits of GEA's Sustainable Energy Solutions (SEnS) concept and has been awarded Excellence in Energy Efficiency Design Certification by the Sustainable Energy Authority of Ireland.

[+ Read more](#)

### Product security

All GEA divisions have established Product Safety Committees (PSCs) for the purposes of evaluating and assessing incidents involving GEA products that have (or may have) already resulted in either a hazard to life and limb or resulted in damages to customers. The inter-disciplinary PSCs are tasked with initiating suitable measures to prevent and rectify product safety problems while minimizing GEA's legal and financial exposure. The committees gather and evaluate information about the use of the products throughout their life cycle. Hazardous defects and risks arising from the improper use of products must be reported as serious incidents; see also "Managing serious incidents," [page 55](#). Specific scenarios in which a PSC must intervene include the unsafe operation or unsafe maintenance of machines and components. PSCs must also respond if unsafe customer products with impacts on end users and/or consumers are reported or observed. When GEA's machinery and components are used to process food, beverages or pharmaceuticals, they are generally in direct contact with the product being processed, which explains why cases involving product contamination are investigated as a matter of extreme urgency.

### Product life cycle

GEA documents each phase of the product life cycle in order to record and account for both favorable and detrimental impacts on the natural environment that result from the development and project-planning phases, and when products (and process solutions, if applicable) are purchased, transported, produced, delivered, operated and disposed of. Throughout a product's life cycle, all product information is compiled with a focus not only on the technical but also the commercial and ecological aspects. GEA is thereby seeking to ensure the transparency and traceability of any environmental im-

pacts that occur at each stage of the product life cycle. The life cycle perspective has already been documented in detail at many international sites, including Drummondville, Canada (manure technology); Parma, Italy (homogenizers); Plainfeld, Austria (animal hygiene products and teat dips); Oelde (separators), Büchen (valves), Bönen (dairy equipment) in Germany; as well as at other sites in the United Kingdom.

## Service

Our customers' business success depends not only on their own production capabilities but in particular on the availability of technologies. Modern production plants are highly automated and even minimal downtimes can have a noticeable impact on customers' productivity.

Following the successful rollout of several new service products and initiatives, GEA's global service business continues to grow. GEA has set itself the goal of becoming the world's leading industrial provider of life cycle service concepts. The task is to establish, maintain and improve plant performance at the customer throughout the life cycle of the plant or business. With this life cycle approach, GEA partners with customers in a way that adds value at every step – from dimensioning and commissioning plants, supplying spare parts at short notice and service level agreements (SLAs) to repairs following failures as well as preventive and predictive maintenance services. This is where digital services such as real-time condition monitoring – both offline and online – are playing a greater role.



Clean label smoking: The GEA inline smoking solution is the first on the market to use healthier residue-free condensed smoke. The patent pending technology is available as an upgrade for the GEA CookStar spiral oven.

By combining the latest technologies for condition monitoring with leading industry expertise, GEA offers service concepts that cover maintenance, monitoring, analysis and optimization. They also meet expectations in terms of sustainable business operations. Efficient and properly maintained plants minimize product losses and prevent excessive energy consumption. Longer machine service lives further reduce the overall environmental footprint.

The coronavirus pandemic has accelerated the shift toward remote support, which eliminates the need for on-site service visits and thus minimizes contact and risk. It goes without saying that GEA's experts provide full support to customers even when handling things remotely. An easy-to-install streaming solution that can run on all standard mobile devices allows service specialists and customers to communicate by video and examine the plants together. This keeps operations running smoothly and prevents unnecessary travel, thus reducing any environmental impact.

Upgrades to technical processing plants – instead of potentially premature new purchases – reduce costs throughout the life cycle and conserve resources. One example of an upgrade is the expansion of a GEA CookStar – a double spiral oven for industrial food preparation – so that it can be used to smoke foods. SuperHeatSmoke by GEA is an in-line solution that allows smoked products to be made in the oven without actually creating smoke. Using condensed natural smoke, the process operates at temperatures above 100 degrees Celsius and is suitable for chicken, beef, pork, seafood and vegetarian products such as textured vegetable protein. This innovation cuts smoking times from hours to minutes, and the end products can display a “CleanSmoke” label – an important differentiator for consumers who are looking for healthier, more natural foods. Purified condensed smoke from which tar and ash have been removed is not only better for consumers than conventional smoke; it also benefits the employees working at the machines because there are no combustion residues. Moreover, it eliminates the cleaning that would otherwise be necessary. Cooling the factory uses less energy because there are fewer production steps and there is no smoking plant to be cooled.

In order to fulfil customer expectations even more effectively, the strategic initiatives and measures during the fiscal year focused on performance improvements. To this end, key processes and clear responsibilities were defined for the service division and assigned standardized performance indicators, with the aim of improving the management of global and local services. The customer relationship management system will be gradually expanded to include a survey function following business contacts in order to gauge customer satisfaction. Furthermore, a new training course for service managers

ensures that common and globally accepted standards are used for local service activities. GEA has also improved the performance and reaction times of the central technical support functions, increased its efficiency in planning and implementing field service activities, and invested in the global network of repair facilities. This has gone hand in hand with the expansion of a multi-tiered spare parts logistics system that allows GEA to deliver spare parts worldwide even more quickly and on demand.

GEA is also continuing to expand its digital service solutions. By evaluating continuously measured process parameters, the company can further improve the stability of plants and processes. One example is a cloud-based platform for digital services. The supplier-neutral portal provides customers with state-of-the-art services such as remote maintenance, data analysis and comprehensive e-commerce functions. It also facilitates the seamless integration of all supplier interactions on a shared platform.

**I**n our service business, we see the life-cycle approach and digital possibilities as major opportunities to support our customers in terms of sustainability. By focusing on the life cycle of a plant, we can greatly extend a production line’s service life, using perfectly coordinated components to proactively eliminate unnecessary emissions and the waste of energy, water and processed raw materials. Digital services such as real-time condition monitoring as well as preventive and predictive maintenance play a key role that will continue after this pandemic.

**Tjitze de Wit**, Chief Service Officer, Liquid & Powder Technologies, GEA



# People

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# People

GEA's success is the result of the efforts of nearly 19,000 employees, with each individual making an important contribution to the group's overall performance. Our employees are the basis for future growth in the company's value. GEA wants to remain an attractive employer and is therefore committed to a culture of honesty, sincerity and loyalty. The company is convinced that extensive training and education coupled with life-long learning are essential to a fulfilling working life. In conjunction with all parties involved, GEA creates a working environment in which employees are and remain healthy and in which work-related illnesses and accidents are avoided to the greatest extent possible. Diversity and equal opportunities are not only core values but also the basis for achieving success in an international setting. GEA is committed to respecting human rights as well as the generally accepted core working standards of the International Labour Organisation.

At GEA, Human Resources (HR) is part of the Global Corporate Center, reporting directly to the CEO, who is also the Chief Human Resources Officer.

See appendix for detailed employee data – [page 76 ff.](#)



**I**n September 2020, we launched our overhauled HR organization, which is aligned to GEA's divisional structure. With this step, we underscore the strategic relevance of human resource management to GEA's future viability. HR is oriented closely to the operating business, supporting divisional and regional management. Internal HR operations teams at the hubs in Berlin and Kuala Lumpur, Malaysia, and the new MyHR ticketing system consolidate all HR matters, making HR a modern one-stop shop."

**Ulrich Braig**, Chief Human Resources Officer, GEA

## Employment

Against the backdrop of demographic change and growing competition for talent, GEA is dependent on regularly and successfully recruiting diverse and qualified people. Retaining them is another essential task of human resource management. Both aspects are crucial to employee satisfaction and the company's future viability. For this reason, GEA began reporting on new hires and employee turnover in fiscal year 2019.



**1,242 new employees**

hired in 2020

In 2020, GEA hired a total of 1,242 new employees, compared with 1,409 in 2019. The total number of new hires as a percentage of the average headcount last year fell from 7.7 percent to 6.5 percent as of December 31, 2020. This decline is mainly due to a restructuring program that was launched in May 2019. As of the end of 2020, this program had reduced the workforce by a total of some 800, both GEA employees and temporary workers.

A total of 1,639 employees left the group, compared with 1,539 in 2019. The turnover rate rose slightly from 8.4 percent in the previous year to 8.5 percent in 2020.

### Employee survey

In 2019, GEA developed a new system for responding to employee feedback and for ensuring employees' active participation in the company's development. On this basis, a global employee survey will be conducted once a year. The survey performed in November 2019 focused on employees' general satisfaction, their assessment of GEA as an attractive employer and an evaluation of the measures that had been implemented in the 2019 reporting year. The results of the survey were published at the beginning of 2020, revealing that employees trust in senior management and their faith in GEA's future had

risen significantly over the previous year. In addition, more employees had recommended GEA as an employer than in the previous year. Employee communications and management effectiveness were identified as areas requiring attention; so initiatives were launched in spring 2020 to address them.

GEA conducted a further employee survey in November 2020, collaborating with an internationally respected service provider in order to professionalize the process. The survey again focused on aspects of employee commitment as determined by research, such as management effectiveness, the working environment and opportunities for growth. In addition, employees were asked about a number of important facets of the company's business such as customer centricity and sustainability. The survey was accompanied by a comprehensive communications campaign with the aim of strengthening employees' confidence in the survey program as well as in management. In addition, all executives received training to help them respond to and implement the findings of the survey in order to continuously improve GEA's employer branding. The focus on the results and on the related measures will be continued in 2021.

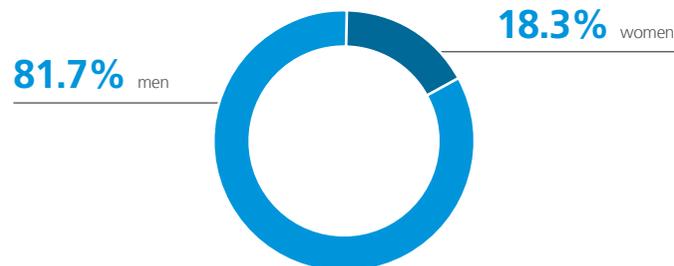
### Labor/management relations and co-determination

Labor/management relations at GEA are characterized by long-standing, respectful dialog and interaction with employee representatives as well as parity co-determination on the company's Supervisory Board. One half of the Supervisory Board is composed of shareholder representatives and the other half of employee representatives. As the employee representatives on the Supervisory Board are elected by the entire German workforce, the interests of all German employees are represented in the form of co-determination at company level. In addition to numerous local and general works councils, GEA also has a Group Works Council (GWC) established in accordance with the German Works Constitution Act. At corporate level, local issues are regulated by company agreements.

At the European level, GEA has a European Works Council (EWC), which has the statutory right to information from and consultation by the company's management. It is in regular contact with the Executive Board and Human Resources. The activities of the European Works Council mainly focus on the cross-border impact of decisions and developments on employees in the EU member states, the countries of the European Economic Area, and Switzerland. At the end of 2018, the foundations for the work of the EWC were framed in a new EWC agreement, jointly developed and adapted by the EWC and GEA's Executive Board with the assistance of the global trade union federation IndustriALL.

### Workforce

Total of 18,232 employees (excluding contingent workers)



**Disclosure 102-41**

Collective bargaining agreements apply to around 50 percent (previous year: around 49 percent) of the workforce worldwide. These figures are based on data from the global “Workday” human resource management system. All other employees have individual contracts.



**50%**

of employees are covered  
by collective bargaining agreements

**Leadership development**

In fiscal year 2020, two strategic leadership development programs were devised and implemented to prepare executives for the challenges arising from the new organizational structure and thus to support the company’s transformation and business success.

In response to the changed requirements facing executives, GEA developed the “GEA Signature for Leadership” model, which describes the main behavior patterns, skills and conduct expected of GEA managers worldwide on the basis of six dimensions. The purpose is to enable employees to make the best possible contribution to GEA’s business success. In the year under review, GEA launched the associated development program for executives called “Living our Signature for Leadership”. During six focus weeks, virtual learning content was provided on each of the dimensions, ranging from interviews with managers, presentations and webinars to e-learning sessions and practical exercises.

The second program – “Making the Matrix Work” – was offered to the executives who manage the matrix organization or work at interfaces to help them develop the skills and expertise needed in a matrix organization. This program consisted of workshops and trainer-led webinars conducted at various levels and in different parts of the organization.

In addition, GEA offers training for executives at the GEA Learning Center, where they can select development sessions based on their individual learning requirements. Alongside a broad range of e-learning content, trainer-led webinars are available to reinforce efforts to strengthen leadership skills. In addition, all young talents and executives have access to the “GEA Leadership Toolbox”, a constantly growing collection of best practice, tried-and-tested management and leadership tools, together with coaching and a 360-degree feedback tool.

**GEA Signature for Leadership**

**Network Catalyst**



**Decision Maker**



**Market Shaper**



**Matrix Champion**



**Result Achiever**



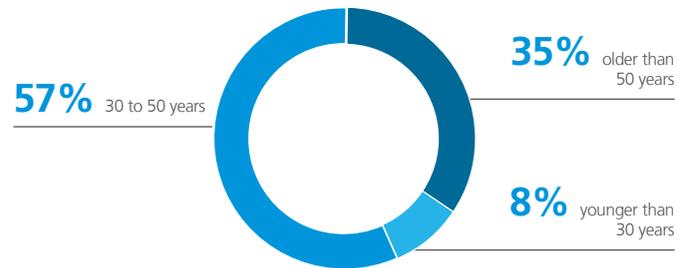
**People Activator**

The Covid-19 pandemic meant that no conventional face-to-face training was available this year. All development measures were offered online, mostly in the form of trainer-led webinars.

## Diversity and equal opportunities

GEA operates in a challenging international market environment with a large number of stakeholders – ranging from customers, competitors and employees to the government and society in general – who impact the company in many different ways. GEA meets the numerous challenges in this highly disparate cultural environment by observing the principle of diversity. GEA defines diversity on the basis of four personal criteria – origin, gender, age and qualification – and two organizational criteria – mobility and flexible working. The latter refers to both working time and place of work. Further diversity characteristics, such as disability or sexual orientation, are also considered in ensuring equal opportunities. All in all, GEA employs people from

### Age structure



GEA employees come from  
**82 nations**

82 different nations. The age structure of GEA's workforce is as follows: 8.1 percent of employees are younger than 30, 57.0 percent are aged between 30 and 50 and 34.9 percent are older than 50.

To encourage diversity on as many levels as possible and thus create an attractive working environment, GEA also incorporates aspects of modern work flexibilization and fosters mobility within the group.

The "Diversity Management Policy" has been developed to institutionalize and manage diversity within the company. This policy describes the overarching goal and the progress that has been made in implementing diversity management at GEA. The company views diversity as a strategic success factor and has developed a range of measures to promote it. For example, diversity criteria are regularly taken into account in filling positions. One of the main aims is to attract more women to work at GEA despite the sector-specific challenges.

Diversity and equal opportunities have been a firm aspect of human resource processes for a number of years. Moreover, when nominating candidates for leadership development programs, executives are encouraged to consider a proportion of women that exceeds the average total percentage of women employed by GEA. This ensures balanced representation of both genders in leadership development.

Details of GEA's diversity concept can also be found in the Corporate Governance Statement in the [+ GEA Annual Report 2020](#).

## Learning and development

GEA's Learning Center has been the central learning and development provider for employees worldwide since 2015, offering management, sales, service and project management training as well GEA product and user training courses. It also includes a comprehensive range of e-learning content on technical and business-related topics. The aim is to develop employees both personally and professionally. The range of content is continuously revised in light of changing requirements. In 2020, new offerings included a global training program for service managers aimed at professionalizing the service business.

The pandemic situation in 2020 meant that training content and formats had to be adjusted quickly. Training was primarily offered in the form of trainer-led webinars. The successful use of state-of-the-art technologies ensured high acceptance on the part of the webinar participants. The impact of Covid-19 was also reflected in participation numbers, although it should be noted that reporting may not include all the short-term adjustments made to the training offering.

In the year under review, 5,228 employees, equivalent to 28.7 percent of the workforce, made use of the learning and training opportunities: 257 employees attended face-to-face training, 421 participated in integrated training initiatives and 6,027 joined trainer-led webinars. A total of 13,262 e-learning seminars were held.



**5,228 employees**

made use of the training and  
learning opportunities

### Vocational training in Germany

In the year under review, GEA trained 381 young people at 14 sites in 11 commercial and industrial/technical occupations, which fall into different specialty areas depending on the product portfolio of the individual GEA sites. The Oelde site is the center for technical training, coordinating these activities in Germany. In addition, 17 combined vocational training and degree programs were organized in cooperation with polytechnics and universities. Lasting six semesters, these programs lead to bachelor degrees in various fields of expertise. GEA has given the practical phases of the program a more international focus by offering projects at GEA companies outside Germany.

### Work/life balance

GEA explicitly endorses a good work-life balance and supports employees through a variety of different measures. For instance, some sites have experienced contact partners for expectant mothers and fathers or offer flexible working arrangements. Similarly, GEA also provides support in finding childcare and, under certain conditions, pays tax-free allowances for places in daycare facilities. In fiscal year 2020, 2.1 percent of employees in Germany took parental leave (previous year: 3.4 percent). Of these, 72 percent were fathers and 28 percent mothers. The average duration of parental leave in 2020 was 12.7 months in the case of women and 1.8 months in the case of men. From 2021, there are plans to provide training for executives with employees who experience particular challenges in achieving a work-life balance due to the birth of a child or the need to care for a dependent, thus raising awareness for this issue. In addition, GEA cooperates with an international external service provider to assist employees in finding suitable options to provide daycare for children and look after dependents in need of care. This offering also includes free social counseling.

### Employee mobility

To meet market requirements and safeguard the company's sustained long-term competitiveness, it is increasingly important to be able to deploy the know-how and expertise of GEA's employees worldwide. For this reason, GEA established a central competence center for international employee mobility back in 2014. This not only ensures professionalism when it comes to the legally correct implementation of global contractual standards, but also improves efficiency in terms of the operational realization of international transfers. The work of the competence center facilitates the equal treatment of all internationally mobile employees.

### Company pension schemes

GEA grants its employees pension benefits under defined contribution or defined benefit pension schemes. Employees are able to actively shape their pension plans together with GEA. Supporting company pension schemes allows GEA to respond to demographic change and retain qualified employees over the long term. GEA endeavors to continuously optimize existing administrative processes and global pension-related service structures to improve both the transparency and economic efficiency of the pension schemes. In doing so, the company always ensures that the pension schemes fully comply with all statutory and regulatory requirements.

### GEA Aid Commission

GEA supports 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 serious illness. Under such circumstances, affected employees and their families may turn to the GEA Aid Commission for help.

## Social engagement

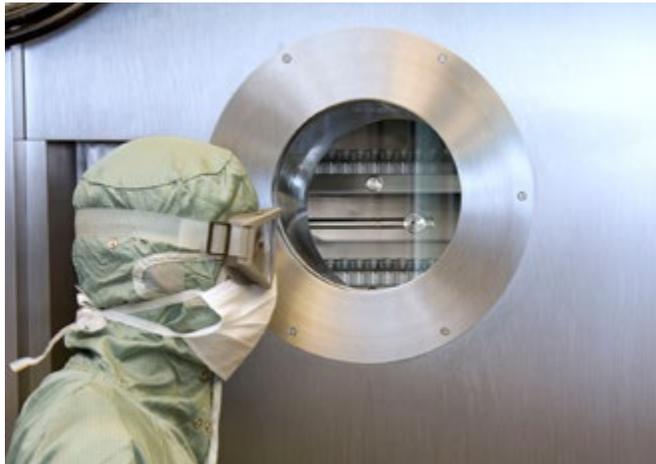
GEA is a member of the World Economic Forum (WEF). Established as a non-profit foundation in Geneva, Switzerland, in 1971, the WEF received the official status of an international organization in 2015. It is free from any political or national interests. Via its multistakeholder platform, the Forum brings together leaders from business, government, civil society and science with young people in order to drive change. As one of the world's leading suppliers of process technology, GEA aims to use its membership to help shape responsible business practices and contribute to the discourse on global issues. To this end, GEA attended various events in 2020, including the virtual Sustainable Development Impact Summit.

As a global player, GEA participates in numerous regional and local initiatives and projects while sharing its views on technical and market-related issues in over 300 trade and industry associations, societies and institutions. For example, GEA is a member of the "Verband Deutscher Maschinen- und Anlagenbau" (VDMA – German Engineering Association) and is actively involved in the association's Corporate Responsibility working group, which was established in 2017. A list of GEA's key memberships can be found at [+ gea.com](https://www.gea.com). As a rule, they are managed locally and autonomously by the individual sites.

In addition, GEA is engaged in a large number of partnerships with schools and universities in Germany. Cooperation between educational institutions and companies supports students in their transition to the world of work and offers career guidance and counseling to ensure that, going forward, there are sufficient young talents willing to take up jobs in the fields of engineering and natural sciences in particular. Information on some of these initiatives can be found at [+ gea.com](https://www.gea.com).

## NFGS Occupational health and safety

A healthy and safe working environment is a recognized human right and is a requirement for one of the Sustainable Development Goals ("good health and well-being"). GEA gives top priority to occupational health and safety. Above and beyond legal requirements, GEA feels a sense of duty, where possible, to protect its own employees, individuals whose workplaces are controlled by GEA or who work on behalf of GEA, as well as the people working for customers and suppliers. GEA's QHSE organization (see [+ page 25](https://www.gea.com)) ensures that contracts with customers and suppliers/subcontractors align with the standards set by GEA and include relevant clauses on occupational health and safety as well as the related procedures. This is achieved through standard processes.



GEA is one of the leading companies in the field of freeze drying. Already today, numerous vaccines are freeze-dried on GEA equipment worldwide.

## Targets

Derived from the QHSE Policy (see [+ page 25](https://www.gea.com)), the company again defined and set tangible targets in and for fiscal year 2020 and medium-term targets (up to 2025), with the respective target achievement levels assessed in comparison with the previous year's results (see the corporate website [+ gea.com](https://www.gea.com)), including:

### Lost Day Frequency Rate

Accidents with period of absence per million hours worked



### Lost Day Severity Rate

Days lost after accidents per million hours worked



### Proactive Injury Rate (PAIR)



The long-term target still remains zero accidents. For more information on target achievement levels, see [+ page 26, 54 f., 78 and 82](https://www.gea.com).

## Management approach and key performance indicators

GEA pursues a clear zero-accident strategy. GEA regards accidents and health hazards affecting the workforce as well as the resulting absences, damage to the company's image and potential penalties or indemnity payments as unacceptable. Its risk management concept applies to all GEA sites worldwide and includes the regular systematic identification and assessment of risks performed on the basis of established procedures; for instance, each GEA company is required to conduct a risk assessment. The respective health and safety experts in the companies advise management teams on the status of occupational health and safety, improvement measures, the occupational health and safety organization, accident statistics as well as the required personal protection equipment. Moreover, GEA also manages risk by means of certifying the sites to ISO 45001 (see [page 76](#)), setting clear QHSE Policy targets and continuously enhancing the regional QHSE organizations. At GEA sites, occupational health services are available both to employees and any external staff working there; the confidentiality of medical data is assured. Reviews take place via internal HSE audits, risk assessments and psychological risk assessments performed within the framework of the company's health management scheme.

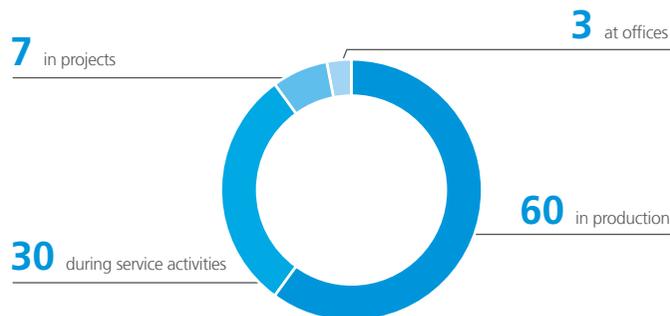


## 4.8% decline in accidents

at GEA sites

## Worksite accidents by place of activity

(in %)

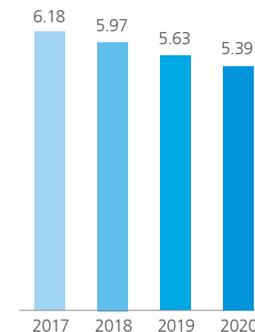


In order to be able to more specifically address the causes of accidents, the company also started capturing information on the body parts affected, main causes, nature of the injuries and other detailed information in 2019. This analysis helps the global QHSE team avoid and further reduce accidents.

For instance, employee training on occupational health and safety in Germany mainly takes place within the framework of the annual required UVV training courses. UVV stands for the accident prevention regulations ("Unfallverhütungsvorschriften") issued by the German workers' compensation boards ("Berufsgenossenschaften"), which set forth the processes for safely operating and handling technical equipment and materials. These accident prevention regulations represent the obligations governing health and safety in the workplace that are binding on all companies and insured individuals. Available in 14 different languages, the "GEA Safety Core Rules" apply world-

## Lost Day Frequency Rate 2017–2020

Accidents with period of absence per million hours worked



wide and represent the minimum standards for occupational health and safety. They are available in the GEA Learning Center in the form of online training courses and videos. In addition, there are briefings and checklists for specific hazardous activities or equipment, for instance the use of forklift trucks. Country-specific training courses in line with the respective regulations fall within the remit of the local managing directors or site managers.

The number of accidents declined significantly compared with the previous year (down 4.8 percent). With approximately the same number of hours worked, GEA's 2020 Lost Day Frequency Rate went down to 5.39 (previous year: 5.63) accidents per million hours worked. In the year under review, a total of 219 accidents (previous year: 230) were reported, with 248 sites – i.e. 73 percent of the 340 GEA sites included in the survey – remaining without accidents that entail a period of absence (previous year: 76 percent). There was one

accident at work that resulted in a death in 2020, in Singapore (previous year: none). The Lost Day Severity Rate declined to 115.32 days lost following accidents per million hours worked (previous year: 126.63). This means that accidents entailed shorter periods of absence overall. As outlined above, the company's 2020 targets for health and safety at work (Lost Day Frequency Rate < 5.6, Lost Day Severity Rate < 120) were achieved. Fewer near misses were reported due to the coronavirus pandemic; accordingly, the target proactive injury rate of  $\geq 100$  was not achieved.

The company will continue to consistently implement its precautionary approach in the field of occupational health and safety: For the purpose of detecting potential risks and hazards early on and preventing accidents, GEA has recorded and analyzed near misses world-

wide since 2017. In the same way as actual accidents, near misses at GEA are analyzed and there is a targeted follow-up process with defined responsibilities and a specific set of actions. This process helps to achieve the zero-accident target.

On occupational health and safety in the supply chain, see [page 71](#).

### Managing 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 also captures accidents sus-

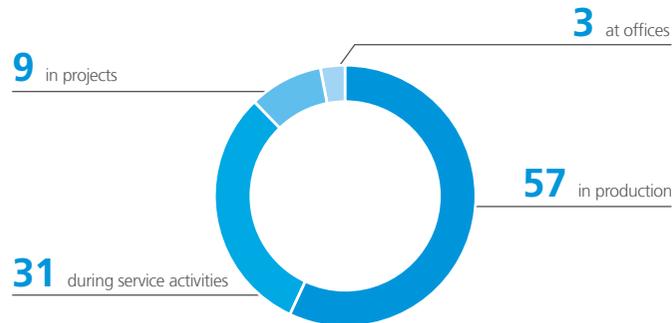
tained by individuals not employed by the company but whose work and/or workplace is nonetheless controlled by GEA. This allows GEA to respond as quickly as possible to such events, minimize their impact and promptly initiate investigations into the respective incidents. Afterwards, a dedicated lessons-learned process is launched; its findings are also used proactively to prevent risks, identify measures for improvement and communicate them to the organization. This reporting system also includes incidents connected to GEA products and plants. Such incidents are recorded and investigated regardless of whether the incident was caused by one of GEA's products or plants. For this purpose, a group-wide reporting platform is in place to ensure that the established reporting channels are used.

### Internal HSE compliance audits at the sites

Compliance with local statutory rules and regulations applicable to health, safety and the environment is regularly reviewed by means of audits conducted by an external service provider commissioned by the Executive Board. The reports are uniform and compiled on the basis of a set of 25 criteria, with all observations and recommendations being entered into a group-wide software system. This process identifies any necessary areas for improvement and allows those responsible on a local level to directly document their corrective measures in the system. The respective organization undertakes to implement these corrective measures on a lasting basis, with the entire process being monitored and validated by the QHSE officers.

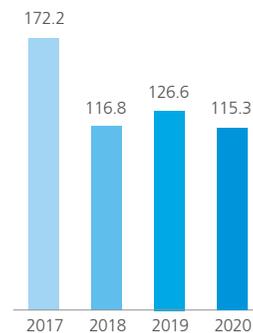
### Lost days by place of activity

(in %)



### Lost Day Severity Rate 2017–2020

Days lost after accidents per million hours worked



## Health management

GEA is expanding its GEA Care health management system. For instance, as part of a group-wide program, GEA plans to offer stress management and mindfulness training to employees who are exposed to particular levels of stress.

The company's sites around the world have been systematically polled to determine what measures are mandatory under (national) law and what measures are considered desirable from a local point of view. Such measures fall within the responsibility of the local site and will be incorporated into the health management system in line with the commitment to encourage local autonomy and promote established offerings especially.

Ultimately, GEA Care is to be fully established by 2025, with local and global content that can be accessed via the intranet to make online offerings directly available to every employee, at the same time ensuring greater transparency. In this way, the sites will be able to mutually benefit from the experience gained by others. A draft agreement with the Group Works Council is currently in the discussion phase. It is to be based on three pillars: prevention and information, rehabilitation and verification.

Once the agreement with the Group Works Council has been finalized, the processes, measures, responsibilities and metrics are to be defined in a "GEA Care Policy". However, the general approach will remain the same as before: The local sites will be responsible for local

measures and for ensuring compliance with statutory requirements, while global measures will be coordinated and initiated centrally and online. Global programs should support sustainability initiatives such as tree-planting campaigns, for example.

A matrix approach reflecting GEA's new divisional structure is being considered as a way of steering cooperation. Although local health management will remain a local responsibility, GEA has been able to support many employees centrally during the coronavirus pandemic, working with a medical service provider to assist travelers especially in the event of medical emergencies. For example, it was possible to organize face coverings at a very early stage – particularly at a time when they were in very short supply globally. Other support to employees includes coronavirus testing within the context of classic assistance activities, risk analyses and round-the-clock assistance for all other medical issues.



## Travel security management

GEA also fulfils its duty of care to its employees by providing comprehensive security management. The "Major Incident Management Manual" describes the procedures to be followed in the event of high-risk incidents that might potentially impact GEA's security, operations and reputation or affect the security, safety, health and life of its employees or other stakeholders. This manual is also being used during the current coronavirus pandemic: A global crisis team was assembled to react flexibly and specifically to new developments and to support local crisis teams.

GEA also offers a comprehensive service prior to the commencement of any travel on behalf of the company. Detailed risk assessments as well as travel and security information are available for every region



## GEA Travel Security & Health

28,020 trips, active assistance provided in 27 cases, information and advice offered in 52 cases

of the world. In 2019, GEA joined ASW West (Allianz für Sicherheit in der Wirtschaft West e.V. – German Association for Security in Industry and Commerce West), which provides a cross-sector platform for exchanging information on security challenges. The company is also a member of the Global Player Initiative established by the German Federal Criminal Police Office (Bundeskriminalamt – BKA), which provides a direct point of contact at the BKA and also promotes the exchange of information and cooperation between major German companies.

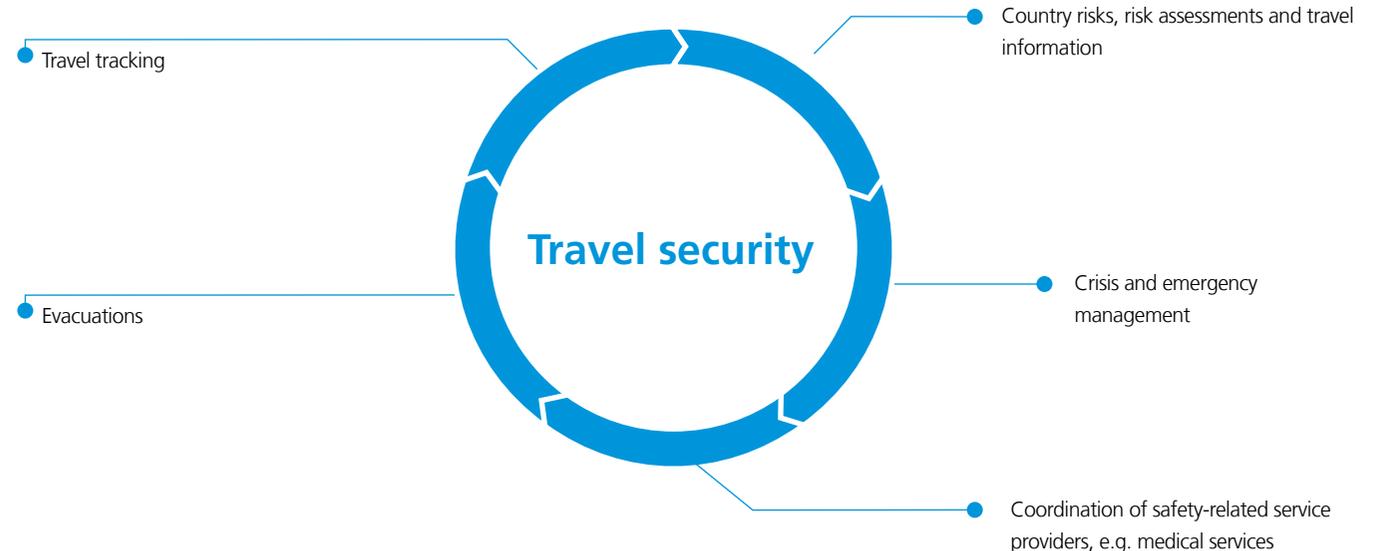
During preparations for travel, preventive measures can be discussed and planned at an early stage. Training is offered to groups that are particularly at risk (service and sales staff, employees assigned to major projects and construction sites in high-risk countries).

By providing regular updates on the intranet, GEA ensures that all employees are kept informed of and have access to all services

offered. In connection with the coronavirus pandemic, the details of international travel restrictions are regularly published and a guide to safe travel is available.

If an employee nonetheless gets caught up in an emergency while traveling, he or she can reach the “GEA Security and Support Hotline” around the clock. In the event of health-related issues, the “Medical Support Service Hotline” provides assistance and ensures appropriate medical care or even repatriation. Via a voluntary security app, GEA employees may also obtain medical and security-related information about a group site at any time or directly contact the 24-

hour hotline at the GEA Security Center. If employees have booked their business trip via the GEA Travel Center, they can be tracked anywhere in the world by means of the “Travel Tracker”, subject to their consent. In the event of a crisis such as a natural disaster or political unrest, GEA Security Management can thus intervene quickly and contact the travelers concerned. In this way, GEA was able to track 9,925 travelers (counted individually per quarter) on 28,020 trips in 2020. Active intervention was necessary on 27 occasions, while the provision of information and advice on security-related matters was sufficient in a further 52 cases.





# Environment

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# Environment

GEA is a manufacturing company with a global network of sites that gives maximum priority to the environmental footprint of both its own production and the equipment it manufactures during the use phase (see “Sustainable Engineering”, [page 39](#)). The focus is on carbon emissions, water and waste.

NFGS

## Targets

GEA is vigilant about mitigating adverse environmental impacts when it comes to its own business activities (see QHSE Policy / integrated management approach, [page 25](#)) Derived from the QHSE Policy, the company again defined and set tangible targets in and for fiscal year 2020, medium-term targets (up to 2025) and long-term targets (up to 2050), with the respective target achievement levels assessed in comparison with the previous year’s results (see the corporate website [gea.com](#)), including:

### Water withdrawal

Per EUR 1 million of revenue<sup>1</sup>



### Waste

Per EUR 1 million of revenue<sup>1</sup>



### CO<sub>2</sub> emissions



1) For the 2025 and 2050 targets, the base year is 2018; for the 2020 target, the comparison is with the previous year

2) Compared to the previous year and revenue (scope 1 and scope 2 market-based)

3) Compared to base year 2015 (scope 1 and scope 2 market-based)

For more information on target achievement see [page 82](#).

On environmental responsibility in the supply chain see [page 71](#).

For this purpose, GEA has produced five simple environmental core rules – in 14 languages – that are explained in a practical manner and accompanied by implementation guidelines:

- Avoid unnecessary energy consumption
- Avoid unnecessary water consumption
- Minimize waste
- Avoid or reduce emissions
- Adequately and promptly respond to adverse environmental impacts

The sustainability figures (see Facts and figures, [page 76 ff.](#)) are gathered and consolidated by the relevant sites (primarily service and production sites) using the globally available corporate sustainability software so that they can be monitored and reviewed on an ongoing basis. Preconfigured dashboards show the current status and make it easier to identify any discrepancies or irregularities. This enables those responsible at the local level to act quickly to implement any corrective measures required.

## Greenhouse gas emissions

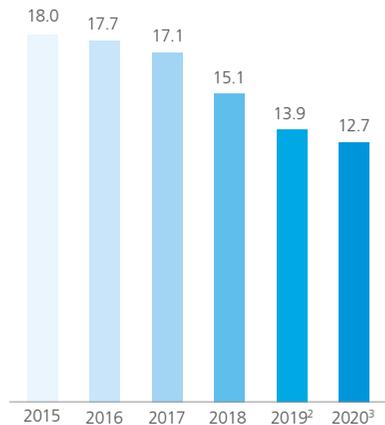
Since 2017, GEA has disclosed the relevant data for the respective year under review that is audited by KPMG in accordance with ISAE 3000. The data is available from the base year 2015. In addition, starting in 2018, GEA changed the way it presents CO<sub>2</sub> equivalents across all three scopes to a regional level as required by the CDP. The data series comprises the years 2018 to 2020. In 2020, GEA meas-

ured the greenhouse gas emissions of its 83 largest sites, comprising production, service and administration.

As of fiscal year 2019, for countries in which energy supply companies can provide reliable fuel mix data, GEA has reported the market-based CO<sub>2</sub> equivalents (under Scope 2), calculated based on this data. In the year under review, a market-based calculation was performed for 31 sites in seven countries (Belgium, Denmark, Germany, France, New Zealand, Austria and Spain).

### Greenhouse gas emissions<sup>1</sup> / revenue 2015-2020

(tons per EUR 1 million of revenue)



1) Emissions only scope 1 and 2

2) 22 sites in Germany and New Zealand, market-based. Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

3) 31 sites in Belgium, Denmark, Germany, France, New Zealand, Austria and Spain, market-based

Across the globe, the key figures for energy consumption are collected using a standardized system and reported as follows:

- Scope 1 – Direct Greenhouse Gas Emissions: GEA includes fuel emissions from fuel oils, various gases, diesel and gasoline
- Scope 2 – Indirect Greenhouse Gas Emissions: GEA reports emissions from electricity, heat, steam and cooling (site-related in accordance with IEA conversion factors and/or market-based)
- Scope 3 – Other Indirect Greenhouse Gas Emissions: Currently, this category only includes reporting on business travel; see also subsection “Outlook: Enhanced climate reporting”
- Intensity – Ratio of greenhouse gas emissions to GEA’s revenue

Further information on the method used for calculating greenhouse gas emissions in 2020 is outlined on the corporate website at [+ gea.com](https://www.gea.com) under “Explanatory notes to environmental reporting”. Apart from market-based figures, the figures presented are in line with the conversion factors stated in the GHG Protocol/IEA Ver. 14 (11/2020) – IEA 2020.

Compared with 2019, greenhouse gas emissions from GEA’s business operations were lower, with revenue down slightly compared to the prior year. The Covid-19 situation and energy efficiency optimization initiatives at GEA’s sites had a positive impact and led to a reduction in emissions of CO<sub>2</sub> equivalents across all scopes. Overall, in 2020, GEA was able to reduce its greenhouse gas emissions both in absolute terms and in relation to revenue. In the year under review, GEA therefore exceeded the target agreed with the Executive Board of

reducing Scope 1 and 2 (market-based) CO<sub>2</sub> emissions by 2.1 percent in relation to revenue: This decrease amounted to 8.5 percent when calculated on a market basis.

Compared to the base year 2015, the market-based decline was 29.3 percent – putting GEA ahead of its target for 2025 (19.1 percent reduction) today already.

In absolute terms, greenhouse gas emissions (scopes 1 and 2 market-based) decreased by 13.1 percent compared with the previous year.

### CDP Rating

As in previous years, GEA again participated in the sustainability rankings of CDP (formerly the Carbon Disclosure Project) in 2020 and confirmed the prior year’s excellent result. CDP is an independent nonprofit organization, which currently represents more than 500 institutional investors. Each year, it gathers information on the specific greenhouse gas emissions of major listed companies and their strategies to combat climate change. The results are then made available to current and potential investors. As part of this survey, GEA regularly provides information on the organizational framework, global targets, policies and programs, the risks and opportunities relating to climate change, as well as the action it has taken in the field of climate protection; this information is also fully accessible to GEA’s customers. In the year under review, GEA was awarded an A– (leadership) in the CDP sustainability rankings. The confirmed overall score of A– puts GEA in the leading group at sector and regional level. “Leadership” level recognizes companies that stand out in areas such as the completeness and transparency of their reporting.

## Outlook: Enhanced climate reporting

GEA continued to work on enhancing its climate reporting in 2020, and internal projects to quantify greenhouse gas emissions along the entire value chain (upstream/downstream) are currently underway. For information about greenhouse gas emissions in the supply chain, see [page 71](#). A project is underway to calculate the climate footprint of the logistics and service life of GEA products. The findings are expected in fiscal year 2021.

## Energy audits

Companies that do not fall under the EU Commission's definition of small and medium-sized enterprises have to carry out an energy audit every four years. They are obliged to do so under the German Energy Services Act (Energiedienstleistungsgesetz – EDL-G). This transposes into law the European requirements of the Energy Efficiency Directive (Directive 2012/27/EU of the European Parliament and of the Council of October 25, 2012). The energy audits were carried out successfully in 2019. The potential for improvement identified in the audits is being taken into account. All audited GEA sites within the European Union comply with the respective national laws in line with Directive 2012/27/EU.

## Water

Water is essential for all life on earth, and access to safe drinking water and sanitation is a basic human right. GEA recognizes that water is a critical resource. This is why the company is committed to contributing to high water quality and sustainable water use throughout the entire value chain by way of the "Water Policy" adopted by the Executive Board in 2020 and binding throughout the group. GEA has set targets for reducing water consumption at its production sites, which are carefully monitored. In addition, GEA incorporates the supply chain (see [page 71](#)) and provides customers with technologies to improve water quality and water use efficiency.

By capturing and visualizing the relevant key performance indicators, which are made available to local managers via dashboards, awareness and understanding at the sites have been significantly increased. This data pool is also the basis for defining local environmental programs and campaigns.

In 2020, GEA recorded water withdrawal at its 82 largest sites (previous year: 77), which included production, service and administration. GEA showed an overall absolute higher demand of 306,163 cubic meters of water in 2020. The reason: In 2020, nine additional sites with a demand of 18,104 cubic meters reported for the first time. In the same period, four sites with a demand of 857 cubic meters were closed.

On a comparable basis, water withdrawal decreased by 2,803 cubic meters, or 0.9 percent. The reduction target was thus not achieved. The sites attribute this to increased hygiene requirements as a result of the coronavirus pandemic.

For water in the supply chain, see [page 71](#).

## Water risk management

The World Economic Forum's 2019 Global Risks Report already identified the water supply crisis as the fourth largest risk to society in terms of potential impact over the next decade. A water crisis is defined as a significant decline in the available quality and quantity of fresh water, resulting in adverse impacts to human health and/or economic activity. Examples include droughts, as well as limited access to safe drinking water, which can lead to economic competition for water quantity or quality, disputes among users, irreversible groundwater withdrawals and negative environmental impacts. More than one billion people currently live in arid regions, and up to 3.5 billion could face water scarcity by 2025. In many regions, a company can no longer rely on a stable supply of high-quality water to grow its business.

As part of the recurring consideration of environmental opportunities and risks, the focus in the year under review was again on the issue of water scarcity. GEA has developed a process to identify regions that are vulnerable to water scarcity risks and determine the impact on GEA's production. GEA sites in water-stressed regions were

mapped during the year under review. The classification is done using the non-profit organization World Resources Institute's "Aqueduct Water Risk Atlas", a tool that applies current data to create a global water risk map. There are five water risk categories: low, medium low, medium high, high and extremely high. In 2020, GEA focused on sites in areas with an extremely high, high or medium high water risk. In-depth surveys – including the requirement to give detailed reasons for answers – were carried out there. Among other things, it was ascertained whether water risks are known and relevant to the activity, what legal requirements exist and what measures are taken to conserve water.

As a result, out of 82 production sites, five sites are located in areas of extremely high water risk, eleven in areas of high water risk, and eight in the medium high category. Overall, the 24 sites represented 26.9 percent of GEA's total water withdrawal in 2020, with the 16 sites in the "high" and "extremely high" categories accounting for 20.5 percent. All sites comply with local laws and regulatory requirements, and there was no water shortage at any of these sites in 2019 or 2020.

## Examples of water conservation projects

### Saving water at Asian production sites

GEA operates five production sites in India and China that are exposed to extremely high water stress. These sites account for around eight percent of GEA's total water consumption. In India, the production sites in Vadodara and Bangalore have initiated water conservation projects aimed at reusing water and reducing water consumption. These include the installation of water treatment plants for water reclamation at both sites. The sites are currently planning additional water conservation measures to achieve further reductions. In China, the Shijiazhuang production site continued a water conservation plan to reuse test water for gardening and floor cleaning.

### Milk powder production with no fresh water consumption

A new milk powder plant built by GEA in Gandhinagar, India, with a capacity of 150 tons per day has no fresh water consumption. Evaporated water is 100 percent condensed and reused in the dairy. The focus at the site of GEA customer Amul – India's largest dairy cooperative – was on sustainable production with innovative and future-proof GEA technologies. GEA was responsible for end-to-end plant engineering in the project, from milk processing to powder packaging, including ancillary equipment, electrical installation, media supply, piping and automation. In total, GEA has installed three plants with a total capacity of 310 tons per day at Asia's largest milk powder site in Gandhinagar.

[+ Read more](#)



India's largest dairy cooperative Amul produces entirely without fresh water using GEA technology.

## Carbon Disclosure Project: Water Security

GEA was evaluated by CDP in the “water security” category of its sustainability rankings for the first time in 2020, receiving the highest possible leadership level rating (A List) for its responsible water stewardship. Significant, demonstrable action to protect water resources has made GEA a global leader in environmental ambition, action and transparency.

CDP’s annual environmental disclosure and assessment process is widely recognized as the gold standard for environmental transparency. In 2020, more than 515 investors with over USD 106 trillion in assets and more than 150 large buyers with USD 4 trillion in procurement spend requested that companies disclose data on environmental impacts, risks, and opportunities through CDP’s platform. More than 9,600 responded – the highest number ever.

We are proud that CDP ranked us in the A List for our water management activities. They recognize our efforts to conserve resources at our own sites and at our customers' plants. For example, we have been tracking our sites in areas of water stress since 2019 as part of our global water risk mapping. Water conservation measures are intensified in areas where production is affected by water scarcity.

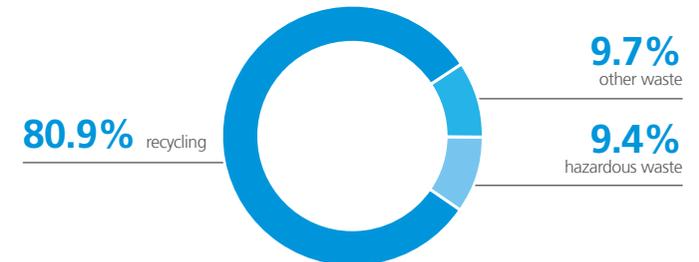
**Dr. Riad Alb**, Head of Health, Safety & Environment, GEA

## Waste

Waste can have significant negative impacts on the environment and human health if not adequately managed. These impacts often extend beyond the region where the waste is generated or disposed of. Targets grouped under SDG 12 (responsible consumption and production) call on organizations to implement environmentally friendly waste management and to prevent and reduce waste through reuse and recycling.

### Waste generation

2.72 tons of waste per EUR 1 million of revenue



Of the 12,621 tons of waste in 2020, 59.7 percent were metals that are being recycled. Hazardous aqueous substances accounted for 9.4 percent (1,186 tons) of the waste. Plastic waste remained at a low level of 173 tons. GEA processes mostly metals and therefore focuses on recycling metal waste; the overall recycling rate was 80.9 percent.

The absolute volume of waste decreased by 9.4 percent.

The annual reduction target for waste volume per EUR 1 million in revenue on an ongoing annual basis of 2.1 percent compared with the previous year was exceeded; the change in 2020 was -4.6 percent compared with 2019.

For more details, see the appendix on [page 80 ff.](#)

## Reduce, reuse, recycle: value added from waste

### Raw material development in food production

Population growth, rising incomes and urbanization are the factors that are driving demand for protein worldwide. Food production always generates side streams of valuable biomass, much of which is disposed of as waste despite the fact that it still contains valuable ingredients. These residues can be used to produce functional proteins and other bioactives for which there is great demand. This is why GEA has been part of the Pro-Enrich consortium since 2018, for example. Together with 15 other companies and research institutes, a closed bioeconomic loop is being developed to extract high-value ingredients from specific agricultural side streams – with the goal of increasing food production while reducing food waste and the environmental footprint of agriculture.

[+ Read more](#)



GEA is working in the EU "Pro-Enrich" project to extract functional proteins and bioactives from by-products of the citrus industry.



GEA is producing the next generation of biofuels.

### Biochemicals through biorefining

Almost all basic chemicals are traditionally obtained from liquid fossil fuel. They form the building blocks in plastics, pigments, fertilizers and many other products that humankind has depended on for decades. "White biotechnology", the implementation of the bioeconomy using biobased chemicals still requires entrepreneurial effort and investment.

GEA solutions and experience in refining biomass into valuable products and components cover nearly all renewable resources and industrial applications. For instance, microalgae are used to produce biopesticides or animal feed, or innovative second-generation biofuels are produced from non-edible feedstocks such as animal fats, used cooking oil or sugar-containing residues. The aim is to reduce the consumption of raw materials used in the production of foodstuffs.

[+ Read more](#)

### Setting the technical course for biofuels

Biofuels are produced partly or entirely from vegetable matter or animal fats. Since these raw materials can be regrown, they are generally considered to be renewable raw materials. Most biofuels are blended on a percentage basis into gasoline or diesel fuel based on fossil fuels to support existing engines. Conventional biofuels – also known as first-generation biofuels – are made from fresh or food-grade feedstocks such as oils and fats and have been in use for more than 30 years.

[+ Read more](#)

### Circular economy with sludge from aquacultures

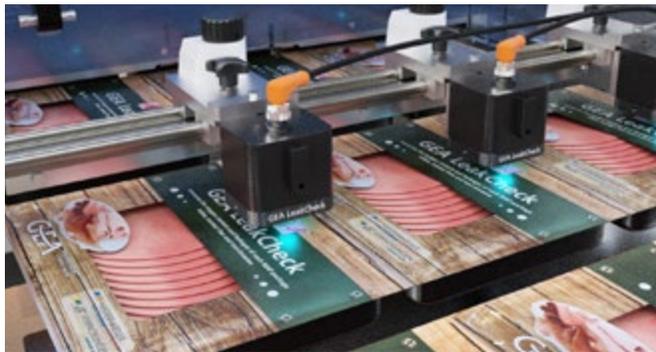
Worldwide demand for fish – and with it, land-based aquaculture – is on the rise. However, fish farmers need solutions to be able to process the resulting sludge in accordance with regulations. With the installation of automated sludge plants, the sludge is processed on site so that it consists of 90 to 95 percent dry matter. This makes it much cheaper to transport and dispose of. The water removed from sludge and pollutants can be released or reused. And the dried sludge is used in biogas plants to generate environmentally friendly energy, as a soil conditioner or as a food-grade fertilizer.

[+ Read more](#)

### Clever packaging instead of wasting food

Globally, about 30 percent of food is wasted or lost; that's about 1.3 billion tons per year. Some of this is lost due to poorly designed or inadequate packaging. Foods with high inputs (labor, feed, fertilizer, water) such as meat, fish or cheese have a larger carbon footprint. Therefore, it is critical that their packaging increases the likelihood of their consumption, even if more plastic is used in the process. On the other hand, GEA has been working hard for years to reduce the amount of film used on GEA machines while ensuring that packaging meets all necessary food and product safety requirements. For example, packaging machines from GEA work with thinner films, which significantly reduces plastic consumption, and with monomaterials, which are easier to recycle. GEA also offers thermoformable fiber-based material for use in MAP (modified atmosphere packaging) and fiber-based options for skin solutions.

[+ Read more](#)



GEA LeakCheck inspects the seal and package integrity of each individual package in an in-line process on the GEA Thermoformer.



## Risk assessments

for the protection of GEA  
sites further systematized

### Elemental risks at GEA sites

GEA also reviews the risks posed by natural hazards to its sites as part of its safety management program. Together with the insurer FM Global, GEA classifies its own sites according to hazards from wind speed, floods and earthquakes. The 79 largest sites by total insurance value are reviewed.

FM Global assesses potential hazards by analyzing on-site conditions – topography, structural condition, basements, building openings, etc. – and using locally available information and maps, as well as (hydrological) surveys if necessary. The insurer has its own “Property Loss Prevention Data Sheets” for the three hazard complexes. For assessing hazards due to wind speed, for example, the data sheet contains detailed technical information for buildings and parts of buildings, as well as the calculation of the corresponding wind load these structures must be able to withstand.

For the classification in terms of flood risk, water bodies (rivers, streams, oceans, lakes or canals) and weather conditions are mainly considered. FM Global has developed its own assessment system for this purpose, which is used in particular in the United States and Germany. In the remaining countries, other systems are used because the data is not publicly available there. For instance, floodgates and barriers, flood pumps, water tightness, emergency power supplies and other flood protection systems are assessed to minimize risk.

The assessment of risk from earthquakes is based primarily on what is referred to as the shaking loss, which typically accounts for the largest share of an earthquake-related loss. Assessed here are, in particular, the geographical location in terms of proximity to regions frequently hit by earthquakes as well as the building materials and structure of the buildings, which have a significant impact on risk mitigation.

At the end of 2020, there were 30 recommendations from the insurer on how to deal with natural hazards. These recommendations are being implemented by the respective GEA unit. For the most part, this involves updating and developing emergency plans. In this way, GEA ensures that employees and assets are prepared in the event of a hazard. The insurer follows up on implementing the recommenda-

tions by way of on-site inspections, generally advising all sites as to how response plans could be developed whenever the risk assessment indicates this is necessary. Risk assessments and tools are available at the facility level.

In addition to the classification and assessment by FM Global, GEA will in the future carry out a further classification in line with the “WeltRisikoBericht” (World Risk Report), which is published by the “Entwicklung Hilft” (Development Helps) alliance and the Ruhr University Bochum – Institut für Friedenssicherungsrecht und Humanitäres Völkerrecht (IFHV – Institute for International Law of Peace and Humanitarian Law). In contrast to many other indices, the World Risk Index not only takes into account a country’s geographical exposure to natural disasters, but also incorporates the vulnerability, coping and adaptation of the respective country. According to the World Risk Report 2020, the World Risk Index is a statistical model for assessing the risk of disasters resulting from extreme natural events such as earthquakes, storms, floods, droughts or sea-level rise. It is based on the understanding that risk is particularly high where natural disasters strike vulnerable societies. The index based on the World Risk Report will help prioritize FM Global’s recommendations for protecting GEA sites going forward.

# Supply chain

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# Supply chain

The cost of materials at GEA regularly accounts for almost half the company's revenue and is therefore the largest single expense item in the consolidated income statement. This not only points to the considerable importance of procurement to GEA's profitability but also reveals the extent of the company's ability to influence ethical and environmental issues in the supply chain. GEA therefore bears a substantial responsibility, which it fulfills in the following ways: Through its "local for local" principle, GEA shortens supply routes and makes them more sustainable, at the same time indirectly supporting the local economies in the vicinity of its sites. Our policy of responsible resource extraction and the use of sustainably produced precursors enable GEA to avert raw material risks and ensure a reliable flow of goods from our suppliers. At GEA, we also firmly believe that responsible procurement can enhance our reputation, our appeal as an employer and, ultimately, sharpen our competitive edge. Special importance is attached to ensuring that human rights are respected in the supply chain.

## Targets

### Standards and values in the supply chain



GEA's supply chains generally conform with the following patterns: For products manufactured in-house, GEA purchases raw materials, semi-finished products, precursors and, notably, components not based on the company's core technologies from external suppliers. For the construction and delivery of process solutions for a wide range of applications during its projects, GEA also purchases plant components and awards work to subcontractors, especially for on-site and assembly services. The steel required for constructional steelwork is usually included in the services rendered by subcontractors. At present, seven production sites in China, India, Poland and Russia are capable of manufacturing multiple product lines (multi-purpose sites), which places corresponding demands on the supply chain.

## Organization

Effective January 1, 2020, the Executive Board introduced a new Global Procurement & Supply Chain organization tasked with ensuring a clear allocation of responsibilities and interfaces. The new organization replaces the three formerly independent purchasing units with a single centralized entity. In addition to providing a template for designing the supply chains for each of the five divisions, this approach also ensures consistent monitoring and full accountability. Furthermore, as of January 1, 2020, the areas of procurement, production and supply chain each report separately to the Executive Board (Chief Operating Officer).

On July 1, 2020, the global procurement organization was split into a strategic organization with clear responsibilities for direct and indirect procurement. The organization reflects the requirements and issues specific to each of the procurement categories. Direct procurement primarily covers electrical and mechanical components and systems as well as project and assembly services. Indirect procurement includes IT, insurance, financial and consulting services, logistics and warehousing, fleet and travel management as well as general services. The individual categories are managed from either a global or a regional perspective. The local procurement organizations in each of the five divisions are bound by the functional directives of the organization responsible for direct procurement. November 2020 saw the announcement of a new operational procurement model. With effect from January 2021, the priority will be to place the procurement function on a more professional footing by harmonizing key functions across the procurement organization. This will ensure that major procurement decisions are managed centrally and that local procurement is controlled by those in charge of Category Management. The timely involvement of the project business remains an area of focus and will be further intensified.

The Covid-19 pandemic had a major impact on the manner in which procurement was organized. Office routines were largely run by employees working from home while warehousing operations were maintained at almost the same level. Since the outbreak of the Covid-19 pandemic, the local units as well as Category Management have submitted weekly status reports to a Covid-19 crisis management team in order to alleviate problems and monitor additional costs.

## Local procurement

Wherever possible, GEA applies the “local for local” principle. In addition to short response times, the targeted reductions of adverse economic and ecological impacts due to fewer shipments as well as the potential to support the local economies at manufacturing and project sites are particularly beneficial. In general, GEA uses the respective local procurement organizations in the divisions. Suppliers are assigned to regions based on their sales location. As a result, it is not always possible to provide unequivocal information on the origin of a product, especially since certain products are only manufactured in one region but are sold worldwide.



**85%**  
Procured locally

## Logistics

In accordance with the “local for local” principle, transport and logistics expenditure only accounts for a small proportion of the company’s overall procurement volume. In the year under review, GEA further intensified its efforts to establish a centrally managed supply-chain organization in order to realize efficiency-related and ecological benefits. Around half of the transport services engaged by GEA are already covered by global framework agreements. The Covid-19 pandemic had a powerful influence on the logistics category in 2020. It became imperative to intensify the close cooperation with key providers in order to maintain punctual deliveries to customers.

NFGS

## Human rights in the supply chain

GEA expressly requires its business partners to apply the values and rules set out in the Code of Corporate Responsibility in all material respects. To ensure compliance with these values and the rules of corporate social responsibility along the entire value chain, GEA has adopted its own Code of Conduct for Suppliers and Subcontractors. GEA practices a zero-tolerance policy with regard to unethical business conduct, in particular bribery, corruption, money laundering, or child and forced labor. The supplier registration process requires that suppliers agree to comply with GEA’s dedicated Code of Conduct for Suppliers and Subcontractors, which was published and implemented in 2018. GEA’s Code of Conduct sets forth the 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 rendering of services. These obligations include the recognition of the ISO 26000 Guidance on Social Responsibility, compliance with international standards, respect for human rights – including the prohibition of child and forced labor as well as discrimination – fair wages and working hours, freedom of association, and occupational health and safety.

Furthermore, the Code of Conduct lays down obligations to engage in environmentally sound business practices, fair competition, respect data protection, protect intellectual property, and comply with foreign trade acts as well as the ban on corruption, bribery and money laundering. When GEA becomes aware of or suspects violations of the Code of Conduct – and notifies the relevant supplier accordingly – GEA expects the supplier to investigate and resolve any such non-compliance issues as quickly as possible and within an agreed time frame. If the supplier is unwilling to rectify such issues, GEA reserves the right to take legal steps, from claiming, pursuing and enforcing corrective measures to the full termination of the business relationship.

In the year under review, the company conducted a total of 269 supplier audits (previous year: 426); this decrease was attributable to the Covid-19 travel restrictions. Of these, 73 new suppliers were audited (previous year: 38). 127 suppliers were audited in relation to negative social/environmental impacts (previous year: 160). GEA performs these evaluations by means of supplier visits, audits and self-declarations, which are undertaken by the Category Management of the purchasing organizations, country organizations, the divisions and the CR & QHSE department.

All purchases (direct and indirect expenses) are covered by the Code of Conduct. Suppliers must accept the Code of Conduct in order to complete purchases that exceed the following threshold amounts specified in the Third Party Policy: EUR 2,500 for individual orders, EUR 10,000 for longer-term contracts. GEA approves a supplier when the Code of Conduct for Suppliers and Subcontractors is an integral part of a supplier agreement. It is the ongoing responsibility of the purchasing organization to inform all GEA companies and all purchasing managers in all regions and divisions of their responsibility for implementing the Code of Conduct for Suppliers and Subcontractors according to the specified process. Acceptance of the Code of Conduct by a supplier or subcontractor must be documented in all cases. If a supplier declines to accept the Code of Conduct, the relevant supplier must promptly submit a written statement in which they detail and specify the basic principles/commitments to which they adhere. This statement requires the approval of the local GEA legal/compliance officer. GEA regularly reviews adherence to the Code of Conduct for Suppliers and Subcontractors as part of regular supplier audits.

### Suppliers in countries carrying risks for human rights

The risk analysis process designed to counter human rights risks (see subsection “Procedures for determining actual and potential negative impact on human rights”, [page 36](#)) also includes a procedure for suppliers and contractors.

Although GEA in general seeks to ensure full compliance with the Code of Conduct for Suppliers and Subcontractors, the human rights situation in some countries calls for special attention. Based on a multi-index approach, GEA currently rates 27 countries with existing

purchasing volumes as critical. For this purpose, the company combines the assessments of four well-known indices:

- “Freedom in the World”, published by Freedom House, an American nongovernmental organization
- “Index of Economic Freedom”, published by the Heritage Foundation and The Wall Street Journal
- “Press Freedom Index”, published by Reporters Without Borders
- “Democracy Index”, published by the Economist Intelligence Unit (EIU), a private company based in the UK

In its assessment, GEA also takes into account the OECD membership of the countries with the lowest score in at least one of the four indices. In terms of value, GEA sources approximately nine percent of its total purchasing volume from human rights priority countries. All suppliers and subcontractors that account for this critical volume have accepted the Code of Conduct. Once this is achieved, regular audits with a special focus on compliance with human rights in these countries are planned.

### Conflict minerals

Under the Code of Conduct for Suppliers and Subcontractors, GEA Group Aktiengesellschaft and its subsidiaries undertake to only purchase components and materials from companies that share GEA’s values with regard to the respect of human rights, integrity and environmental responsibility. In addition, GEA has committed to the “OECD Due Diligence Guidance for Responsible Supply Chains of

Minerals from Conflict-Affected and High-Risk Areas.” This guidance is designed to help prevent the use of minerals that directly or indirectly finance or support armed groups in conflict-affected or high-risk areas (“conflict minerals”). Conflict minerals include tin, tantalum, tungsten and gold (also referred to as “3TG”), irrespective of where they are obtained, processed or sold. At the end of the fiscal year, GEA implemented its own Conflict Minerals Policy, which applies to all suppliers and subcontractors.

GEA aims to provide complete transparency about the source of 3TG in its supply chains. GEA’s aim is for all of the 3TG in products supplied to GEA to be conflict-free. GEA is establishing continuous and company-wide due diligence and risk management processes to determine the source and origin of 3TG in its supply chain, in addition to how it is processed. GEA is working closely together with its suppliers and other relevant actors in the supply chain on this.

To be considered “conflict-free”, the 3TG in items supplied to GEA must be transported, mined and traded in a manner that does not violate any of the principles in Annex II to the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Any ethical concerns or violations of the guidelines can be reported via the GEA whistleblower portal (see [page 33, 37 f.](#)).

## Sustainability in the supply chain

Environmental stewardship is important not only with regard to GEA products and services but also throughout the supply chain. Compliance with basic environmental protection standards along the entire value chain is the only way to secure the trust required for a long-term business relationship and is therefore a top priority for us. As an industrial technology group with strong material expertise and a mission to provide innovative product and service solutions to ensure the long-term success of its customers, GEA procures its raw materials, goods and services worldwide exclusively from qualified suppliers.

The supplier registration process requires that suppliers agree to comply with GEA's dedicated Code of Conduct for Suppliers and Subcontractors. This includes the obligation to engage in environmentally sound business practices and to avoid trade in conflict resources. For information about our code of conduct and how GEA deals with violations, see also [page 69 f.](#)

Major suppliers are visited annually; they are also regularly subjected to an environmental assessment. For the number of supplier reviews, see "Human rights in the supply chain" on [page 69](#); the information also applies to the environmental assessment.

## Quantifying impacts in the supply chain

In 2020, GEA conducted its first analysis of the sustainability impacts along the group's entire supply chain. The analysis also takes account of the greenhouse gas emissions, air pollution, water consumption and waste generated by GEA suppliers and upstream suppliers, as well as workdays lost due to occupational injury and illness.

From this analysis, GEA is able to identify the hotspots of selected sustainability risks in the supply chain and minimize or eliminate them in cooperation with the suppliers. The impacts indirectly attributable to GEA were calculated with the help of an established macroeconomic model (PwC ESCHER) based on GEA's purchasing volumes broken down by purchasing sectors and regions. Fiscal year 2019 served as the reference period for the data collection.

The quantification of greenhouse gas emissions from the purchase and transport of commodities, services and capital goods reveals that they exceed the greenhouse gas emissions from the company's own business activities (reference) by a factor greater than six. The majority of supply-chain emissions are generated by upstream suppliers. The upstream chain of the energy utilities that supply electricity to GEA is a significant issue in terms of emissions.

Analysis of water consumption and waste generation along the value chain reveals a similar pattern of sustainability impacts. Again, the supply chain impacts identified exceed those of the company's own business activities (reference). The most significant drivers of waste generation and water consumption along the supply chain are the extraction of fossil fuels for electricity generation as well as the manufacturing of machinery and accessories used in GEA's production activities.

An analysis of workplace accidents resulting in a temporary inability to work as determined by the macro model showed similar levels of occurrence with suppliers compared to GEA's own business activities (reference).

**A** large proportion of GEA's procurement and sales operations are global. Given integrated supply structures make quantifying the impact of GEA's business activities very complex, we are now using a macroeconomic model to perform a global impact analysis of supply chains by sector and region. We focus on greenhouse gas emissions, water and waste generation and workplace accidents and have the ability to pinpoint the main drivers of each, as well as identify opportunities and risks throughout the supply chain at an early stage.

**Detmar Tietz**, Head of Corporate Responsibility & QHSE, GEA

# Appendix

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## Reporting profile

GEA's Sustainability Report for fiscal year 2020 again follows the international standards set by the Global Reporting Initiative (GRI). This report has been prepared in accordance with the GRI standards: Core option.

At the request of GEA's Supervisory Board, KPMG AG Wirtschaftsprüfungsgesellschaft reviewed GEA's non-financial group statement for fiscal year 2020 and performed a limited assurance engagement according to Sections 315b and 315c in conjunction with Sections 289c to 289e of the German Commercial Code (HGB). This review was in line with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", see GRI Disclosure 102-56.

### Disclosure 102-45

Unless otherwise specified, this disclosure covers the global activities of the entire group, i.e. GEA Group Aktiengesellschaft and all entities over which GEA has a controlling or significant influence. The list of subsidiaries, associates and joint ventures which meet this definition is provided in Section 12.4 Investments in the Notes to the Consolidated Financial Statements (GEA Annual Report) for the fiscal year 2020.

### Disclosure 102-48

There were no restatements; see Disclosure 102-49 for more information about the addition of material topics and any changes in related indicators.

### Disclosure 102-46

GEA's CR & QHSE and Communication, Marketing & Branding departments again held a full-day workshop with external advisors in 2020 to discuss GEA's economic, ecological and social impact on the topics defined for the year. The main aim was to define new topics on the basis of the stakeholder survey, set the boundaries between topics, and discuss and define reporting boundaries. The decision was made to maintain the existing materiality analysis overall but to add two environmental topics and increase the level of detail of the reporting provided for some topics. The topic of taxes was discussed at length, and ultimately found to not be a material topic for GEA. The materiality analysis process was discussed with the entire GEA Executive Board and approved.

For the purpose of determining which topics will be covered in the non-financial statement, GEA has taken into consideration the extent to which a specific topic is necessary to understanding GEA's business performance, business results and the situation of the company (net assets, financial position and results of operations) pursuant to Section 315c in conjunction with 289c (3) of the HGB. Potential risks related to these topics were identified, discussed and assessed.

### Disclosure 102-42

GEA primarily drew on internal experts to define and engage with external stakeholder groups.

### Disclosure 102-40

As a listed company with a shareholder structure that is dominated by institutional investors – with no majority shareholder – GEA has defined the traditional "owners" stakeholder group as "investors". It includes current and potential investors, in addition to shareholders, analysts, investment firms and rating agencies. GEA engages with the following stakeholder groups, which were reallocated in the previous year:

- Investors
- Employees
- Customers
- Industry / peer group (including suppliers)
- NGOs / civil society
- Sustainability experts (scientists, consultants)
- Authorities / political representatives

### Disclosure 102-43

A number of different sources were used to evaluate the updated materiality analysis, including an employee survey and a customer satisfaction survey. In 2020, GEA took a more systematic approach to surveying its stakeholders for the purpose of verifying the relevance of its economic, ecological and social impacts. Beverage, dairy and food customers from Asia, Europe, and Latin and North America were surveyed between March and June 2020. Their feedback about the importance of environmental issues prompted GEA to define water and effluents, as well as waste as material topics. GEA had previously included these topics in its reports voluntarily. The current management approach for respecting human rights was enhanced after discussions with different departments in order to identify current and

future requirements. This primarily served to meet the requirements of the National Action Plan for Business and Human Rights. As in previous years, feedback from the capital market (particularly ratings and ESG analysts) about our sustainability reporting was analyzed carefully together with CR & QHSE experts. Every year, GEA takes part in the Climate Change Information Request of the Carbon Disclosure

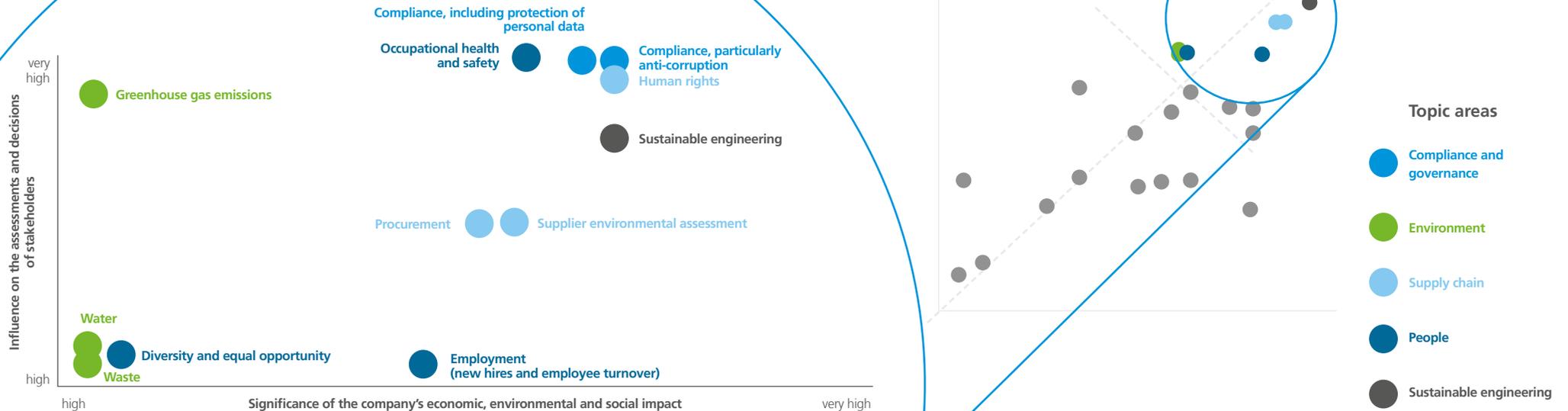
Project (CDP) and in other ESG rating systems. These documents were also taken into consideration. The sustainability reports of major customers and competitors were used for comparative analyses.

#### Disclosure 102-49

Water and effluents as well as waste were added as new material topics. GEA now considers the topic of human rights to be relevant for the company's net assets, financial position and results of operations; the level of detail of reporting was increased significantly.

#### Disclosure 102-47

Material topics for 2020



**Disclosure 102-44**

This overview shows which stakeholder groups found which topics most important:

<b>Stakeholder groups assessment of topic materiality</b>	Investors	Customers	Industry / peer group	NGOs / civil society	Sustainability experts (scientists, consultants)	Authorities / political representa- tives	Employees
Procurement			•	•		•	
Compliance, particularly anti-corruption	•	•	•	•	•	•	•
Water and effluents	•	•	•	•	•	•	•
Greenhouse gas emissions	•	•	•	•	•	•	•
Waste	•	•	•	•	•	•	•
Environmental responsibility in the supply chain	•	•	•	•	•	•	•
Employment	•			•			•
Occupational health and safety	•	•	•	•		•	•
Diversity and equal opportunity	•			•		•	•
Human rights	•	•	•	•	•	•	•
Compliance, including protection of personal data	•				•	•	•
Sustainable engineering	•	•	•		•	•	•

## Facts and figures

### Sustainability at GEA

Management system	Number of certificates 2020 ✓	Number of certificates 2019 ✓	Number of certificates 2018 ✓
DIN EN ISO 9001:2015	92	89	105
DIN EN ISO 14001:2015	39	38	30
DIN EN ISO 45001:2018	35	30	25
DIN EN ISO 50001:2011 / ISO 50001:2018	14	16	17
<b>Total number of certificates</b>	<b>180</b>	<b>173</b>	<b>177</b>

✓ Audited by KPMG

**ISO 9001** is the international standard that specifies requirements for a quality management system. Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements. The standard also helps organizations to continually improve their quality management system.

**ISO 14001** is the international standard that specifies requirements for an effective environmental management system (EMS). It is part of the ISO 14000 family of standards on environmental management.

**ISO 45001** specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use. It was published by the International Organization for Standardization in March 2018.

**ISO 50001** specifies requirements for establishing an energy management system. The intended outcome is to allow an organization to continually improve its energy performance.

## People

### Employees\* by contract type and gender

	12/31/2020					
	Total employees		of whom on permanent contracts		of whom on temporary contracts	
	Number	in %	Number	in %	Number	in %
Male	14,900	81.7	14,266	78.2	634	3.5
Female	3,332	18.3	3,137	17.2	195	1.1
<b>Total</b>	<b>18,232</b>	<b>100.0</b>	<b>17,404</b>	<b>95.5</b>	<b>828</b>	<b>4.5</b>

\*) Full-time equivalents excluding apprentices and suspended employment contracts

### Employees\* by contract type and region

	12/31/2020					
	Total employees		of whom on permanent contracts		of whom on temporary contracts	
	Number	in %	Number	in %	Number	in %
DACH & Eastern Europe	6,883	40.0	6,739	97.9	144	2.1
Western Europe/Middle East & Africa	3,132	16.4	3,055	97.5	78	2.5
Northern and Central Europe	3,040	14.9	3,016	99.2	25	0.8
Asia Pacific	3,005	16.8	2,437	81.1	569	18.9
North America	1,618	8.9	1,618	100.0	0	0.0
Latin America	553	3.0	553	100.0	0	0.0
<b>Total</b>	<b>18,232</b>	<b>100.0</b>	<b>17,404</b>	<b>95.5</b>	<b>828</b>	<b>4.5</b>

\*) Full-time equivalents excluding apprentices and suspended employment contracts

### Employees\* by employment type and gender

	12/31/2020					
	Total employees		Men		Women	
	Number	in %	Number	in %	Number	in %
Full-time	17,291	94.8	14,586	84.4	2,704	15.6
Part-time	941	5.2	314	33.3	627	66.7
<b>Total</b>	<b>18,232</b>	<b>100</b>	<b>14,900</b>	<b>81.7</b>	<b>3,332</b>	<b>18.3</b>

\*) Full-time equivalents excluding apprentices and suspended employment contracts

Total workforce*	12/31/2020		12/31/2019		Absolute change
	in %		in %		
<b>GEA employees</b>	<b>18,232</b>	<b>94.6</b>	<b>18,490</b>	<b>92.1</b>	<b>-258</b>
Contingent workers	1,036	5.4	1,585	7.9	-549
of whom employees under the Labor Leasing Act/leased employees	938	90.5	1,425	89.9	-487
of whom self-employed contractors	98	9.5	161	10.1	-63
<b>Total</b>	<b>19,268</b>	<b>100</b>	<b>20,075</b>	<b>100</b>	<b>-807</b>

\*) Figures based on full-time equivalents

Members of the executive bodies and employees by gender (in %)	12/31/2020	
	of whom men	of whom women
Supervisory Board	50.0	50.0
Executive Board	100.0	0.0
Senior executives*	84.5	15.5
Total workforce	81.7	18.3

\*) Number of employees in management positions, excluding suspended employment contracts; GEA defines the members of the top three management levels beneath the Executive Board as senior executives.

Vocational training in Germany	GEA	GEA
	12/31/2020	12/31/2019
Apprentices	381	368
Ratio of apprentices (%)	6.1	5.9

Total number and rate of new hires by region, age group and gender	12/31/2020											
	Age < 30			Age 30 – 50			Age > 50			GEA total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total

**DACH & Eastern Europe**

Total number of new hires	73	53	<b>126</b>	141	86	<b>227</b>	35	12	<b>48</b>	250	151	<b>401</b>
Rate of new hires (%)	13.5	29.4	<b>18.4</b>	4.9	10.8	<b>6.5</b>	1.4	2.2	<b>1.6</b>	4.2	9.9	<b>5.4</b>

**Western Europe,  
Middle East & Africa**

Total number of new hires	53	13	<b>66</b>	107	37	<b>144</b>	9	5	<b>13</b>	169	54	<b>223</b>
Rate of new hires (%)	27.2	28.9	<b>35.9</b>	6.0	8.9	<b>8.6</b>	1.1	2.9	<b>1.8</b>	6.1	8.8	<b>6.6</b>

**Northern and Central Europe**

Total number of new hires	34	11	<b>45</b>	133	37	<b>169</b>	38	7	<b>45</b>	204	56	<b>260</b>
Rate of new hires (%)	21.2	25.4	<b>23.6</b>	10.4	11.8	<b>11.4</b>	3.1	4.0	<b>3.4</b>	7.7	10.3	<b>8.1</b>

**Asia Pacific**

Total number of new hires	30	21	<b>52</b>	102	25	<b>127</b>	4	1	<b>6</b>	137	47	<b>184</b>
Rate of new hires (%)	17.0	47.6	<b>23.9</b>	5.2	5.8	<b>5.4</b>	1.3	2.1	<b>1.5</b>	5.5	9.0	<b>6.1</b>

**North America**

Total number of new hires	15	8	<b>23</b>	42	20	<b>62</b>	18	11	<b>30</b>	76	39	<b>115</b>
Rate of new hires (%)	17.3	28.8	<b>21.9</b>	6.8	16.9	<b>9.3</b>	2.8	9.7	<b>4.2</b>	5.5	15.0	<b>7.0</b>

**Latin America**

Total number of new hires	8	2	<b>11</b>	34	9	<b>43</b>	5	1	<b>5</b>	47	12	<b>59</b>
Rate of new hires (%)	33.5	10.6	<b>24.3</b>	10.5	9.4	<b>11.1</b>	4.9	5.9	<b>5.5</b>	10.6	9.3	<b>10.3</b>

**Total**

Total number of new hires	214	109	<b>323</b>	559	213	<b>772</b>	110	37	<b>147</b>	883	359	<b>1,242</b>
Rate of new hires (%)	17.9	29.8	<b>22.7</b>	6.3	9.9	<b>7.7</b>	1.9	3.5	<b>2.4</b>	5.6	10.0	<b>6.5</b>

The rate of new entries is based on the total number of employees in the relevant groups.

Total number and rate of employee departures by region, age group and gender	12/31/2020											
	Age < 30			Age 30 – 50			Age > 50			GEA Total		
	Men	Women	total	Men	Women	total	Men	Women	total	Men	Women	total
<b>DACH &amp; Eastern Europe</b>												
Total number of departures	35	11	<b>46</b>	106	44	<b>150</b>	191	28	<b>218</b>	331	83	<b>414</b>
Departure rate (%)	6.4	6.2	<b>6.7</b>	3.7	5.5	<b>4.3</b>	7.6	5.1	<b>7.6</b>	5.6	5.5	<b>5.6</b>
<b>Western Europe, Middle East &amp; Africa</b>												
Total number of departures	20	2	<b>22</b>	166	28	<b>194</b>	119	12	<b>131</b>	305	42	<b>347</b>
Departure rate (%)	10.1	5.5	<b>12.1</b>	9.4	6.8	<b>11.6</b>	14.9	7.5	<b>17.9</b>	11.0	6.9	<b>10.3</b>
<b>Northern and Central Europe</b>												
Total number of departures	18	11	<b>28</b>	117	40	<b>157</b>	160	21	<b>181</b>	294	72	<b>366</b>
Departure rate (%)	10.9	24.1	<b>14.8</b>	9.2	12.7	<b>10.6</b>	13.0	11.5	<b>13.7</b>	11.1	13.2	<b>11.4</b>
<b>Asia Pacific</b>												
Total number of departures	25	4	<b>29</b>	166	31	<b>197</b>	51	7	<b>58</b>	242	42	<b>284</b>
Departure rate (%)	13.9	9.9	<b>13.5</b>	8.4	7.4	<b>8.5</b>	15.0	12.8	<b>15.1</b>	9.7	8.2	<b>9.4</b>
<b>North America</b>												
Total number of departures	14	6	<b>19</b>	63	15	<b>78</b>	61	13	<b>74</b>	138	33	<b>171</b>
Departure rate (%)	15.2	21.7	<b>18.3</b>	10.2	12.3	<b>11.6</b>	9.2	11.0	<b>10.4</b>	10.0	12.7	<b>10.5</b>
<b>Latin America</b>												
Total number of departures	3	2	<b>5</b>	30	10	<b>40</b>	12	0	<b>12</b>	45	12	<b>57</b>
Departure rate (%)	13.1	8.9	<b>12.0</b>	9.2	10.8	<b>10.4</b>	12.3	0.7	<b>11.8</b>	10.1	9.5	<b>10.0</b>
<b>Total</b>												
Total number of departures	113	37	<b>150</b>	648	168	<b>816</b>	593	81	<b>673</b>	1,354	285	<b>1,639</b>
Departure rate (%)	9.5	10.1	<b>10.5</b>	7.3	7.8	<b>8.1</b>	10.5	7.5	<b>11.0</b>	8.6	7.9	<b>8.5</b>

The departure rates refer to the total number of employees in the respective group.

Health and safety figures	2020 ✓	2019 <sup>1</sup> ✓	2018 ✓	2017 ✓
Number of occupational accidents with lost time	219	230	243	242
Number of occupational accidents resulting in fatalities	1	0	0	0
Number of days lost <sup>2</sup>	4,684	5,169	4,786	6,716
Lost day frequency rate <sup>3</sup>	5.39	5.63	5.97	6.18
Lost day severity rate <sup>4</sup>	115.32	126.63	117.58	172.18
Proactive injury rate (PAIR) <sup>5</sup>	92.08	128.96	145.76	97.06
Total injury rate (TIR) <sup>6</sup>	32.18	33.39	37.88	45.18
Sites without accidents with period of absence as a percentage of all sites	73	76	60	53

✓ Audited by KPMG

1) Since 2018 GEA has been counting days lost up to 182 days in accordance with European Statistics on Accidents at Work (ESAW) compared with the previous figure of 365 days.

2) Accident rate: Accidents with period of absence per million hours worked

3) Lost day severity rate: Days lost after accidents per million hours worked

4) Near misses per million hours worked; the PAIR rate includes the total number of miscellaneous incidents (e.g. hazardous conditions, hazardous activities, close-calls, environmental incidents, fire without any injuries, etc.)

5) Accidents with and without period of absence per million hours worked

## Environment

Direct greenhouse gas emissions (Scope 1), in metric tons of CO <sub>2</sub> equivalents	2020 ✓	2019 <sup>1</sup> ✓	2018 ✓
Asia Pacific (excl. China)	573.0	547.5	562
China	481.7	491.8	472
DACH & Eastern Europe	16,611.5	19,151.8	18,737
Latin America	7.4	6.9	5
North America	5,268.4	6,284.5	8,150
Northern and Central Europe	1,542.4	1,673.4	1,402
Western Europe, Middle East & Africa	5,910.0	6,049.6	7,799
<b>GEA Total</b>	<b>30,394</b>	<b>34,205</b>	<b>37,127</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

Indirect energy-related greenhouse gas emissions (scope 2), in metric tons of CO <sub>2</sub> equivalents	2020 ✓		2019 <sup>1</sup> ✓		2018 ✓
	site-related	market-based <sup>2</sup>	site-related	market-based <sup>3</sup>	site-related
Asia Pacific (excl. China)	1,313.5	1,262.3	1,569.3	1,466.5	1,463
China	4,679.8	4,679.8	5,701.6	5,701.6	4,779
DACH & Eastern Europe	16,822.8	11,281.9	17,843.7	13,617.1	18,661
Latin America	78.6	78.6	101.1	101.1	97
North America	5,058.0	5,058.0	5,846.4	5,846.4	6,107
Northern and Central Europe	2,456.6	2,276.1	2,620.3	2,620.3	2,459
Western Europe, Middle East & Africa	3,876.2	3,850.9	4,201.5	4,201.5	1,995
<b>GEA Total</b>	<b>34,286</b>	<b>28,488</b>	<b>37,884</b>	<b>33,555</b>	<b>35,561</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

2) Market-based 31 sites in Belgium, Denmark, Germany, France, New Zealand, Austria and Spain

3) Market-based 22 sites in Germany and New Zealand

Other indirect greenhouse gas emissions (Scope 3), in metric tons of CO <sub>2</sub> equivalents	2020 ✓	2019 ✓	2018 ✓
<b>GEA Total</b>	<b>3,602</b>	<b>18,412</b>	<b>21,021</b>

✓ Audited by KPMG

Total greenhouse gas emissions (Scope 1, 2, 3), in metric tons of CO <sub>2</sub> equivalents	2020 ✓		2019 <sup>1</sup> ✓		2018 ✓
	site-related	market-based <sup>2</sup>	site-related	market-based <sup>3</sup>	site-related
<b>GEA Total</b>	<b>68,282</b>	<b>62,484</b>	<b>90,501</b>	<b>86,172</b>	<b>93,709</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

2) Market-based 31 sites in Belgium, Denmark, Germany, France, New Zealand, Austria and Spain

3) Market-based 22 sites in Germany and New Zealand

Total greenhouse gas emissions (only Scope 1 and 2), in metric tons of CO <sub>2</sub> equivalents	2020 ✓		2019 <sup>1</sup> ✓		2018 ✓
	site-related	market-based <sup>2</sup>	site-related	market-based <sup>3</sup>	site-related
<b>GEA Total</b>	<b>64,680</b>	<b>58,882</b>	<b>72,089</b>	<b>67,760</b>	<b>72,688</b>
CO <sub>2</sub> equivalents in relation to GEA revenue (in tons per EUR 1 million)	13.95	12.70	14.77	13.89	15.05

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

2) Market-based 31 sites in Belgium, Denmark, Germany, France, New Zealand, Austria and Spain

3) Market-based 22 sites in Germany and New Zealand

Water	2020 ✓	2019 <sup>1</sup>	2018
<b>Withdrawal (in thousand cubic meters)</b>	306.2	309.0	294.5
Municipal and tap water (in thousand cubic meters)	273.8	270.5	265.4
Well and groundwater (in thousand cubic meters)	32.4	38.5	29.1
Water withdrawal per EUR 1 million of revenues (in cubic meters)	66.1	63.3	61.0

✓ Disclosures on water withdrawal audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

Waste by composition, in metric tons	2020 ✓			2019 <sup>1</sup>		
	Waste generated	Waste diverted from disposal	Waste forwarded for disposal	Waste generated	Waste diverted from disposal	Waste forwarded for disposal
Household waste	1,224.9	–	1,224.9	1,438.7	–	1,438.7
Packaging material: Paper: Cardboard	647.6	647.6	–	681.6	681.6	–
Paper and cardboard	169.5	169.5	–	189.0	189.0	–
Packaging material: Plastics	173.0	173.0	–	185.7	185.7	–
Packaging material: Wood	1,684.4	1,684.4	–	2,350.0	2,350.0	–
Aqueous purging liquids containing hazardous substances	777.0	777.0	–	846.0	846.0	–
Halogen-free processing emulsions and solutions	409.3	409.3	–	438.6	438.6	–
Metal	7,535.6	7,535.6	–	8,000.6	8,000.6	–
<b>Total</b>	<b>12,621</b>	<b>11,396</b>	<b>1,225</b>	<b>13,928</b>	<b>12,691</b>	<b>1,439</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

Waste diverted from disposal by a method of recovery, in metric tons	2020 ✓			2019 <sup>1</sup>		
	On site	Off site	Total	On site	Off site	Total
Hazardous waste						
Processing for reuse	–	–	–	–	–	–
Recycling	–	–	–	–	–	–
Other recovery processes	–	1,186.4	1,186.4	–	1,284.5	1,284.5
<b>Total</b>			<b>1,186.4</b>			<b>1,284.5</b>
Non-hazardous waste						
Processing for reuse	–	–	–	–	–	–
Recycling	–	7,535.6	7,535.6	–	8,000.6	8,000.6
Other recovery processes	–	2,674.4	2,674.4	–	3,406.3	3,406.3
<b>Total</b>			<b>10,210</b>			<b>11,407</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

Waste forwarded for disposal by a disposal process, in metric tons	2020 ✓			2019 <sup>1</sup>		
	On site	Off site	Total	On site	Off site	Total
Hazardous waste						
Combustion (with energy recovery)	–	–	–	–	–	–
Combustion (without energy recovery)	–	–	–	–	–	–
Landfilling	–	–	–	–	–	–
Other disposal methods	–	–	–	–	–	–
<b>Total</b>			<b>–</b>			<b>–</b>
Non-hazardous waste						
Combustion (with energy recovery)	–	1,224.9	1,224.9	–	1,438.7	1,438.7
Combustion (without energy recovery)	–	–	–	–	–	–
Landfilling	–	–	–	–	–	–
Other disposal methods	–	–	–	–	–	–
<b>Total</b>			<b>1,225</b>			<b>1,439</b>

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

Key indicators for waste	2020 ✓	2019 <sup>1</sup>
Hazardous waste / total waste ratio (in %)	9.40	9.22
Recycling / total waste ratio (in %)	80.90	81.90
Volume of waste per EUR 1 million in revenue (in tons)	2.72	2.85
Waste per full-time equivalent <sup>2</sup> (in tons)	1.10	1.22

✓ Audited by KPMG

1) Due to changes in allocation and calculation as well as additions and divestments of companies, the basis of reporting locations was adjusted for 2019.

2) Only full-time equivalents of waste-reporting sites

## Supply chain

Region	2020 Local procurement as a percentage of total volume (in %)*	2019 Local procurement as a percentage of total volume (in %)*
Europe, Middle East, Africa	82	82
Asia Pacific	91	71
North and South America	95	82

\*) Excluding intragroup procurement

Status of 2020 target attainment of the most important KPIs	Actual 2020
The Lost Day Frequency Rate does not exceed 5.6 accidents with periods of absence per 1 million hours worked in 2020 for explanations see <a href="#">page 54 f.</a> , for data see <a href="#">page 78</a>	 5.39
The Lost Day Severity Rate does not exceed 120 lost days after accidents per 1 million hours worked in 2020 for explanations see <a href="#">page 55 f.</a> , for data see <a href="#">page 78</a>	 115.32
GEA records more than 100 near misses per 1 million hours worked (Proactive Injury Rate, PAIR) in 2020 for explanations see <a href="#">page 55 f.</a> , for data see <a href="#">page 78</a>	 92.08
GEA reduces greenhouse gas emissions 2020 (Scope 1 and 2 market-based) in relation to revenues by 2.1% compared to previous year for explanations see <a href="#">page 60</a> , for data see <a href="#">page 79</a>	 -8.5%
GEA reduces greenhouse gas emissions by 19.1% in relation to sales by 2025 (Scope 1 and 2 market-based) compared to the base year 2015 for explanations see <a href="#">page 60</a> , for data see <a href="#">page 79</a>	 -29.3%
GEA reduces water withdrawal in 2020 in relation to revenues by 2.1% compared to the previous year for explanations see <a href="#">page 61</a> , for data see <a href="#">page 80</a>	 4.3%
GEA reduces waste volume in 2020 in relation to revenues by 2.1% compared to the previous year for explanations see <a href="#">page 64</a> , for data see <a href="#">page 82</a>	 -4.6%

## GRI content index

GEA's Sustainability Report for fiscal year 2020 follows the international standards set by the Global Reporting Initiative (GRI). This report has been prepared in accordance with the GRI standards: Core option. At the request of GEA's Supervisory Board, KPMG AG Wirtschaftsprüfungsgesellschaft reviewed GEA's non-financial statement for fiscal year 2020 as well as the disclosures on water withdrawal and waste for 2020 in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" and, in addition, performed a limited assurance engagement (see [Disclosure 102-56](#)).

GRI standard	Disclosure	Page	Note
GRI 101: Foundation 2016			

## General Disclosures

Organizational profile	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-1 Name of the organization	<a href="#">page 14</a>	
	102-2 Activities, brands, products, and services	<a href="#">page 15</a>	
	102-3 Location of headquarters	<a href="#">page 95</a>	
	102-4 Location of operations	<a href="#">page 17</a>	
	102-5 Ownership and legal form	<a href="#">page 14</a>	
	102-6 Markets served	<a href="#">page 16 f.</a>	
	102-7 Scale of the organization	<a href="#">page 14,</a> <a href="#">page 16 f.</a>	
	102-8 Information on employees and other workers	<a href="#">page 16 f.,</a> <a href="#">page 76 ff.</a>	
	102-9 Supply chain	<a href="#">page 68 ff.</a>	
	102-10 Significant changes to the organization and its supply chain	<a href="#">page 15 ff.</a>	

	102-11 Precautionary principle or approach	<a href="#">page 20</a> <a href="#">page 25</a> <a href="#">page 35 ff.</a> <a href="#">page 41 ff.</a>	
	102-12 External initiatives	<a href="#">page 53</a>	
	102-13 Membership of associations	<a href="#">page 53</a>	

Strategy	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-14 Statement from senior decision-maker	<a href="#">page 3 f.</a>	

Ethics and integrity	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-16 Values, principles, standards, and norms of behavior	<a href="#">page 23 f.,</a> <a href="#">page 31 f.,</a> <a href="#">page 35 f.,</a> <a href="#">page 69 f.</a>	

Governance	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-18 Governance structure	<a href="#">page 16 f.</a>	

Stakeholder engagement	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-40 List of stakeholder groups	<a href="#">page 73</a>	
	102-41 Collective bargaining agreements	<a href="#">page 50</a>	
	102-42 Identifying and selecting stakeholder	<a href="#">page 73</a>	
	102-43 Approach to stakeholder engagement	<a href="#">page 73 f.</a>	
	102-44 Key topics and concerns raised	<a href="#">page 75</a>	

Reporting practice	Disclosure	Page	Note
GRI 102: General Disclosures 2016	102-45 Entities included in the consolidated financial statements		The full list of entities is available in the 2020 Annual Report (Notes to the Consolidated Financial Statements, section 12.4)
	102-46 Defining report content and topic Boundaries	<a href="#">page 73</a>	
	102-47 List of material topics	<a href="#">page 74</a>	
	102-48 Restatements of information	<a href="#">page 73</a>	
	102-49 Changes in reporting	<a href="#">page 74</a>	
	102-50 Reporting period	<a href="#">page 18</a>	
	102-51 Date of most recent report		Annual Report 2019 (January 1 to December 31, 2019)
	102-52 Reporting cycle	<a href="#">page 21</a>	annual
	102-53 Contact point for questions regarding the report	<a href="#">page 95</a>	
	102-54 Claims of reporting in accordance with the GRI Standards	<a href="#">page 21</a> , <a href="#">page 73</a>	
	102-55 GRI content index	<a href="#">page 83 ff.</a>	
102-56 External assurance	<a href="#">page 93 f.</a>		

## Topic-specific disclosures: Economy

Procurement Practices	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	<a href="#">page 68 f.</a>	
	103-2 The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	<a href="#">page 69</a> , <a href="#">page 82</a>	

Anti-corruption	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	<a href="#">page 31 ff.</a> ,	
	103-2 The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 205: Anti-corruption 2016 ✓	205-1 Operations assessed for risks related to corruption	<a href="#">page 33</a>	
	205-2 Communication and training about anti-corruption policies and procedures	<a href="#">page 32</a>	The following data is available: number of employees provided with training by means of e-learning (not broken down by employee category or region), information about training broken down by subject and region (without number of employees) and preventive measures implemented by business partners (no total number). The members of the governance body (Supervisory Board) are provided with information about compliance issues (including anti-corruption) on a regular basis.

## Topic-specific disclosures: Environment

Emissions	Disclosure	Page	Note	
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	<a href="#">page 25</a> , <a href="#">page 59 ff.</a> , <a href="#">page 71</a>	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 305: Emissions 2016 ✓	305-1	Direct (Scope 1) GHG emissions	<a href="#">page 59 f.</a> , <a href="#">page 79</a>	This disclosure includes emissions from the following sources: production sites, workshops and service sites in addition to GEA Group Aktiengesellschaft as the company headquarters.
	305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">page 59 f.</a> , <a href="#">page 79</a>	Market-based emissions were calculated for the following countries: Belgium, Denmark, Germany, France, New Zealand, Austria and Spain.
	305-3	Other indirect (Scope 3) GHG emissions	<a href="#">page 59 f.</a> , <a href="#">page 71</a> , <a href="#">page 79</a>	This disclosure currently only includes business travel. GEA distinguishes between air travel (recorded globally by GEA Travel Agency), hire car bookings (in Europe and the USA) and travel on Deutsche Bahn (Germany bookings).
	305-4	GHG emissions intensity	<a href="#">page 59 f.</a> , <a href="#">page 79</a>	
Supplier Environmental Assessment	Disclosure	Page	Note	
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	<a href="#">page 71</a>	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	<a href="#">page 71</a>	

Water and effluents	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	<a href="#">page 61 ff.</a>
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 303: Water and effluents 2018 ✓	303-1	Interactions with water as a shared resource	<a href="#">page 61 ff.</a>
	303-2	Management of water discharge-related impacts	<a href="#">page 62</a>
	303-3	Water withdrawal	<a href="#">page 80</a>
Waste	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	<a href="#">page 63 ff.</a>
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 306: Waste 2020 ✓	306-1	Waste generation and significant waste-related impacts	<a href="#">page 63 f.</a> , <a href="#">page 80 ff.</a>
	306-2	Management of significant waste-related impacts	<a href="#">page 63 f.</a> , <a href="#">page 80 ff.</a>
	306-3	Waste generated	<a href="#">page 63 f.</a> , <a href="#">page 80 ff.</a>
	306-4	Waste diverted from disposal	<a href="#">page 63 f.</a> , <a href="#">page 80 ff.</a>
	306-5	Waste directed to disposal	<a href="#">page 63 f.</a> , <a href="#">page 80 ff.</a>

## Topic-specific disclosures: Social

Employment	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	➔ page 48 ff.
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	➔ page 48 f., ➔ page 77 f.

Occupational Health and Safety	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	➔ page 25, ➔ page 53 ff.
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 403: Occupational Health and Safety 2018 ✓	403-1	Occupational health and safety management system	➔ page 25, ➔ page 54
	403-2	Hazard identification, risk assessment and incident investigation	➔ page 53 f., ➔ page 55
	403-3	Occupational health services	➔ page 54
	403-4	Worker participation, consultation and communication on occupational health and safety	➔ page 25
	403-5	Worker training on occupational health and safety	➔ page 54
	403-6	Promotion of worker health	➔ page 53 f., ➔ page 56

403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	➔ page 53, ➔ page 55, ➔ page 69, ➔ page 71	
403-9	Work-related injuries	➔ page 78	The types of work-related injuries were not disclosed.

Diversity and Equal Opportunity	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	➔ page 51
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	➔ page 77 This disclosure does not include the age groups of individuals within governance bodies. Resumes of board members can be found at <a href="https://www.gea.com">+ gea.com</a> .

Supplier Social Assessment	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	➔ page 69 f.
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 414: Supplier Social Assessment 2016 ✓	414-2	Negative social impacts in the supply chain and actions taken	➔ page 69 f. Central topic in the area of human rights

Customer Health and Safety	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	🔗 page 25, 🔗 page 28
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 416: Customer Health and Safety 2016 ✓	Independent disclosure: Number of ISO 9001, 14001, 50001 and 45001 certificates	🔗 page 76	The number of certificates is a general indicator of quality and sustainability.

Customer Privacy	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	🔗 page 34 f.
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	🔗 page 35

Socioeconomic Compliance	Disclosure	Page	Note
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	🔗 page 31 ff.
	103-2	The management approach and its components	
	103-3	Evaluation of the management approach	
GRI 419: Socioeconomic Compliance 2016 ✓	419-1	Non-compliance with laws and regulations in the social and economic area	🔗 page 33 f. Includes protection of personal data and violations

### Sustainable engineering (not covered by an existing GRI Standard)

For GEA it is crucial to optimize the impact of products and solutions (outside the organization) under economic, ecological and social aspects, taking into account both opportunities and risks.

This is what GEA understands by "sustainable engineering". GEA manages the topic of sustainable engineering through product development and innovation, which are subordinate to the technology strategy.

GEA discloses key figures from the innovation process under this heading.

GEA continued to work on enhancing its climate reporting in 2020, and internal projects to quantify greenhouse gas emissions along the entire value chain (upstream/downstream) are currently underway.

A sub-project has been set up to calculate and simulate the climate footprint of GEA products during their use phase. The findings are expected in fiscal year 2021.

✓ Audited by KPMG in accordance with ISAE 3000 (water withdrawal and waste for 2020 only)



## Contribution to the Sustainable Development Goals

The Sustainable Development Goals (SDG) were adopted by the General Assembly of the United Nations in 2015. They cover economic, environmental and social issues, and are geared toward a 2030 timeframe. Although the signatories, i.e. all nation states, are the primary addressees, the cooperation of other actors, including companies, is crucial for putting the goals into practice. GEA's contribution is illustrated by the following links to the GRI standards underlying its sustainability reporting. Further information on the SDGs can be found at <https://sdgs.un.org>. The links are based on the GRI publication "SDG Compass - Linking the SDGs and GRI".



### Healthy lives for all

Ensure healthy lives and promote wellbeing for all at all ages

Topic	GRI standard
Waste	Waste, GRI 306
Water quality	Water and effluents, GRI 303
Occupational health and safety	Occupational health and safety, GRI 403



### Gender equality

Achieve gender equality and empower all women and girls

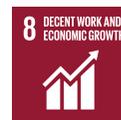
Topic	GRI standard
Gender equality	New employee hires and employee turnover, GRI 401-1; Diversity of governance bodies and employees, GRI 405-1
Women in management positions	Diversity of governance bodies and employees, GRI 405-1
Workplace harassment and violence	Negative social impacts in the supply chain and actions taken, GRI 414-2 (see also Human Rights)



### Clean water and sanitation for all

Ensure availability and sustainable management of water and sanitation for all

Topic	GRI standard
Sustainable water withdrawal	Water and effluents, GRI 303
Waste	Waste, GRI 306
Water-use efficiency	Water and effluents, GRI 303
Water quality	Water and effluents, GRI 303
Recycling and reuse of water	Water and effluents, GRI 303
Water-related ecosystems and biodiversity	Water and effluents, GRI 303; Waste, GRI 306



### Sustained economic growth and decent work for all

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Topic	GRI standard
Diversity and Equal Opportunity	Diversity of governance bodies and employees, GRI 405-1
Employment	Information on employees and other workers, GRI 102-8; New employee hires and employee turnover, GRI 401-1
Freedom of association and collective bargaining	Collective bargaining agreements, GRI 102-41 (see Human Rights, Labor/Management Relations and Co-determination)
Labor practices in the supply chain	Negative social impacts in the supply chain and actions taken, GRI 414-2
Occupational health and safety	Occupational health and safety, GRI 403
Water-use efficiency	Water and effluents, GRI 303
Youth employment	New employee hires and employee turnover, GRI 401-1
Human rights	See general management approach/policy statement on the respect of human rights in Compliance and governance



### Resilient infrastructure and sustainable industrialization

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Topic	GRI standard
Research and development	See Sustainable Engineering



### Sustainable consumption and production

Ensure sustainable consumption and production patterns

Topic	GRI standard
Air quality	Emissions, GRI 305
Energy efficiency	See Sustainability at GEA (certification of management systems); Sustainable engineering
Green investment	Emissions, GRI 305; Waste, GRI 306
Procurement Practices	Proportion of spending on local suppliers, GRI 204-1
Transport	Emissions, GRI 305
Waste	Waste, GRI 306
Water-use efficiency	Water and effluents, GRI 303
Sustainable engineering	See Sustainable Engineering



### Climate action

Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy

Topic	GRI standard
Green investment	Emissions, GRI 305; Waste, GRI 306; Management Approach, GRI 103, Sustainable Engineering
Greenhouse gas emissions	Emissions, GRI 305



### Life below water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Topic	GRI standard
Green investment	Emissions, GRI 305; Waste, GRI 306
Ocean acidification	Emissions, GRI 305



### Protect terrestrial ecosystems

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Topic	GRI standard
Green investment	Emissions, GRI 305; Waste, GRI 306
Deforestation	Emissions, GRI 305



## Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Topic	GRI standard
Anti-corruption	Operations assessed for risks related to corruption, GRI 205-1; Communication and training about anti-corruption policies and procedures, GRI 205-2
Compliance with laws and regulations	Non-compliance with laws and regulations in the social and economic area, GRI 419-1; Substantiated complaints concerning breaches of customer privacy and losses of customer data, GRI 418-1
Ethical and legal conduct	Values, principles, standards and norms of behavior, GRI 102-16; see also Conflict minerals in Supply Chain section
Grievance mechanisms	Management Approach, GRI 103 - Human Rights and Compliance
Data protection	See Compliance and governance: protection of personal data; Non-compliance with laws and regulations in the social and economic area, GRI 419-1; Substantiated complaints concerning breaches of customer privacy and losses of customer data, GRI 418-1
Workplace harassment and violence	Negative social impacts in the supply chain and actions taken, GRI 414-2

## Linking SASB and GRI standards

GEA's sustainability reporting is carried out in accordance with the standards of the Global Reporting Initiative (GRI). Some of GEA's key stakeholders also use SASB standards. The Sustainability Accounting Standards Board (SASB) is a non-profit organization that was founded in 2011 to develop standards for sustainability reporting. GRI and SASB standards have different objectives and are based on different assumptions with respect to materiality. In 2020, the two organizations started to develop materials which will allow entities to use both sets of standards at the same time. No reconciliation document has been published yet.

According to the SASB standards, GEA is in the "Resource Transformation Sector" – with the applicable industry standard being "Industrial Machinery & Goods". The table below maps SASB disclosures with metrics that deviate significantly from GRI requirements to corresponding GRI disclosures. This index was published in March 2021. It will be updated every year.

Topic	SASB Accounting Metric	Unit of Measure	Code	Note	GRI standard(s)	Page
<b>Energy Management</b>	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	RT-IG-130a.1	GEA discloses direct, energy indirect and other indirect emissions. This has the advantage of factoring the fuel mix into the values. Registered users can access GEA's disclosures on the website of the Carbon Disclosure Project.	GRI 305-1 to 4	<a href="#">page 59 ff.</a> , <a href="#">page 79</a>
<b>Employee Health &amp; Safety</b>	(1) Total recordable incident rate (TRIR), Rate (2) fatality rate, and (3) near miss frequency rate (NMFR)		RT-IG-320a.1	In addition to the number of accidents and days lost, GEA also discloses a Lost Day Frequency Rate (LDFR), Lost Day Severity Rate (LDSR), near misses in the form of a Proactive Injury Rate (PAIR) and a Total Injury Rate (TIR). There was one accident at work that resulted in a death in 2020, in Singapore.	GRI 403-1 to 7, 9	<a href="#">page 53 ff.</a> , <a href="#">page 78</a>
<b>Fuel Economy &amp; Emissions in Use-phase</b>	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Gallons per 1,000 ton-miles	RT-IG-410a.1	The majority of GEA's machinery and facilities are powered by electricity. Due to the wide variety of components and processes and, in particular, the need to gather comprehensive operating data outside the company's own sphere of influence, it is not possible to obtain concrete global evidence regarding the climate footprint of the entire product and service portfolio during its service life. GEA therefore continued to work on enhancing its climate reporting in 2020. Internal projects to quantify greenhouse gas emissions along the entire value chain (upstream/downstream) are currently underway. A sub-project has been set up to calculate and simulate the climate footprint of GEA products during their service life. The findings are expected in fiscal year 2021.	GRI 305	<a href="#">page 60</a> , <a href="#">page 79</a>
	Sales-weighted fuel efficiency for non-road equipment	Gallons per hour	RT-IG-410a.2			
	Sales-weighted fuel efficiency for stationary generators	Watts per gallon	RT-IG-410a.3			
	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines	Grams per kilowatt-hour	RT-IG-410a.4			
<b>Materials Sourcing</b>	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	RT-IG-440a.1	GEA discloses local procurement as a percentage of total volume and detailed information about conflict minerals.	GRI 204-1; 414-2	<a href="#">page 69 ff.</a> , <a href="#">page 82</a>
<b>Remanufacturing Design &amp; Services</b>	Revenue from remanufactured products and remanufacturing services	Reporting currency	RT-IG-440b.1	GEA is not significantly involved in reconditioning old machinery (itself). However, GEA Service provides a wide range of options for extending the service life of machinery and facilities. Service accounts for well over 30 percent of GEA's revenue. No other analyses are available.	General information about topic: See Service section under Sustainable Engineering	<a href="#">page 45 f.</a>

## TCFD index

The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board to develop a uniform framework for reporting climate-related risks and opportunities. The focus is on disclosing financial risks that companies face from climate change.

GEA considers the recommendations of the TCFD to be a useful extension of its reporting and intends to disclose its handling of climate-related risks and opportunities in a more comprehensible manner in the future. Given the growing importance of climate change impacts, GEA aims to implement additional components of the TCFD recommendations in the coming years.

The overview of content on this set of topics, first prepared in 2020, can be found in the index to the TCFD recommendations below. The index contains references to text passages with relevance to the core areas of corporate governance, strategy, risk management and key figures and targets recommended by the TCFD.

	Corporate governance	Strategy	Risk management	Key figures and targets
<b>TCFD requirements</b>	The organizational structure of the company with regard to climate-related risks	The actual and potential impact of climate-related risks and opportunities on business operations, strategy and financial forecast	The processes for identifying, assessing and managing climate-related risks	The key figures and targets used to assess and manage relevant climate-related risks and opportunities
<b>Sustainability report 2020</b>	<p><b>Materiality analysis</b>  <a href="#">page 21</a>, <a href="#">page 74</a></p> <p><b>Sustainability at GEA:</b>            Basic principles; organization; integrated management approach to quality, health, safety at work and the environment; certification of management systems  <a href="#">page 23 ff.</a>, <a href="#">page 28</a></p> <p><b>Sustainable engineering:</b>            Technology strategy and climate footprint  <a href="#">page 42 f.</a></p>	<p><b>Sustainability at GEA:</b>            Basic principles; organization; integrated management approach to quality, health, safety at work and the environment  <a href="#">page 23 ff.</a></p> <p><b>Sustainable engineering:</b>            Product development process; GEA innovation process; technology strategy and climate footprint  <a href="#">page 40 ff.</a></p> <p><b>Environment</b>  <a href="#">page 25</a>, <a href="#">page 59</a></p> <p><b>Supply chain:</b>            Quantifying impacts in the supply chain  <a href="#">page 71</a></p>	<p><b>Sustainability at GEA:</b>            Basic principles; organization  <a href="#">page 23 ff.</a></p> <p><b>Environment</b>  <a href="#">page 25</a>, <a href="#">page 59</a>,  <a href="#">page 61 f.</a>, <a href="#">page 65 f.</a></p> <p><b>Supply chain:</b>            Quantifying impacts in the supply chain  <a href="#">page 71</a></p>	<p><b>Sustainability at GEA:</b>            Sustainability targets and key performance indicators; ESG ratings  <a href="#">page 26</a>, <a href="#">page 29</a></p> <p><b>Environment</b>  <a href="#">page 59 ff.</a></p> <p><b>Supply chain:</b>            Quantifying impacts in the supply chain  <a href="#">page 71</a></p> <p><b>Appendix:</b>            Facts and figures  <a href="#">page 76 ff.</a></p>
<b>Annual Report 2020</b>	<p><b>Group Management Report:</b>            Fundamental Information about the Group; Corporate Governance Statement</p> <p><b>Non-financial group statement</b></p>	<p><b>Group Management Report:</b>            Management system; Corporate Governance Statement</p> <p><b>Non-financial group statement</b></p> <p><b>Opportunities and risk report</b></p>	<p><b>Non-financial group statement</b></p> <p><b>Opportunities and risk report</b></p>	<p><b>Non-financial group statement</b></p> <p><b>Opportunities and risk report</b></p> <p>Explanatory notes to environmental key figures <a href="#">+ gea.com</a></p>

## Limited Assurance Report of the Independent Auditor regarding selected sustainability disclosures<sup>1</sup>

To the legal representatives of GEA Group Aktiengesellschaft, Düsseldorf

We have performed an independent limited assurance engagement on the indicators Waste and Water withdrawal as well as those disclosures which are transferred from the non-financial group statement 2020, published in the Sustainability Report (further "Report") of GEA Group Aktiengesellschaft, Düsseldorf (further "GEA") for the year from January 1 to December 31, 2020.

### Responsibility of the legal representatives

The legal representatives of GEA are responsible for the preparation of the Report in accordance with the reporting criteria. GEA applies the principles and standard disclosures of the GRI Standards of the Global Reporting Initiative, in combination with internal guidelines (further: Reporting Criteria).

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual sustainability disclosures which are reasonable under the given circumstances. Furthermore, the responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Report in a way that is free of – intended or unintended – material misstatements.

### Practitioner's Responsibility

Our responsibility is to express a conclusion based on our work performed on the information above within a limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" published by IAASB. This standard requires that we comply with our professional duties and plan and perform the assurance engagement to obtain a limited level of assurance to preclude that the information above for the period from January 1 to December 31, 2020 is not in accordance, in material respects, with the aforementioned Reporting Criteria. We do not, however, issue a separate conclusion for each sustainability disclosure. In a limited assurance engagement, the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement.

Within the scope of our engagement, we performed amongst others the following procedures:

- A risk assessment, including a media research, of relevant information about the sustainability performance of GEA in the reporting period
- Assessment of the design and implementation of the systems and processes for the collection, processing and control of the sustainability disclosures included in the scope of this engagement, including the consolidation of the data
- Inquiries of personnel on group level responsible for providing the data, carrying out internal control procedures and consolidating the data on the quantitative indicators
- Analytical evaluation of data and trends of quantitative information which are reported by all sites on group level
- Evaluation of selected internal and external documents
- Assessment of local data collection and reporting processes and reliability of reported data via a sampling survey in Bönen (Germany) and Sala Baganza (Italy)

<sup>1</sup>) Our engagement applied to the German version of the Report 2020. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

- Alignment of disclosures with the respective information in the non-financial group statement 2020
- Assessment of the overall presentation of the selected sustainability disclosures

### Independence and quality assurance on the part of the auditing firm

In performing this engagement, we applied the legal provisions and professional pronouncements regarding independence and quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

### Conclusion

Based on the procedures performed and the evidence received to obtain assurance, nothing has come to our attention that causes us to believe that selected sustainability disclosures for the business year from January 1 to December 31, 2020, published in the Report, are not prepared in all material respects, in accordance with the Reporting Criteria.

### Limited liability

This limited assurance report is issued for purposes of the Supervisory Board of GEA Group Aktiengesellschaft, Düsseldorf, only. We assume no responsibility with regard to any third parties.

This report is issued for purposes of the legal representatives of GEA Group Aktiengesellschaft, Düsseldorf, only. We assume no responsibility with regard to any third parties.

Our assignment for the legal representatives of GEA Group Aktiengesellschaft, Düsseldorf, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 ([https://www.kpmg.de/bescheinigungen/lib/aab\\_english.pdf](https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf)). By reading and using the information contained in this report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Munich, March 2, 2021

KPMG AG  
Wirtschaftsprüfungsgesellschaft  
[Original German version signed by:]

Hell

ppa. Ehrenberger

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### Forward-looking statements:

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

### Note regarding the rounding of figures:

Due to the commercial rounding of figures and percentages, small deviations may occur.

### Note on translation:

This English version of the Sustainability Report is a translation from the German. In case of deviations between the two, the German version prevails.



## We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

"Engineering for a better world" is the driving and energizing principle connecting GEA's workforce. As one of the largest systems suppliers, GEA makes an important contribution to a sustainable future with its solutions and services, particularly in the food, beverage and pharmaceutical sectors. Across the globe, GEA's plants, processes and components contribute significantly to the reduction of CO<sub>2</sub> emissions, plastic use as well as food waste in production.

GEA is listed on the German MDAX and the STOXX® Europe 600 Index and also included in the DAX 50 ESG and MSCI Global Sustainability indexes.

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