

SUSTAINABILITY REPORT 2021



CONTENT

Foreword	3	Responsible Operations	55
GEA – Engineering for a better world	5	People	87
Mission 26	15	Compliance and Governance	110
Climate Strategy	26	Appendix	123
Sustainable Solutions	35		

Foreword by Stefan Klebert

Chief Executive Officer

Dear Readers,

A sustainable future needs companies that demonstrate commitment and lead by example. They must take responsibility and focus their innovative strength on developing environmentally friendly and resource-efficient products.

This is GEA's ambition and we work hard every day to make it a reality. We are proud of the contribution made by our machinery, plants and processes to creating a more sustainable world. Across the globe, GEA teams are working to develop ever more efficient and innovative solutions for our customers. It is with great enthusiasm and drive that we fulfill our corporate purpose "Engineering for a better world" in this way.



In 2021, we significantly intensified our efforts. Our new climate strategy sets ambitious targets. We aim to cut our greenhouse gas emissions to net zero by 2040. As we work toward this goal, we are targeting a 60-percent reduction in emissions from our own operations (Scope 1 and 2) and an 18-percent reduction in indirect emissions (Scope 3) by 2030. These interim targets have already been reviewed and validated by the globally recognized Science Based Targets initiative. GEA's core business operations are meanwhile carbon-neutral in that we offset all the emissions we are not yet able to avoid. We are raising the bar in our industry with this multi-stage approach.

Sustainability is also at the heart of our "Mission 26" corporate strategy, launched in 2021, and is defined there as a key factor in GEA's future growth. Precisely because sustainability is becoming increasingly important for the commercial success of entire industries, there are great opportunities for those suppliers with the right skill sets. Our customers expect the best possible solutions for their businesses, enabling them to attain their goals and meet their customers' needs. In this, they can rely on GEA.

Yet sustainability is about much more than just environmental and climate protection. An end-to-end approach like the one taken by GEA naturally includes social and governance aspects. This means that, besides

meeting the most stringent environmental benchmarks, we seek to set exemplary social standards – both at our own facilities and by influencing our suppliers. Additionally, we aim to be the employer of choice in our industry. And we are committed to the common good, deploying our skills and financial resources to strengthen the local communities in which we operate. To underscore the importance of our sustainability targets, we have linked them to Executive Board remuneration.

In 2021, we not only made key strategic decisions, but again demonstrated strength in terms of implementation. Many projects set new standards in terms of sustainability. One example of this is the entirely carbon-neutral juice production facility we built in Rotterdam for our customer Innocent. In May, we also laid the cornerstone for our new carbon-neutral production center in Poland. This state-of-the-art "Factory of the Future," which we will open in 2022, marks a major step for GEA on the road to sustainable production.

The many high ratings we have received are testament to the fact that we are on the right track. For instance, GEA received top scores from the respected organization CDP (formerly the Carbon Disclosure Project) in 2021. We are included in CDP's A List for climate and water, with an excellent second place among the 14 German companies listed. MSCI also gave us an "AA" rating as part of its ESG assessment. We received a

"Gold" rating from rating agency EcoVadis for our sustainability management, which placed GEA in the top two percent of all companies in the mechanical engineering sector.

What we have achieved in the past year is thanks first and foremost to all our colleagues around the world who give their best every day, working with inquisitive minds and an inventive spirit as they strive for ever better solutions. Thank you so much for your dedication. It is a privilege to work with you!

We will consistently pursue our sustainability agenda in 2022. We have difficult tasks ahead, but our expertise and experience will enable us to achieve our goal of being commercially successful as we work step by step to make the world a better place.



Sincerely,
Stefan Klebert

GEA Engineering
for a better
world.



GEA at a glance

GEA is an internationally active technology group specializing in machinery and plants, together with process technology and components. We provide solutions for sophisticated production processes in diverse end-user markets and also offer a comprehensive service portfolio. In doing so, we help our customers make their production processes ever more sustainable and efficient. GEA is one of the largest suppliers of systems and components to the food, beverage and pharmaceutical industries, as well as to a wide range of other processing industries, e.g. chemicals.

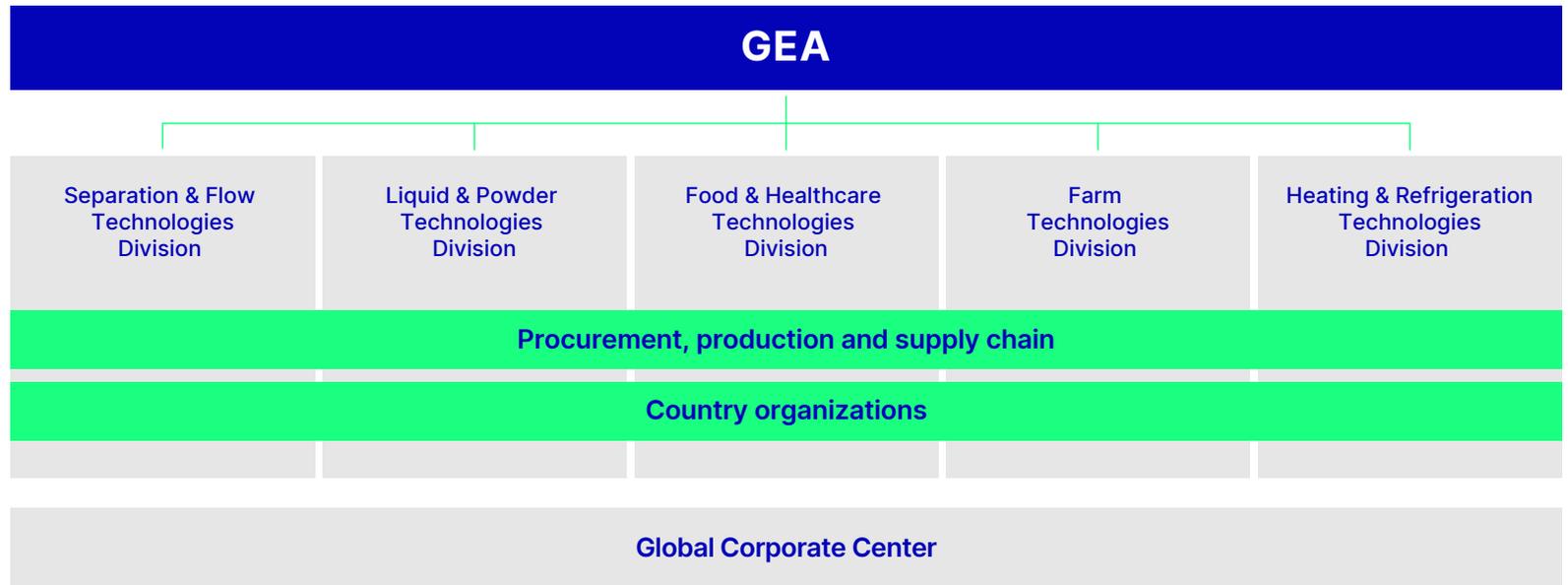
The group is a specialist in its respective core technologies and a leader in many of its markets worldwide. Thereby we promote a strong innovation-led culture in order to maintain our technological edge going forward. Further details can be found in the Annual Report 2021 under “Fundamental Information about the Group” in the section “Research and Development”.

GEA's enduring success is based on a number of global megatrends:

1. Constant global population growth
2. Significant growth of the middle class
3. Increasing desire for healthy, functional and safe nutrition
4. Strong demand for efficient production methods that also conserve valuable resources

Since January 1, 2020, GEA Group has been divided into five divisions, each with up to six business units. They are based on comparable technologies and have mostly leading market positions. Each division is headed by a management team consisting of three mem-

bers: a divisional CEO, a divisional CFO and a divisional CSO (Chief Service Officer). The CSO role in each division underscores the significance of the growing, high-margin service business.



 GEA production sites, sales offices, service and other sites



Separation & Flow Technologies Division

World-class components and equipment for production excellence

Separators . Homogenizers . Valves & Pumps

Separation & Flow Technologies encompass process engineering components and machines, including separators, decanters, homogenizers, valves and pumps, which are at the heart of many production processes.

These solutions contribute to a cleaner environment in numerous industrial applications. They also ensure the efficient separation and homogenization of liquids used in the production of foods, beverages, medicines and home & personal care products that consumers enjoy and rely on. GEA pumps and valves guarantee that raw materials and products move safely and efficiently through plants.

Revenue

1,237

EUR million
Previous year: EUR 1,192 million

EBITDA before restructuring measures

303

EUR million
Previous year: EUR 255 million

EBITDA margin before restructuring measures

24.5

percent
Previous year: 21.4 percent

Employees

4,860

Full-time equivalents
Previous year: 4,565



Liquid & Powder Technologies Division

Specialists in processing equipment and integrated solutions

Liquid & Filling Technologies .
Powder & Thermal Separation Technologies

Liquid & Powder Technologies provide processing equipment and integrated solutions for the dairy, food, including new food, beverage, chemical and home & personal care industries. The portfolio includes brewing systems, liquid processing & filling, concentration, precision fermentation, crystallization, purification, drying, powder handling & packaging as well as systems for emission control.

GEA designs, builds, configures and installs versatile and efficient equipment and technologies, processing lines and complete plants, for products as diverse as cell-based protein to polymers.

Revenue

1.546

EUR million
Previous year: EUR 1,666 million

EBITDA before
restructuring measures

150

EUR million
Previous year: EUR 120 million

EBITDA margin before
restructuring measures

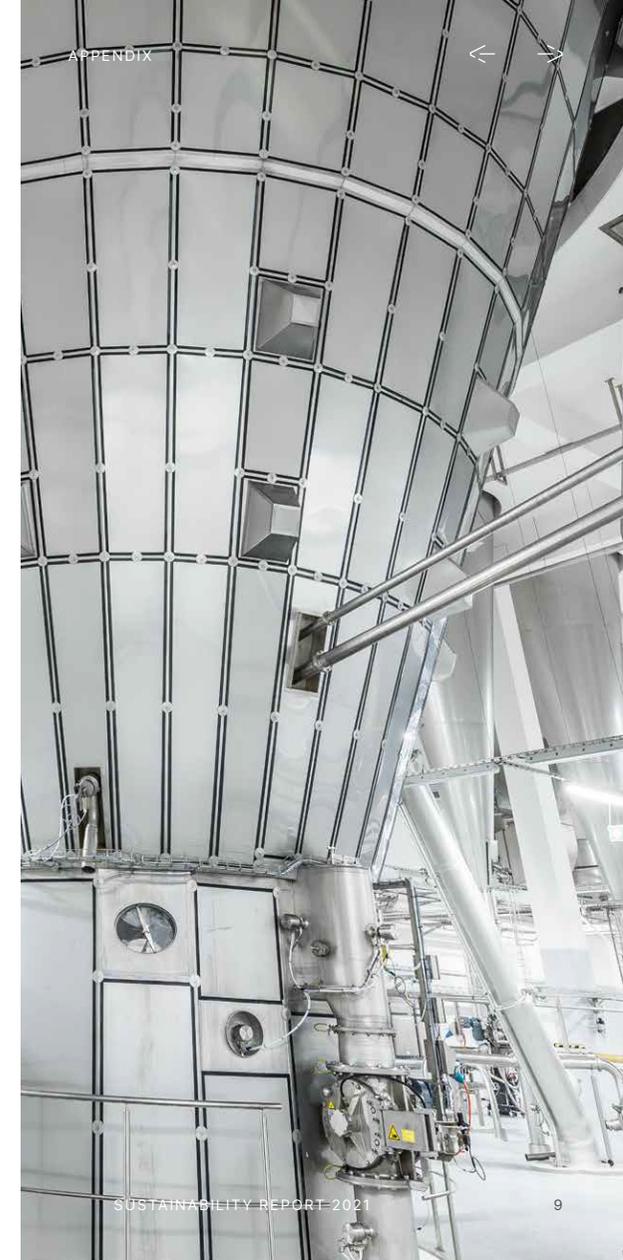
9.7

percent
Previous year: 7.2 percent

Employees

5,241

Full-time equivalents
Previous year: 5,402



Food & Healthcare Technologies Division

Safe foods and medicines for a growing population

Pasta, Extrusion & Milling . Bakery . Slicing & Packaging . Food Solutions . Frozen Food . Pharma & Healthcare

Food & Healthcare Technologies provide solutions for food processing. This covers preparation, marinating and further processing of meat, poultry, seafood and vegan products, in addition to processing lines for pasta, baked goods, snacks, breakfast cereals, confectionery and pet food. GEA also offers equipment for freezing, slicing and packaging of food and milling.

GEA solutions for the pharmaceutical & nutraceutical industry include components, equipment and entire plants for processing solid, liquid as well as semi-solid products and high potent drugs either for batch or continuous production.

Revenue

937

EUR million
Previous year: EUR 895 million

EBITDA before
restructuring measures

100

EUR million
Previous year: EUR 79 million

EBITDA margin before
restructuring measures

10.7

percent
Previous year: 8.8 percent

Employees

3,577

Full-time equivalents
Previous year: 3,436



Farm Technologies Division

Smart solutions for farmers now and in the future

Milking & Dairy Farming: Milking & Feeding, Manure

Farm Technologies offer integrated customer solutions for efficient, high-quality milk production and livestock farming. This includes automatic milking and feeding systems, conventional milking solutions and digital herd management tools. GEA manure management solutions ensure operators have the right tools for safe and efficient storage, application and upcycling of this important resource.

The portfolio also includes a wide range of hygiene products and chemicals to promote optimum udder health and highest milk quality.

Revenue

634

EUR million
Previous year: EUR 625 million

EBITDA before
restructuring measures

76

EUR million
Previous year: EUR 67 million

EBITDA margin before
restructuring measures

12.0

percent
Previous year: 10.7 percent

Employees

1,865

Full-time equivalents
Previous year: 1,888



Heating & Refrigeration Technologies Division

Industrial heating and cooling solutions for climate-friendly production processes

Turnkey installations . Compressors & compressor packages . Heat pumps . Chillers . Controls

Heating & Refrigeration Technologies combine extensive production process knowledge and integrated heating and cooling expertise to deliver sustainable, energy-saving solutions for customers in the food, beverage and other key industries.

GEA plays an important role in the decarbonization of production processes, cities and other market activities. Via a sustainable energy solutions platform, which includes a comprehensive portfolio of heat pumps, GEA delivers the precise temperatures critical to our customers' operations. Our proven technologies provide customers with integrated, high-efficiency solutions that significantly reduce CO₂ emissions and energy costs.

Revenue

584

EUR million
Previous year: EUR 663 million

EBITDA before
restructuring measures

59

EUR million
Previous year: EUR 59 million

EBITDA margin before
restructuring measures

10,2

percent
Previous year: 8.9 percent

Employees

2.091

Full-time equivalents
Previous year: 2,502





Interview with Dr. Nadine Sterley

Chief Sustainability Officer

Nadine Sterley, a lawyer by profession, joined GEA in 2016, where she has held the position of Chief Sustainability Officer since April 2021

GEA announced a new climate strategy and new ESG targets last year. The corporate strategy is also centered around sustainability. However, sustainability is not a new topic at GEA, correct?

No, not at all. Sustainability has always been important to us. It's part of our identity as a global mechanical engineering company. The desire for continuous improvement and optimization is part and parcel of an engineer's identity. Our corporate purpose is "engineering for a better world" – it is well-established and embedded in our company culture! We set out years ago to become more sustainable. In the process, we have made significant strides and hit key milestones in areas such as plant design and energy efficiency. Since 2021, we have taken an even more systematic, comprehensive and ambitious approach to our sustainability activities. We aim to set even higher standards and to set the benchmark as a leader in our industry.

What does sustainability mean for GEA?

Our aim is to make the greatest positive impact possible through our actions. As a technology leader, we want to do our part to help overcome global challenges. Protecting the climate is without a doubt the greatest challenge we face. And we are harnessing all our technological expertise to make progress in this area, such as by offering our customers solutions that are as resource-efficient as possible. We also highly value the importance of having a holistic understanding of sustainability. Environmental, social and responsible corporate governance – often referred to as "ESG" – are equally important to us. These topics are no longer viewed in isolation; they are interconnected. We have set targets for ourselves in all three aspects of sustainability and validated them with measurable indicators.

GEA is aiming to hit net-zero by 2040, which is an ambitious climate target in an energy-intensive industry. How do you plan to achieve this?

Our goal is ambitious, that is true. Especially in light of the fact that it encompasses all our activities along the entire value chain, which also includes our customers and suppliers. We want to achieve net-zero emissions faster than Germany and the European Union. To that end, we have defined seven fields of action in all areas that we can actively influence – from our product portfolio, to logistics and the supply chain. To make progress in this endeavor, we're relying above all else on the skills, creativity and commitment of our employees.

Maintaining close cooperative relationships with our customers and suppliers is just as important. We cannot achieve our goals without them. Our suppliers must record the emissions generated from the production of raw materials and intermediate products. And we are relying on our customers to disclose information about the energy consumption of GEA products in everyday operations. Having a consistent and transparent carbon footprint that involves all our partners is undoubtedly no mean feat. But I'm noticing a growing readiness to pull together on climate protection issues. That makes me confident.

What role does sustainability play in the corporate strategy? What are the specific benefits for GEA?

Acting sustainably is not only the right thing to do, it is an economic necessity. We naturally want to take responsibility for ourselves, our planet and future generations. At the same time, we believe that sustainability is an important part of our core business and our business model. The issue is of immense strategic importance. I'd even go so far as to say that our future as a company depends on us being innovative and bold in this area. Customers expect convincing solutions and the highest standards from us. Sustainability is becoming an increasingly important criterion for employees and investors, too. And legal requirements are becoming ever more stringent worldwide. Our technological expertise means we



can achieve further growth and secure competitive advantages that will benefit us in the long term. In other words, investment in sustainability is an investment in our future.

You became GEA's Chief Sustainability Officer in April 2021. What have you set out to achieve?

In the newly established department we have centrally bundled activities and responsibilities that were previously located in different and very diverse departments across the company. My team now combines both the expertise to professionally manage ESG issues and the ability to actively and comprehensively support the implementation of our climate and sustainability goals. As I mentioned before, we are not starting from scratch by any means. We have been on the right track for a long time now, as evidenced by the increasingly positive ratings that we have received from rating agencies. While we are naturally thrilled by this, it does not give us an excuse to rest on our laurels. Now what we need to do is develop our full potential and meet the increasing expectations. We want to do our best to help GEA stay ahead of the game when it comes to sustainability.

Finally, I'd like to ask you a personal question. What part of your job motivates you the most?

For me, it is perfectly clear: I'm enthusiastic about having such meaningful work. Getting colleagues excited about climate protection and sustainable behavior is very rewarding. Bold corporate targets are well and good, but they only make sense if they can be implemented in everyday operations. And that, in turn, depends primarily on employee attitudes and conduct. I'm encouraged by the level of commitment I encounter everywhere within GEA. There is a great willingness to learn from each other and inspire each other by setting good examples. Everyone can do their part and get involved. This is how we will move forward and develop solutions that are not just outstanding technologically, but also help to preserve our planet as a place worth living for ourselves and future generations.



MISSION 26



[Mission 26](#)

A NEW ALIGNMENT FOR A BETTER WORLD

Without a doubt, 2021 was a watershed year in GEA's history. Last year, we decided to embrace sustainability as a central element of the company's strategy. In practice, this means optimizing our own processes, delivering products and services that enable our customers to achieve their sustainability goals and engaging in dialog with local communities toward a carbon-neutral future.

Sustainability is more than just a guideline for our day-to-day work. It also has fundamental strategic importance. We have set very ambitious environmental and social targets geared to placing our company at the forefront of the industry by 2026. That is why sustainability is also a key element of the new group strategy, "Mission 26". This strategy defines sustainability as one of the seven key levers for attaining our targets. Nevertheless, sustainability aspects are also firmly enshrined in the other six levers, underscoring the overarching significance of this issue for our company.

GEA is very much aware of its corporate responsibility. Although this is a well-used term, it is nonetheless true of our commitment to sustainability. In fact, we take our responsibility very seriously and have already made considerable progress. We are a member of many respected sustainability initiatives, have been evaluated by internationally recognized organizations – and we are taking action. All these factors are reflected in our sustainability strategy, which will serve as our yardstick in the years ahead.

As a multinational company, GEA has the ability and the determination to contribute to a better world. This is mirrored in our corporate purpose "Engineering for a better world", which paves the way for our new vision: "We safeguard future generations by providing sustainable solutions for the nutrition and pharmaceutical industries."

Mission 26

Seven key levers



GEA's sustainability strategy is also guided by the 17 Sustainable Development Goals (SDGs) contained in the United Nations Agenda 2030. These goals serve to ensure global sustainable development on an economic, social and ecological level. They are intended to be applied by governments around the world, but also by society, businesses and academia. Additionally, GEA has committed to upholding the Ten Principles of the United Nations Global Compact, a worldwide pact between businesses and the United Nations that aims to make globalization more socially and ecologically responsible. Moreover, GEA supports the "Blue Competence" sustainability initiative of the German Mechanical Engineering Association (VDMA) and is committed to its twelve sustainability principles.



"We embrace our responsibility and aim to be a role model. That is why we have committed to upholding the principles of the UN Global Compact. In addition, we have aligned our activities with the United Nations Sustainable Development Goals. GEA technologies for more sustainable production foster economic development that meets the needs of both present and future generations."

Stefan Klebert, CEO



We have set ambitious targets

Our most challenging target is to reduce greenhouse gas emissions to net-zero at every link in the value chain by 2040. The Science Based Targets initiative (SBTi) has validated our interim targets for 2030 of cutting Scope 1 and 2 CO₂ emissions by 60 percent and Scope 3 CO₂ emissions by 18 percent each compared with the base year of 2019. SBTi has thereby confirmed that the interim targets are in line with the latest climate research findings and will make an effective contribution to achieving the 1.5 degree target set by the Paris Climate Agreement (see also page 31, "Climate Strategy").

Closely linked with our commitment to sustainability is our corporate purpose of engineering sustainable solutions responsibly with great people for a better world. This aspiration defines the main approaches of our sustainability strategy:

- **Sustainable solutions:** We develop environmentally sustainable solutions, enabling climate and resource efficiency targets of our customers.
- **Responsible Operations:** We foster environmental excellence and highest social standards in our own operations and our sourcing.
- **Great people:** Our employees consider GEA to be the employer of choice in the engineering industry. By increasing diversity, placing the focus on equality and inclusion, providing opportunities for lifelong learning and long-term career development prospects, we aim to become the most attractive employer in the engineering industry.
- **For a better world:** We create societal value through solutions aimed at reducing food and water scarcity as well as improving nutrition and health. GEA actively contributes its knowledge and skills to strengthen local communities.



To substantiate our ambitions, we have defined a set of quantifiable targets in each area that will guide our actions in the coming years (see graphic).

GEA will measure its progress against these specific targets in the years ahead:

Sustainability management

Sustainable corporate governance has been one of our priorities for a number of years now. However, we have shifted up a gear with GEA's new "Mission 26" strategy. Going forward, all sustainability-related activities that were previously split between different departments are being consolidated in a single Sustainability Department with a company-wide remit. This has created an interface to all business units and functions that serves as the strategic backbone for all our sustainability-relevant activities. In this way, we can ensure a professional approach to the increasingly complex requirements of sustainability management. The Sustainability Department, which was responsible for developing, communicating and supporting the aforementioned targets, reports directly to our CEO, Stefan Klebert. It goes without saying that we will be measuring our attainment of the targets we have set.

The sustainability targets were approved by our full Executive Board as well as by the representatives of the divisions and regions (Global Executive Committee). To ensure "Mission 26" is accomplished, we have defined a separate project for each sustainability target. We believe that consistent project management must be applied equally to all targets as a way of promoting transparency about the degree of target attainment and the associated responsibilities. This allows us to identify and analyze any problems in the project process at an early stage. In addition, each sustainability target is broken down into several interim targets with defined timelines. The employee

Engineering for a better world

NET-ZERO by 2040

Sustainable Solutions

- Reduce greenhouse gas emissions scope 3 by 18% by 2030
- 100% of solutions will be offered with zero freshwater-use by 2030
- 100% of packaging-related solutions use sustainable packaging materials by 2030
- 100% of service parts and machinery packaging material to fulfill one of the five R's of circular economy (Reduce; Re-use; Repair; Remanufacture; Recycle) by 2026



Responsible Operations

- Reduce greenhouse gas emissions scope 1 & 2 by 60% by 2030
- 50% of total energy demand is covered by certified energy management system by 2026
- All sites in water-stressed areas that implemented a water strategy by 2026
- >95% of waste recovery rate at production sites by 2026
- 100% of preferred suppliers fulfill GEA's sustainability criteria by 2026
- 100,000 people reached through skill-based volunteering in 2026
- Donation of 1% of net profit per year



Employer of Choice

- 80% favorable rating on the question: "Would you recommend GEA as a good place to work?" in internal employee engagement survey by 2026
- 21% female representation in management levels L1 – L3 by 2026
- 80% of open positions filled by own talent across management levels L1 – L7 by 2026
- Building a diverse talent pool to further strengthen diversity on all management levels by 2026



responsible for each target delivers regular internal reports on the attainment status. Moreover, our Executive Board provides the Supervisory Board with regular updates. The progress made in achieving our targets is published in our annual Sustainability Report.

You can read how we intend to achieve these targets in the following chapters of this Sustainability Report.

Sustainability principles

Sustainability management at GEA is based on the following principles:

1. Group Code of Conduct

Our GEA Code of Conduct has been in place for a number of years. It describes the values, principles and policies governing corporate conduct at GEA. The Code is designed to ensure company-wide compliance with standards and to create a working environment characterized by integrity, respect as well as fair and responsible conduct. It applies to all GEA employees and corporate entities worldwide.

2. Code of Conduct for Suppliers and Subcontractors

We expect our suppliers to work to the same high standards as we do. The Code of Conduct for Suppliers and Subcontractors requires our suppliers to operate in an environmentally responsible manner,

to respect human rights and to refrain from using conflict resources. This Code of Conduct defines our principles and requirements for all suppliers of goods and services, for subcontractors and for the subsidiaries of our suppliers and subcontractors. It covers responsibility toward society, the environment and the people involved in the production of goods and/or the provision of services.

3. Code of Corporate Responsibility

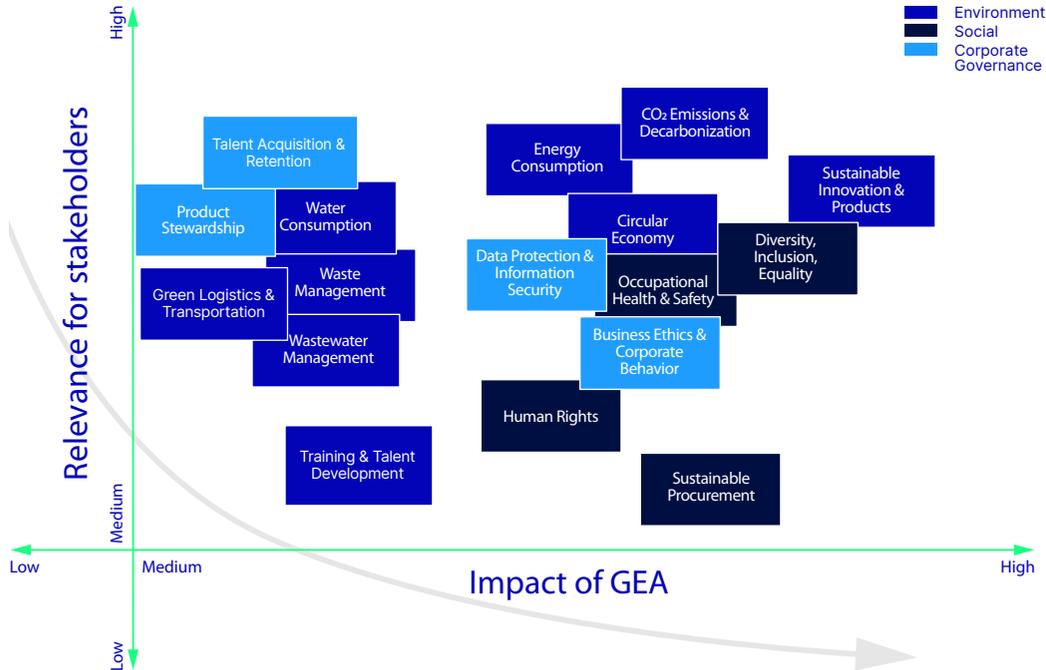
Our Code of Corporate Responsibility defines ethical and legal standards that are binding for all GEA employees. As a globally successful technology group with more than 18,000 employees and operating companies in over 62 countries, we are committed to fair world trade as a prerequisite for global economic growth. GEA has implemented the ISO 26000 Guidance on Social Responsibility and aligns all the company's activities with the principles of social responsibility and the core topics.



Key sustainability issues

Each year, we use a materiality assessment to identify and evaluate our company's most important sustainability issues (see graphic). Alongside our own internal assessment, this process incorporates the expectations and interests of our most important stakeholders: our investors, customers, employees as well as independent institutions such as non-governmental organizations (NGOs). To prepare our Sustain-

ability Report in line with the requirements of Germany's CSR Directive Implementation Act (CSR-RUG) and the Global Reporting Initiative (GRI) Standards, we conducted another materiality analysis in 2021. We classified 17 topics from our "Mission 26" sustainability strategy as relevant according to GRI materiality principles. Of these topics, 13 were defined as relevant within the meaning of CSR-RUG and audited.



Management System

	Number of certificates 2021	Number of certificates 2020	Number of certificates 2019
DIN EN ISO 9001:2015	89	92	89
DIN EN ISO 14001:2015	39	39	38
DIN EN ISO 45001:2018	38	35	30
DIN EN ISO 50001:2018	15	14	16
Total number of certificates	181	180	173

ISO 9001 defines the minimum requirements for a quality management system that an organization must meet in order to provide products and services that meet customer expectations and regulatory requirements. At the same time, the management system should be subject to a continuous improvement process.

The international environmental management standard **ISO 14001** defines the requirements for an environmental management system and is part of the family of standards in environmental management.

ISO 45001 is a standard published by the International Organization for Standardization (ISO) in March 2018 and describes requirements for an occupational health and safety (OH&S) management system (AMS) and guidance for implementation.

ISO 50001 regulates the establishment of an operational energy management system for the purpose of sustainably increasing energy efficiency.

Certification of management systems

In our quest for continuous improvement, we have our management systems audited. After all, management systems not only govern value-creation processes – they also contain an inherent commitment to continuously improve. At GEA, quality management, energy management, environmental management as well as occupational health and safety (QHSE) are aligned with international standards supplemented by the company's own standards and regulations, such as the QHSE Guideline, GEA Safety Core Rules, GEA Environmental Core Rules and globally applicable process descriptions. Developed together with QHSE experts in the divisions and countries, these

rules apply to all GEA companies and are implemented with the support of the global QHSE organizations.

GEA holds a total of 181 certificates for its various ISO management systems (see table) at its production, sales and administration sites.

We started certifying our sites with integrated management systems back in 2016. GEA Group Aktiengesellschaft, headquartered in Düsseldorf, Germany, leads the way with certification to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018. One aspect of GEA's "Mission 26" strategy is to certify the quality,

environmental and occupational safety management systems at all the company's production sites. In the year under review, we achieved coverage of 63.8 percent for ISO 9001:2015, 31 percent for ISO 14001:2015 and 24.1 percent for ISO 45001:2018. By 2026, we aim to have half of our annual energy requirements covered by an energy management system certified to ISO 50001:2018; in the year under review, around 25 percent of total energy requirements were already covered. That means eight sites remain to be certified. Unrelated to certification, environmental protection measures and projects as well as the measurement of consumption data are grouped and performed in cooperation with the QHSE Department.

ESG ratings and rankings

Sustainable corporate governance has been one of our priorities for a number of years now and our product solutions meet high standards when it comes to environmental protection and the preservation of resources. Our customers are well aware of this. Nonetheless, we are pleased to have it confirmed by independent third parties. We are very proud of the fact that, time and again, international ratings confirm our good sustainability performance.

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

DAX 50 ESG

Our exemplary approach to environmental, social and governance issues has earned GEA a place among the 50 companies listed in the DAX 50 ESG Index, which was established in 2020.

CDP

In late 2021, GEA was once again honored by the renowned organization CDP (formerly Carbon Disclosure Project) for its performance and transparency in reporting, receiving A ratings in both the "water security" and "climate change" categories. This puts GEA among only 272 out of 12,000 companies surveyed worldwide that made it onto the A List. Our rating puts us above the regional European average (B) and the average for the motorized machinery sector (C) for climate protection, and above the regional European average (B) and the average for the motorized machinery sector (B-) for water security. In 2021, CDP tightened its requirements once again, particularly in the area of climate protection. Now recognized as one of the world's largest environmental organizations, the London-based NGO is

supported by around 600 major institutional investors with more than USD 110 trillion in managed assets.

EcoVadis

In 2021, GEA achieved a "Gold" rating in the EcoVadis sustainability assessment for the first time, placing it among the top two percent of all mechanical engineering companies assessed by EcoVadis worldwide. Every year since 2016, we have commissioned independent rating agency EcoVadis to audit our sustainability management with increasing detail and have seen a continuous improvement in the results. In the 2021 assessment, we achieved a "Gold" rating with 68 out of 100 points. EcoVadis analyzes companies' sustainability performance in the areas of environment, labor and human rights, ethics and sustainable procurement.

MSCI

In October 2021, GEA was upgraded from "A" to "AA" in the MSCI ESG Rating by U.S. financial services provider MSCI.

Best scores for environmental protection

German companies ranked by Carbon Disclosure Project

Handelsblatt | Tuesday, 7 December 2021, No. 237

	Climate Change	Forests	Water Security
Symrise	A	A	A
GEA Group	A		A
Bayer	A		
Beiersdorf		A	
Dt. Bahn	A		
Dt. Telekom	A		
E.on	A		
Heidelberg Cement	A		
LANXESS	A		
Robert Bosch	A		
SAP	A		
Thyssen-Krupp	A		
TK* Elevator	A		
Volkswagen			A

*Thyssen-Krupp | Source: CDP

Other awards

Following the index review in December 2021, GEA remained in the FTSE4Good Index Series. This is designed to measure the performance of companies that demonstrate strong environmental, social and governance (ESG) practices. In July 2021, we also earned “Prime Status” in the ISS ESG Corporate Rating, putting us at the top of the industry index group. ISS ESG is a service provider for institutional investors. In November 2021, GEA received an ESG risk rating of 22.4 and was classified by Sustainalytics as medium risk for the material financial impacts of ESG factors. The ESG risk rating places GEA in the 9th percentile (1st percentile = lowest risk) in the mechanical engineering industry, as rated by Sustainalytics.



1. In 2021, GEA Group Aktiengesellschaft received a rating of AA (on a scale of AAA-CCC) in the MSCI ESG Ratings assessment.

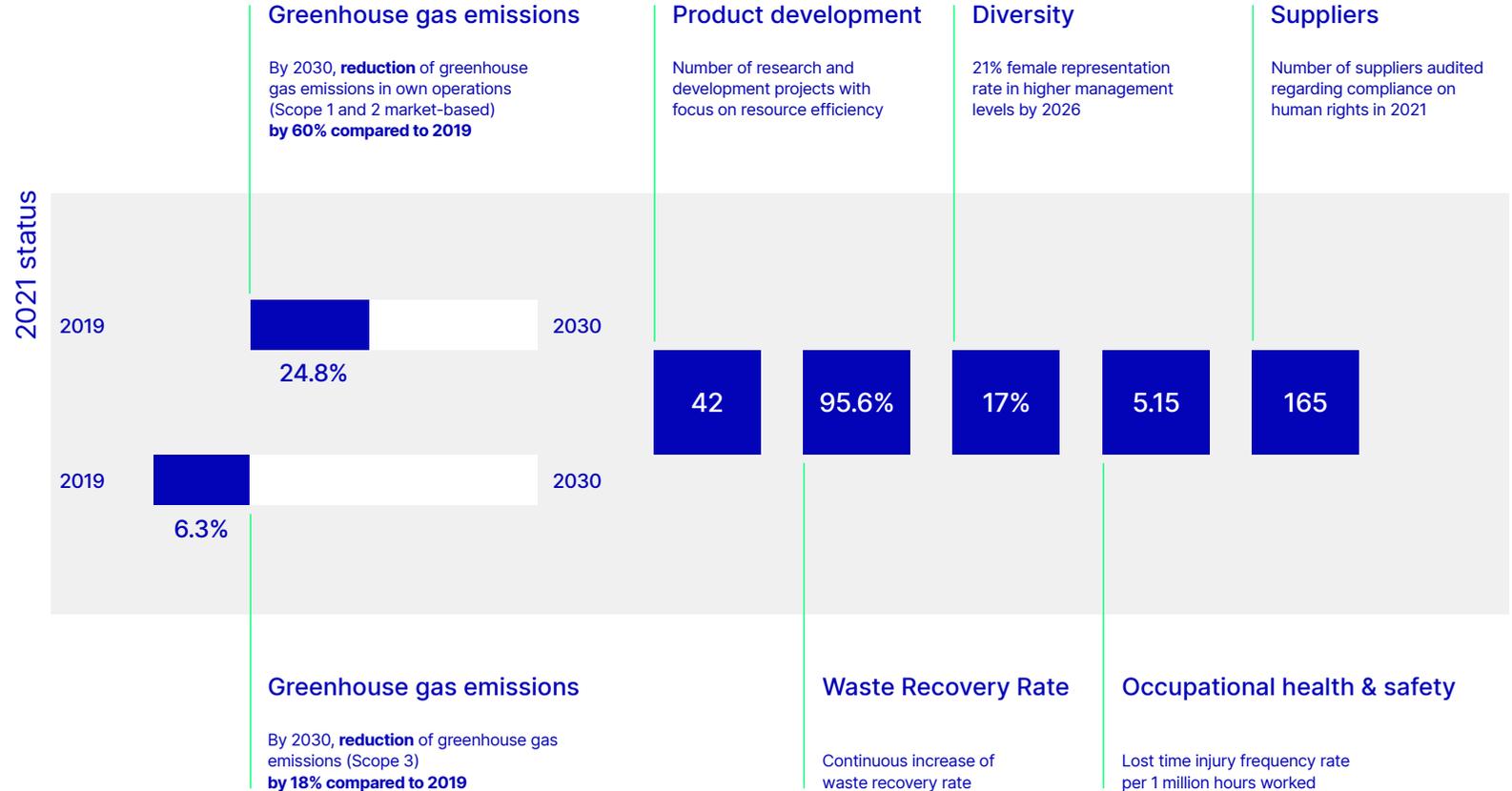
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2. ESG Corporate Rating | ISS (issgovernance.com)

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The key performance indicators 2021



What we have achieved in 2021

The goal of our sustainability strategy is to continuously reduce the environmental and social impact through our business activities on an ongoing basis. By 2026, we aim to be the sustainability leader in our industry. To substantiate these ambitions, we have defined a series of measurable targets in various fields of action. The progress we have made in 2021 can be seen on the basis of selected key figures in the overview on the right.

CLIMATE STRATEGY



[Climate Strategy](#)

AN INDUSTRY LEADER

It is no exaggeration to say that climate change is one of the toughest global challenges ever faced by humankind. Rising atmospheric temperatures will have more far-reaching consequences than any other event. This is why, in the Paris Climate Agreement, the global community adopted the non-negotiable goal of limiting global warming to well below 2, preferably to 1.5 degrees Celsius. It goes without saying that industry also has its part to play in achieving this goal. But what does that mean in practical terms? First and foremost, it requires a comprehensive energy efficiency offensive. And second, it means shifting to a comprehensive circular economy and carbon-neutral production processes.



Climate change and its impact on Earth

With its innovative products, GEA has been playing an active role in climate protection for many years now. We use life cycle analyses to demonstrate that we are improving the energy efficiency of our machinery and plants from generation to generation, thus preserving resources and reducing greenhouse gas emissions. Moreover, in certain cases, we already operate a take-back scheme for our products, which we recondition so they can be used for many more years. From 2026, we will be extending this scheme to selected spare parts as well.

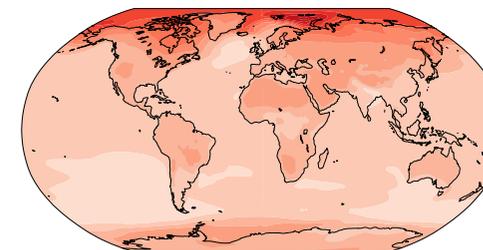
Daunting tasks lie ahead of us. The good news is that the engineering and industrial sectors offer a wide range of technological solutions, processes and extensive expertise, all of which can make a substantial contribution to reducing global emissions to net-zero more quickly. This is a very motivating challenge for the engineers among us.

Stefan Klebert, CEO

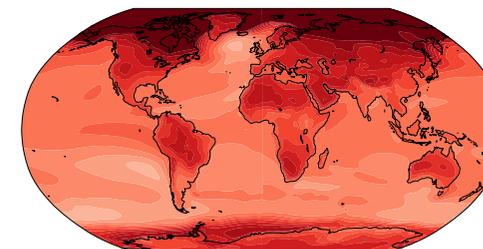
Starting in 2021, we adopted an even more systematic approach to tackling the issue. GEA's new climate strategy means that the company's climate protection measures will be managed centrally and selectively. Indeed, this kind of framework is the only way to measure and compare ambitions. The climate strategy defines the operational framework and provides guidance for the onward development of our company's business activities.

Annual mean temperature change relative to 1850 – 1900

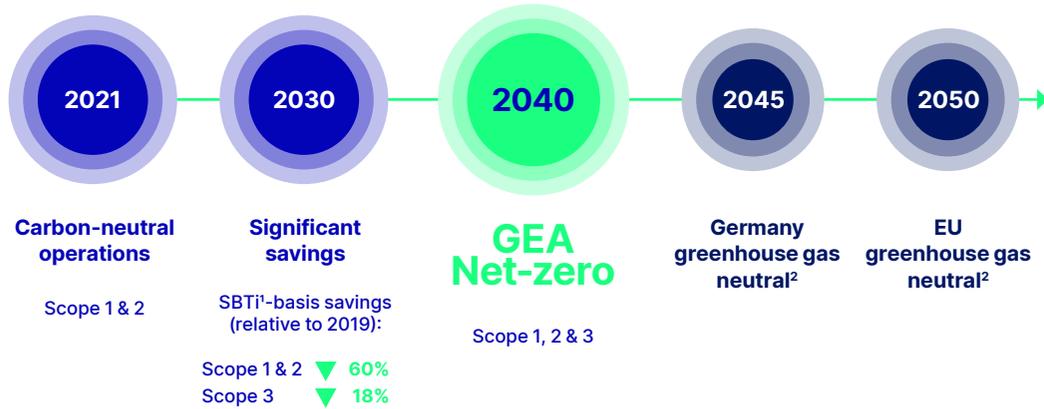
Simulated change at **1.5 °C** global warming



Simulated change at **4 °C** global warming



Source: ipcc report "Climate Change 2021, The Physical Science Basis", Page 22



¹ Science Based Targets Initiative (SBTi): globally recognized independent institution for verification of climate targets, GEA interim targets to be validated by SBTi
² According to German Climate Protection Act 2021/European Green Deal 2019

Science-based targets

GEA has set itself ambitious targets. We aim to achieve net-zero greenhouse gas emissions at every link in the value chain by 2040. This will be the yardstick by which we are measured. It goes without saying that we are not leaving anything to chance as we work toward this goal. The interim targets we have set for 2030 are science-based targets. These are targets that are scientifically calibrated to limit global warming to well below 2 or preferably to 1.5 degrees Celsius compared with the pre-industrial age. GEA

submitted its reduction targets for review by the Science Based Targets initiative (SBTi), an independent, globally recognized organization for auditing climate targets, whose standards we apply in reporting our KPIs. This showed that we are on the right track. The SBTi confirmed that our pledges are in line with the latest climate research findings and will make an effective contribution to achieving the 1.5-degree target. Our entire climate strategy is geared toward attaining this goal.


2040

GEA is a net-zero company.

WE'VE HAD OUR SCIENCE-BASED TARGET APPROVED

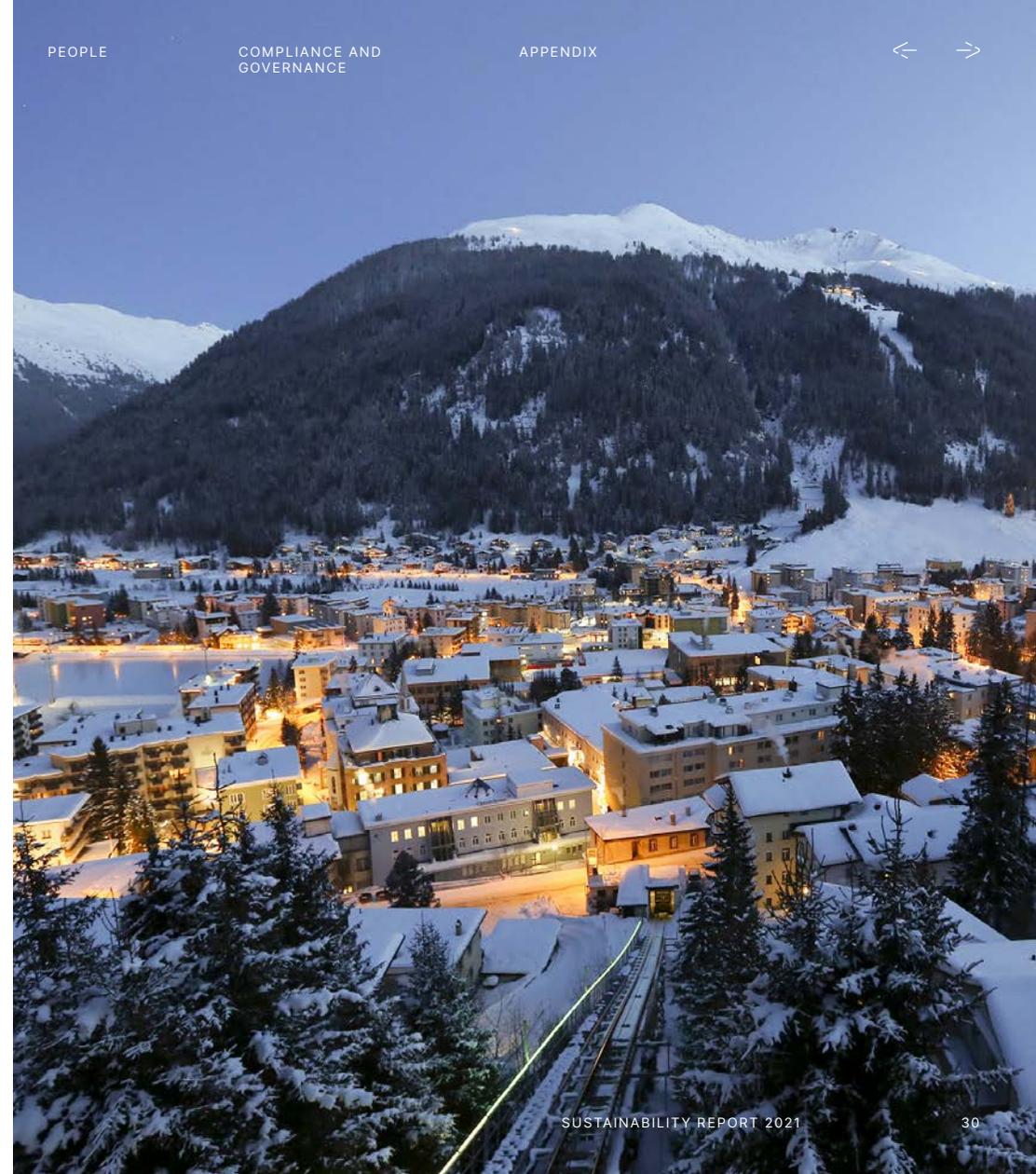


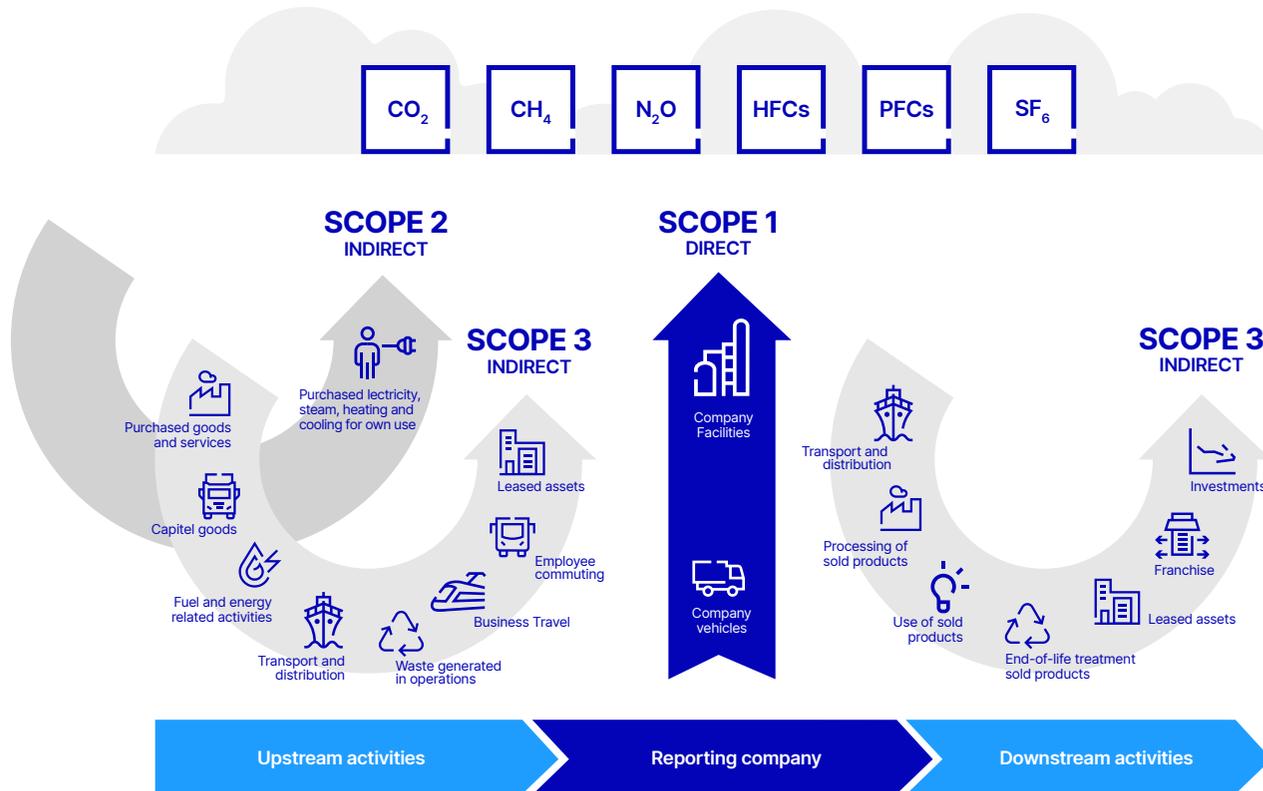
The Gold Standard

Today, GEA is already a net carbon-neutral company (Scope 1 and 2) thanks to off-setting achieved by investing in Gold Standard climate protection projects since 2021. According to the German Federal Environment Agency, the only projects eligible for Gold Standard certification are those that demonstrably lead to a reduction in greenhouse gases and, at the same time, are good for the local environment and meet the population's social needs. They fulfill the criteria and conditions set out in the 2005 Kyoto Protocol on Climate Change.

GEA is one of the few European machine manufacturers to have set any science-based targets to-date. *"This climate strategy puts us ahead of the competition,"* says Stefan Klebert, CEO of GEA. *"It really is one of the most comprehensive and ambitious climate strategies in the mechanical and plant engineering sector and involves the entire value chain, enabling us to reduce both direct and indirect emissions. It is therefore consistent with our corporate purpose of 'Engineering for a better world.'"*

With the goal of achieving progress in climate protection, GEA has joined the World Economic Forum (WEF) Alliance of CEO Climate Leaders, a global community of CEOs from major corporations across different industries. Its aim is to facilitate the transition to a net-zero economy by encouraging action across all sectors and engaging with policymakers. The Alliance was founded by the WEF to support the Paris Climate Agreement and inspire companies to take bold climate action by setting ambitious targets, reducing their own emissions and encouraging others to do the same.





Focus on seven areas of action

So what does the path to net-zero look like? GEA has identified seven key action areas. Employee awareness and sustainable products pave the way for change and our products in particular give us significant leverage for reducing greenhouse gas emissions. Other action areas concern the procurement of electricity from renewable sources (Scope 2) as well as more energy-efficient buildings and mobility (Scope 1). Lastly, they include procurement and logistics in the area of indirect Scope 3 emissions resulting from our suppliers' operations.

The following activities are planned:

- Employee awareness: We are raising employee awareness about sustainable conduct.
- Sustainable products: We aim to make a positive contribution to our customers' sustainability by offering a net-zero product portfolio by 2040.
- Energy and mobility: We plan to procure green electricity and gradually switch to electric company- and service vehicles.
- Energy efficiency: In the long term, we intend to modernize our buildings and make them carbon-neutral by 2040. In the short term, we want to reduce energy consumption at all our energy-intensive sites.
- Procurement and logistics: By 2040, all the goods and services we purchase will be carbon-neutral.

You can read about how we aim to reach these goals in the following chapters of this Sustainability Report.

Source: The Global Compact Network Germany

Our yardstick

What does GEA specifically want to achieve? In addition to the goal of being a net-zero company by 2040, by 2030 we aim to reduce Scope 1 and 2 emissions by 60 percent and Scope 3 emissions by 18 percent each compared with the base year of 2019. Moreover, by 2026, half of GEA's total energy needs will be covered by a certified energy management system.

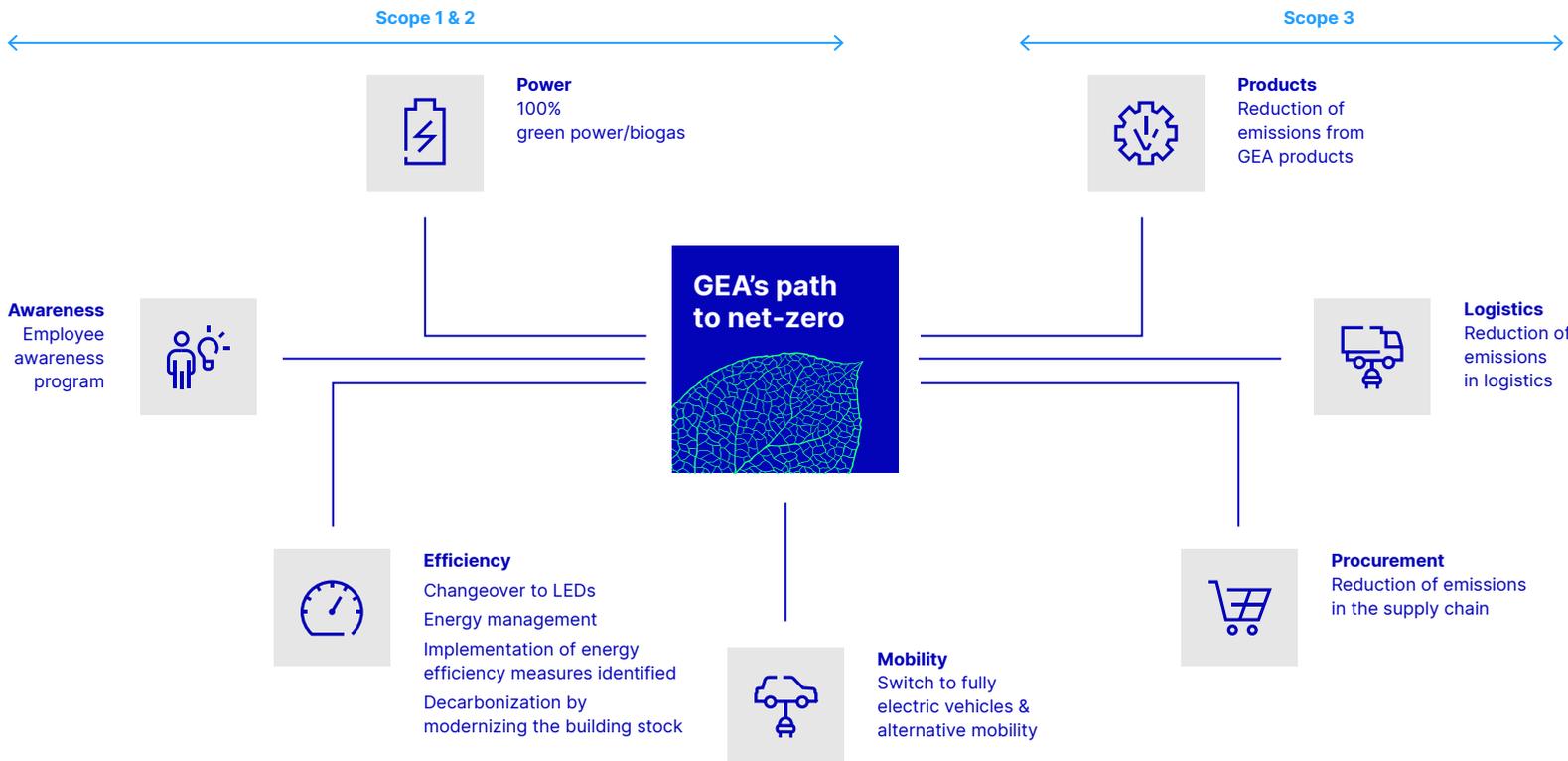
While reducing Scope 1 and 2 emissions is important, a decrease in Scope 3 emissions is more critical to achieving net-zero. These are the indirect emissions from upstream and downstream activities such as the purchase of goods, services, transport and business travel, and especially the phase in which our customers use the products. That is why product innovations are the most important lever for reducing Scope 3 emissions. Firstly, our increasingly resource-efficient products and processes enable our customers to achieve their own sustainability targets; secondly, they contribute toward improving our own greenhouse gas balance. In 2019, indirect emissions from downstream activities accounted for more than 94 percent of GEA's total greenhouse gas emissions.



60 %

By 2030, we aim to cut our Scope 1 and 2 emissions by 60 percent.

Focus on seven areas of action



Improving our customers' carbon footprint

Our impact on climate protection extends well beyond our company's own carbon footprint. The majority of our technologies make significant contributions to helping our customers reach their climate targets by replacing systems that are responsible for substantially higher carbon emissions. We apply the concept of avoided emissions to measure this contribution, in line with established standards such as the Avoided Emissions Framework. Avoided emissions describe the effect of a product on greenhouse gas emissions compared with the baseline situation when that product was not used.

For example, the heat pumps and compressors sold by GEA in 2021 alone will allow our customers to achieve avoided emissions of around 535.000 tons of CO₂ equivalents over the life cycle of these products, as they replace natural gas-fired heating systems and other components such as fans. These savings are made possible by the fact that heat pumps are considerably more energy-efficient, do not waste but use waste heat and are powered by electricity which will increasingly come from renewable and emission-free sources going forward.

GEA is actively informing its customers about the energy and emissions savings they can achieve by using these new technologies. We will extend the avoided emissions concept to other components in our product portfolio in the near future.

One thing we are sure of is that the changes we need to make to protect the climate are a major challenge, but also hold opportunities – not just for GEA. Good planning and modern heat pumps can already reduce operating costs significantly, quite independently of rising CO₂ taxes. New energy- and resource-efficient technologies and processes will enable companies to safeguard their long-term success and competitive edge.



We support climate-friendly transport

In order for Germany to achieve its climate protection targets, more climate-friendly and more efficient vehicles need to be on the roads. Looking ahead, GEA will use electric vehicles, which means we will be switching our global fleet of some 4,300 company cars to environmentally friendly vehicles, wherever we can over the next few years. A corporate directive to promote green mobility stipulates that all new vehicles for GEA executives in Germany must be all-electric starting from 2021. And to ensure that electromobility really gains traction at GEA, we are naturally also investing in the installation of charging stations at our sites.

But that is not all. In collaboration with a German car manufacturer, we are currently testing the performance of all-electric service vehicles, which operate under different conditions to standard company cars. For example, service employees drive long distances to customers every day, transporting heavy tools and spare parts. This high vehicle weight has a direct impact on the potential range of an electric vehicle. In November 2021, six vehicles were tested in service journeys totaling some 12,000 kilometers. In the future, GEA will offer every service technician the option to use an all-electric vehicle, if they choose to do so. Otherwise, they will continue to use diesel vehicles.

“A completely new and fascinating driving experience”



Stefan Klebert, the CEO of GEA, does not have a company car, but has bought an electric car for private use. And he is enthusiastic about this new mobility concept.

Mr. Klebert, how has your personal experience with electric mobility been so far?

I've been driving electric cars for quite a while. It was a bit of an adjustment at the beginning, when it was still a pioneering concept. But I'm now very comfortable with it. It's a completely new and fascinating driving experience which gives you a feeling of both speed and slowing down at the same time. Electric cars ensure a very relaxed driving experience, but they are also extremely agile, with plenty of power when you need it. I love driving my electric car and would never want to give up this experience.

Interest in electric cars is growing, but some people are still skeptical. What do you say to them?

I totally get it. I was also skeptical at first. And, of course, electric cars are not a miracle cure for climate change. Having said that, I firmly believe they make an important contribution to environmentally friendly mobility. They have proven to be well-suited for most journeys, and the charging infrastructure in Germany is also steadily improving. As I said, driving an electric car is different and change is never easy. But at some point, you must make a decision. I'm sure the skeptics will be surprised at how convenient e-mobility is in everyday situations.

GEA's corporate fleet is also being converted to electric vehicles. What advantages do you expect from the changeover?

Our aim is to be a sustainable company and we've set very ambitious climate targets for ourselves. If we're to achieve them, we must scrutinize everything. Converting our fleet to electric vehicles is a significant element that will quickly deliver an effective contribution. In doing so, we also signal that we aim to begin with our own operations and make rapid progress. We've also launched a host of other initiatives to reduce our direct and indirect greenhouse gas emissions.

SUSTAINABLE SOLUTIONS



Sustainable Solutions

USING WATER EXTRACTED FROM MILK FOR PLANT CLEANING AND PRODUCT CHILLING OPERATIONS



Amul is India's largest dairy cooperative, whose roots go back to the early 1950s. Heralded as the pioneer of India's "white revolution", the group has been instrumental in making the country one of the world's largest producers of milk and dairy products. As a long-standing partner to the cooperative, GEA has supplied it with various plants over the years, including Asia's largest milk powder plant in Gandhinagar, which combines cutting-edge technology with maximum resource conservation and low CO₂ emissions. What really makes this plant special is the fact that it uses next to no fresh water in production.

The industry is investing heavily to develop technologies and processes that reduce the amount of water needed in industrial processes and production operations, while also facilitating efficient water treatment. The milk processing industry is leading the way in this water-neutral approach. Milk consists of about 85 percent water, which can be extracted and reused to meet most, if not all, of the milk processing plant's water requirements. Nothing is wasted. Apart from minimizing fresh water consumption, the process thus also produces a lot less wastewater.

We built a water-saving plant like this in Gandhinagar, India, for Amul. GEA was responsible for end-to-end engineering of the entire turnkey project, from milk processing to powder packing, including ancillary equipment, electrical installation, media supply, piping and automation. The AmulFed plant was completed in a record time of just 20 months.

The size of the powder plant, which covers 26,000 square meters and is eight stories high, was unprecedented in the Indian dairy sector. Each day, the fully automated facility produces 150 tons of skimmed milk powder and 120 tons of dairy whitener. The plant is located at the same site as Amul's existing 60-ton and 100-ton powder plants, which were also supplied by GEA in 1994 and 2004, respectively.

"The three plants together give AmulFed the largest single-site skimmed milk powder facility in Asia, with a daily capacity of 310 tons."

Rajesh Golani,
Head of Sales Support and Offer Management, GEA India

Hygienic design principles and advanced, integrated processing solutions ensure sustainable, future-proof milk powder processing. Built to operate 24/7,

the processing and packaging plant has a capacity of 150 tons per day and can handle even the largest volumes of milk arriving from dairy farmers throughout the region during the "flush" season, when milk production is at its peak.

Water target for sustainable solutions

By 2030, GEA will offer its customers the option of operating machinery and plants with no extra need of fresh water.



GEA's complete solution includes energy-efficient separators with an integrated direct drive, separators to remove bacteria, high-pressure homogenizers and hygienic valves for liquid milk processing, not to mention the largest GEA MVR evaporators delivered to India to date. These evaporators typically require 30 percent less space than conventional systems; they help cut energy consumption, thus reducing both costs and CO₂ emissions. Three sets of fine reverse osmosis filters treat condensate from the evaporators. The water extracted from the milk in this way can be reused to clean the plant and chill the product. As a result, AmulFed has cut water consumption by a total of 420 million liters each year – an impressive achievement.

"What's so impressive is that ALL of the evaporated water is condensed and reused in the dairy plant."

Dr. Rupinder Singh Sodhi,
Managing Director, Gujarat Co-operative Milk Marketing Federation (GCMMF)
(Amul)

In addition, the plant is equipped with highly advanced safety features, including a CO detection system, an explosion suppression system and a nozzle camera to monitor the spray cloud. Monitoring and control systems help ensure top-quality production, optimize the use of resources, minimize waste and product loss and reduce downtimes as well as unnecessary stoppages.



In 2010, access to safe drinking water and to water for personal and home hygiene, as well as access to sanitation, were recognized by the UN General Assembly as a human right, before being enshrined as two separate human rights in 2015.

GEA's water-saving plants increase the efficiency of water use and facilitate the integrated management of water resources during the production process. In this way, we are supporting Sustainable Development Goal (SDG) 6 ("Ensure availability and sustainable management of water and sanitation for all").



420 Mio.

The AmulFed plant has cut fresh water consumption by 420 million liters each year. This corresponds to 7,000 tank trucks with a capacity of 60 m³ each.

Sustainable Solutions

Made for a better world

GEA is one of the world's largest systems suppliers to the food and pharmaceutical industries. Our portfolio includes machinery and plants as well as process technology, components and comprehensive services. We offer a host of solutions that enhance the sustainability and efficiency of our customers' production processes worldwide. This is consistent with our corporate purpose of "Engineering for a better world."

For customers, quality and product safety are only part of the picture. The sustainability performance of both our products and the company itself is hugely important in the supplier selection process. Nowadays, customers expect GEA's plants, machinery and components to help them improve their own sustainability performance – allowing them, for example, to achieve carbon neutrality or reduce their environmental footprint. This means our customers will be able to curb their environmental impact because they use fewer raw materials and less energy or water, or produce less waste. However, it goes without saying that our customers also expect the machinery to facilitate economical production throughout its life cycle.



Circular economy approach runs five R's

Re-Use

Re-Use of used product parts which are still in good condition and fulfill their original function.

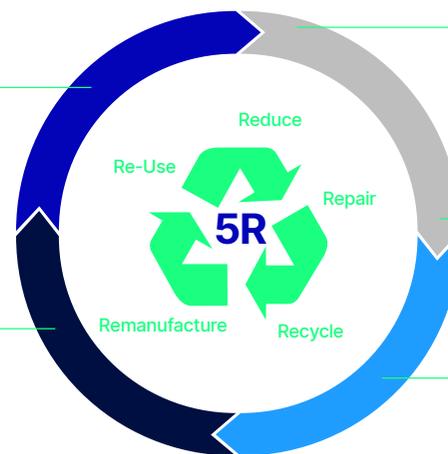
Remanufacture

Remanufacturing of used equipment, components or service parts to be used again.

Product management

At GEA, the strategic management of sustainable products and services is the responsibility of the Sustainability Department, which develops and communicates qualitative and quantitative goals, providing support for their implementation and assessing their attainment. The Sustainability Department is the central unit that initiated our sustainability targets and ensures that they are reached. Operational implementation, i.e. the development of sustainable solutions, is the responsibility of the divisions.

GEA has installed an overarching product development process that focuses on selected criteria when implementing sustainability projects. Development activi-



Reduce

Increase of efficiency in product design, manufacturing or use by consuming fewer natural resources and less polluting material.

Repair

Repair and maintenance of product so it can be used with its original function.

Recycle

Process material to obtain the same or a similar quality.

As part of our “Mission 26” strategy, we have set the following sustainability targets for product development:

- By 2030, greenhouse gas emissions along the entire product value chain (Scope 3) are to be reduced by 18 percent compared with the base year of 2019.
- Likewise by 2030, GEA will offer its customers the option of operating machinery and plants with no additional need for fresh water.
- To enable our customers to make a significant contribution to reducing their raw material consumption, suitable GEA products will process sustainable packaging materials by 2030 at the latest.
- By 2026, spare parts and the packaging material for GEA products will have to meet one of the circular economy's five Rs (Reduce, Re-use, Repair, Remanufacture, Recycle) in order to substantially cut our own and our customers' resource consumption.

ties are concentrated on energy and water consumption, material usage and the circular economy. We use a trend scouting process based on “search – evaluate – observe” to zone in on these sustainability subcategories as required. This process results in a trend radar of sustainable technologies and market or customer trends that the divisions and business units can use in the specific development of sustainable solutions. Success in reducing emissions using GEA products also involves the company's supply chain partners, which is why GEA is in permanent dialog with its suppliers.

Product development

Sustainability, alongside product functionality and cost-effectiveness, are key considerations in product and process development because decisions taken in the development phase have a long-term impact outside the company and must therefore be scrutinized critically to ensure that sustainability criteria are met. The aforementioned sustainability criteria are already taken into account during the requirements and design phase of the development process. In addition to resource efficiency, machine safety to ensure user health and safety throughout the entire life cycle is also a firm development criterion. The intended sustainability effects are measured by key performance indicator systems that record the sustainability parameters during product development and facilitate strategic monitoring.

Product responsibility

The divisions respectively business units have product responsibility. They manage the development and growth of their product portfolios on the basis of the “Mission 26” strategy. The potential risk posed by each plant, machine or component must be taken into account in the construction, testing and operation phases. Avoiding the risk of mechanical, biological, chemical, electrical and acoustic hazards is the central function of a standardized machine safety risk analysis in accordance with ISO 12100. Risk assessment is conducted as part of the development and technical documentation processes using failure mode and effects analysis (FMEA). It uncovers potential weaknesses and errors in a machine or process, assesses the associated risk as well as providing guidance on avoiding errors and minimizing damage.

Our divisions have product safety committees (PSCs) to assess and evaluate incidents involving GEA products that could lead or have led to either a risk to human life, harm to human health or property damage on customers’ premises. The interdisciplinary PSCs are tasked with taking appropriate action to prevent and remedy product safety defects as well

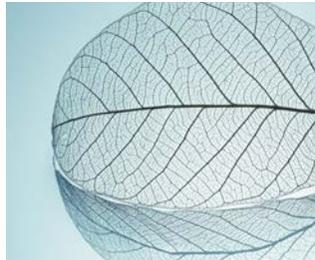
as minimize legal and financial risks for GEA. The committees collect and evaluate information about the use of a product during its life cycle. All the safety aspects are also listed in the operating manuals for GEA products and recorded as part of the documented product final acceptance process.

Statutory product conformity is confirmed by markings such as the CE label, FDA approval or China Compulsory Certification (CCC). During acceptance, customers are also briefed on safety aspects of the GEA product to ensure that it is used as intended. Our service staff also receive product safety and operation training to ensure that the process of installing GEA products on customers’ premises goes smoothly.

Life cycle analyses

In the context of our “Mission 26” strategy and our sustainable solutions targets, life cycle analyses deliver necessary planning assumptions for reducing greenhouse gas emissions. This is why CO₂ life cycle analyses in accordance with ISO 14040 are prepared for selected products to provide a reliable basis for planning and setting CO₂ target values. If required, a life cycle analysis of the technology is also performed as part of the portfolio analysis. This involves determining the current life cycle phase of a technology with a view to initiating appropriate, strategic technology development measures.

GEA has identified four focus areas for product development that reflect market and customer requirements:

**Environmental
Sustainability****New Food****Digital Solutions****Modularization &
Configuration**

Digitalization

GEA aligns its digital innovations to its customers' sustainability targets. New digital services such as condition monitoring and Performance Plus, which are based on the Industrial Internet of Things (IIoT) and data science, help to optimize machine and plant productivity and extend their useful life. This directly impacts the resource requirements for new machinery and the consumption of resources throughout a product's life cycle. Digitalization of the customer interface, especially in Service, using remote maintenance or control further reduces the environmental footprint.

Customer satisfaction

GEA regularly conducts customer satisfaction surveys worldwide. As a rule, these surveys are carried out immediately after various customer contacts such as a business transaction or the delivery of spare parts. A standardized reporting dashboard used throughout the company makes it possible to measure and analyze customer satisfaction both globally and regionally for the group as a whole and for the individual divisions. This lets GEA respond rapidly to customer feedback and identify potential for improvement.

In the period under review, customer satisfaction with Service increased, and the corresponding net promoter score for the Service Division continued to rise, reaching 54 in 2021 (2020: 53). Customer satisfaction with the new machinery business was also measured globally for the first time in 2021. The corresponding net promoter score was 41. Overall, the combined global customer satisfaction in 2021 is an outstanding NPS of 52. The net promoter score is a key performance indicator between +100 and -100 that describes the extent to which customers would recommend a product or service to others.

**41**

Net Promoter Score 2021
for new machine business global.

54

Net Promoter Score 2021
for Service (2020: 53).



The EU Taxonomy Regulation explained

What are sustainable products and services? The European Green Deal aims to achieve absolute carbon neutrality in the European Union by 2050. The European Commission has developed the Action Plan on Sustainable Finance to establish the economic basis and funding for this goal. The EU Taxonomy Regulation is one of the measures defined in this action plan that aims to promote investment in sustainable economic activities. It defines an activity as environmentally sustainable only if it makes a substantial contribution to at least one of the environmental objectives established in the Taxonomy Regulation:

- Climate change mitigation
- Climate change adaptation
- The sustainable use and protection of water and marine resources
- The transition to a circular economy
- Pollution prevention and control
- The protection and restoration of biodiversity and ecosystems

At the same time, economic activities may not significantly impair any of the other environmental objectives (Do No Significant Harm) and must comply with the minimum requirements in the areas of labor standards and human rights.

The Taxonomy Regulation has only limited applicability to GEA

It is a fact that the EU Taxonomy Regulation in its current form only applies to some of GEA's economic activities. The manufacture of technologies, plants and machinery for food and pharmaceuticals production is not listed among the EU Taxonomy Regulation's economic activities. However, GEA Group AG generates over 80 percent of its revenue from its products for the beverage, food and pharmaceutical industries. Thus, the main purpose of our machinery and solutions is the production of food and pharmaceuticals, not reducing energy consumption and/or

manufacturing materials for the energy transition. Nonetheless, our technologies and machinery ensure that customers in the food and pharmaceuticals industries in particular achieve their climate targets

and comply with increasingly stringent regulations on greenhouse gas emissions, water consumption and waste disposal. This is exactly what we mean by "Engineering for a better world."



Climate change mitigation



Climate change adaptation



Sustainable use and protection of water



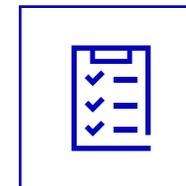
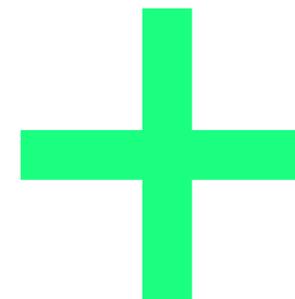
Circular economy



Pollution prevention and control



Protection of biodiversity and ecosystems



Contribution to environmental goal



Protection of human rights

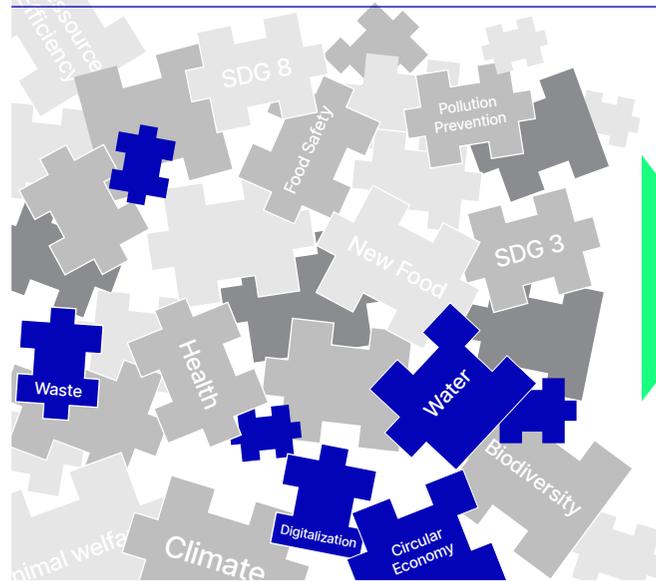


Do No Significant Harm

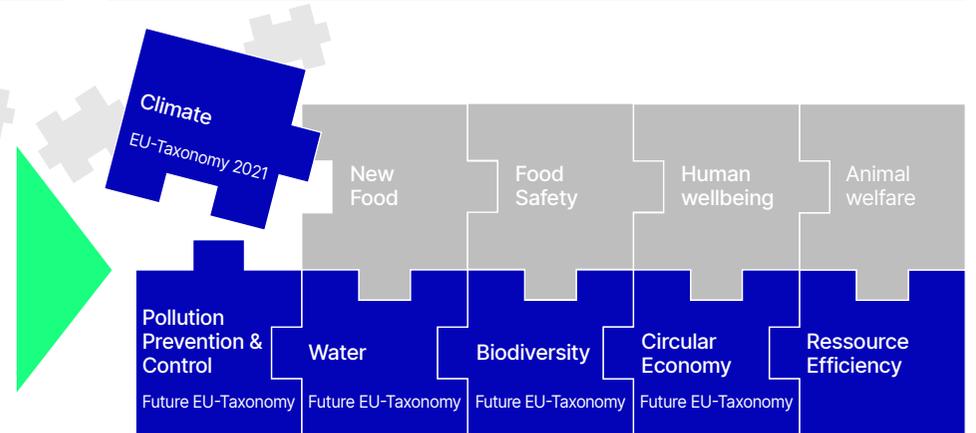
Our sustainable solutions are aligned with UN Sustainable Development Goals



Today's landscape of sustainable activities



Our definition of sustainable solutions



Sustainable solutions

Although the approach of the EU Taxonomy Regulation is good, it currently takes little account of the economic activities of Germany's plant and mechanical engineering sector, which includes GEA. However, since we have also set our own clear sustainability targets as part of our "Mission 26" strategy and aim to make our products and services more sustainable, we have developed our own definition of sustainable product solutions. In this, we were guided by the 17 United Nations Sustainable Development Goals (SDGs). These are political objectives that are intended to ensure sustainable economic, social and ecological development worldwide. We have identified ten categories in which our solutions make an environmentally sustainable contribution.



New
Food

Definition: Plants, technological solutions or software for the production of plant-based alternatives to dairy products and meat, insect proteins, precision-fermented proteins and cell-based meat.

GEA's expertise in the new food segment can help guarantee food security for the world's population, ensure that everyone can maintain a healthy and balanced diet as well as end all forms of malnutrition. In other words, we comply with SDG 2. In addition, the production of meat and dairy substitutes helps to protect the climate, so we are also complying with SDG 13.

2

ZERO
HUNGER

13

CLIMATE
ACTION

Helping to satisfy the world's appetite for protein

One example of a company in the new food sector is Novozymes, the world's largest supplier of enzyme and microbial technologies. In the year under review, the Danish company entrusted GEA with the turnkey construction of a major new plant to produce plant-based proteins. This order from the growing new food market is one of the largest in our company's history.

It is anticipated that the rapidly growing global population will significantly increase demand for proteins in the near future. This development represents both a challenge and an opportunity for food producers. GEA is working hand in hand with its customers to develop and implement product ideas for a variety of meat-replacement and plant-based products incorporating different vegetable or single-cell proteins.

The new production plant for Novozymes covers the manufacturing steps from harvesting to separation of the proteins. In mid-2022, GEA will begin installing the process systems, which include membrane filters, mixers, homogenizers, heat exchangers, heat treatment systems and systems for cleaning and filling as well as the pump and valve technology. The production facility is modular in design so it can easily be expanded from its initial capacity as demand grows. GEA and Novozymes are united by their ability to build scalable, highly efficient and reliable plant systems.

In the year under review, the new production plant for Novozymes contributed to mitigating climate change as defined by the EU Taxonomy Regulation.





Definition: Devices, technological solutions or software designed to prevent food damage, either by direct protection against negative impacts (e.g. contamination, oxidation) or by ensuring high quality by means of additional measures (e.g. testing).

GEA's LeakCheck prevents food from spoiling prematurely because of defects in the packaging. This protects the consumers on the one hand and prevents food waste on the other. In this way, GEA is contributing to SDG 2, 3 and 12.



Detecting leaks, protecting food

Consumers want fresh, hygienically packaged food, while retailers want long-lasting products with an attractive appearance. Positioned at the start of the supply chain, food manufacturers must provide solutions that satisfy all hygiene and quality standards. Meeting all these demands while at the same time boosting productivity calls for end-to-end process monitoring automation.

GEA's LeakCheck is one example of a food safety solution. The new inline measurement system checks the seal integrity on all forms of modified atmosphere packaging (MAP) without exception. This guarantees the protective function and quality of food packaging to ensure that products remain in perfect condition.

Inline process checks for leaks in each individual package

Based on GEA's tried-and-trusted OxyCheck quality control system, the GEA LeakCheck now employs an inline process to test the seal integrity on each individual package. The test procedure comprises three steps. A leaky package is automatically detected and accurately removed on exiting the packaging machine. Thanks to LeakCheck, the two key factors for ensuring food safety – residual oxygen content and seal integrity – can now be continuously recorded and monitored on an end-to-end basis. Process errors are rapidly detected and the delivery of faulty packaging is virtually zero. This makes food safer for longer, leaving a good taste in consumers' mouths.





Human wellbeing

Definition: Devices, technological solutions or software designed for producing goods (or treatments) for restoring, maintaining or improving human health by means of pharmaceutical products or food supplements.

GEA's expertise in pharmaceutical technology is helping to ensure the health of all people around the world – and, for instance, to end the Covid-19 pandemic more quickly. We are thus complying with SDG 3.

3 GOOD HEALTH
AND WELL-BEING



High-tech for global vaccine production

GEA's steam-sterilizable separators for the production of pharmaceuticals are an example of health-promoting product solutions. As a technology leader, we are making a key contribution to the fight against the SARS-CoV-2 coronavirus with our expertise in the field of separators.

The GEA pharma skid unit ensures biocontainment to prevent cross-contamination. A hermetically sealed plant concept prevents the product from coming into contact with the environment. The separator system achieves maximum yield due to its gentle product treatment and high separation efficiency.

Supplied in a steam-sterilizable design to ensure aseptic processing of pharmaceutical products, it is equipped with fully automatic on-site cleaning (CIP, clean-in-place). The hydrohermetic inlet system for shear-sensitive products is patented by GEA. The plant is driven by a three-phase alternating current motor. All parts in contact with the product are made from high-alloy stainless steels.



Animal welfare

Definition: Devices, technological solutions or software designed to analyze, protect or improve animal health and welfare to ensure sustainable animal husbandry.

GEA's smart technologies satisfy SDG 12 concerning animal welfare – for instance, by helping farmers use their natural resources sustainably and efficiently.



Big Data ensures better animal health

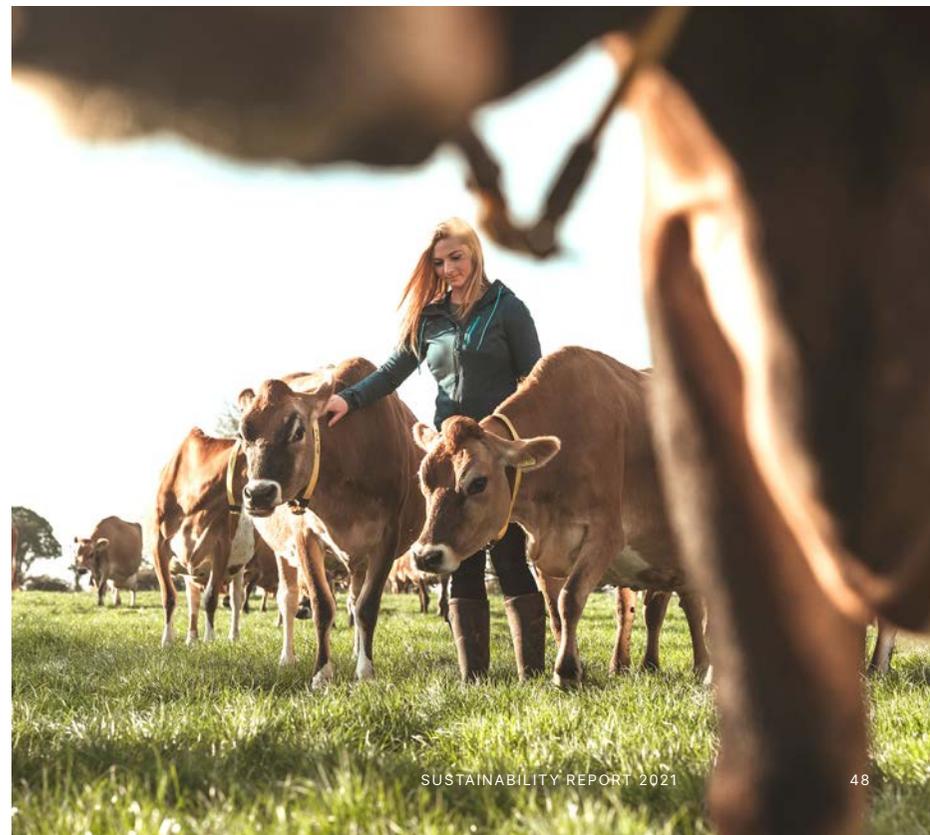
Smart technologies from GEA are helping dairy farmers to master the many challenges they face today – enabling them to stay profitable, attract young talent, reduce resource consumption and waste as well as ensure herd health, which in turn promotes animal welfare.

We offer dairy farms the opportunity to analyze the big data they collect and initiate targeted measures with a view to improving animal health. The GEA CowScout system, for instance, lets users analyze each cow's activity data, such as lying and feeding times. A new optional positioning function allows immediate location of cows and faster action if necessary. Farmers can access all the data in real time on their mobile devices.

Digital early detection and optimized feed management

The DairyMilk M6850 cell count sensor uses patented sensor-based technology to measure somatic cell count classes in milk for earlier detection of mastitis, an inflammation of the udder. By analyzing the milk from each udder quarter individually, the sensor provides farmers with a new level of early detection capability to protect the health of their herds.

DairyNet permits the precise control and programming of feeding stations in the barn and in the milking robot, including functions for group management as well as different rations and feed ingredients. The herd management software shows at a glance where to improve the feeding strategy. Not only does this have a positive impact on herd health, but it also cuts the farm's feed costs.



Climate

EU-Taxonomy 2021

The European Green Deal aims to achieve carbon neutrality by 2050. The European Commission has developed the Action Plan on Sustainable Finance to establish the economic basis as well as funding for this goal. The EU Taxonomy Regulation (Regulation (EU) 2020/852) is one of the measures defined in this action plan that aims to promote investment in sustainable economic activities. This classification system defines economic activities that contributed to achieving the environmental objectives of “climate change mitigation” and “climate change adaptation” in the year under review. Additional environmental objectives are expected in 2022. A list of taxonomy-eligible products can be found in the Annual Report 2021 in chapter “Nonfinancial group statement”.

Products such as our heat pumps contribute positively to mitigating climate change because they dispense with fossil fuels, use only natural and carbon-neutral refrigerants and deliver high energy efficiency. This puts us in compliance with SDG 13.

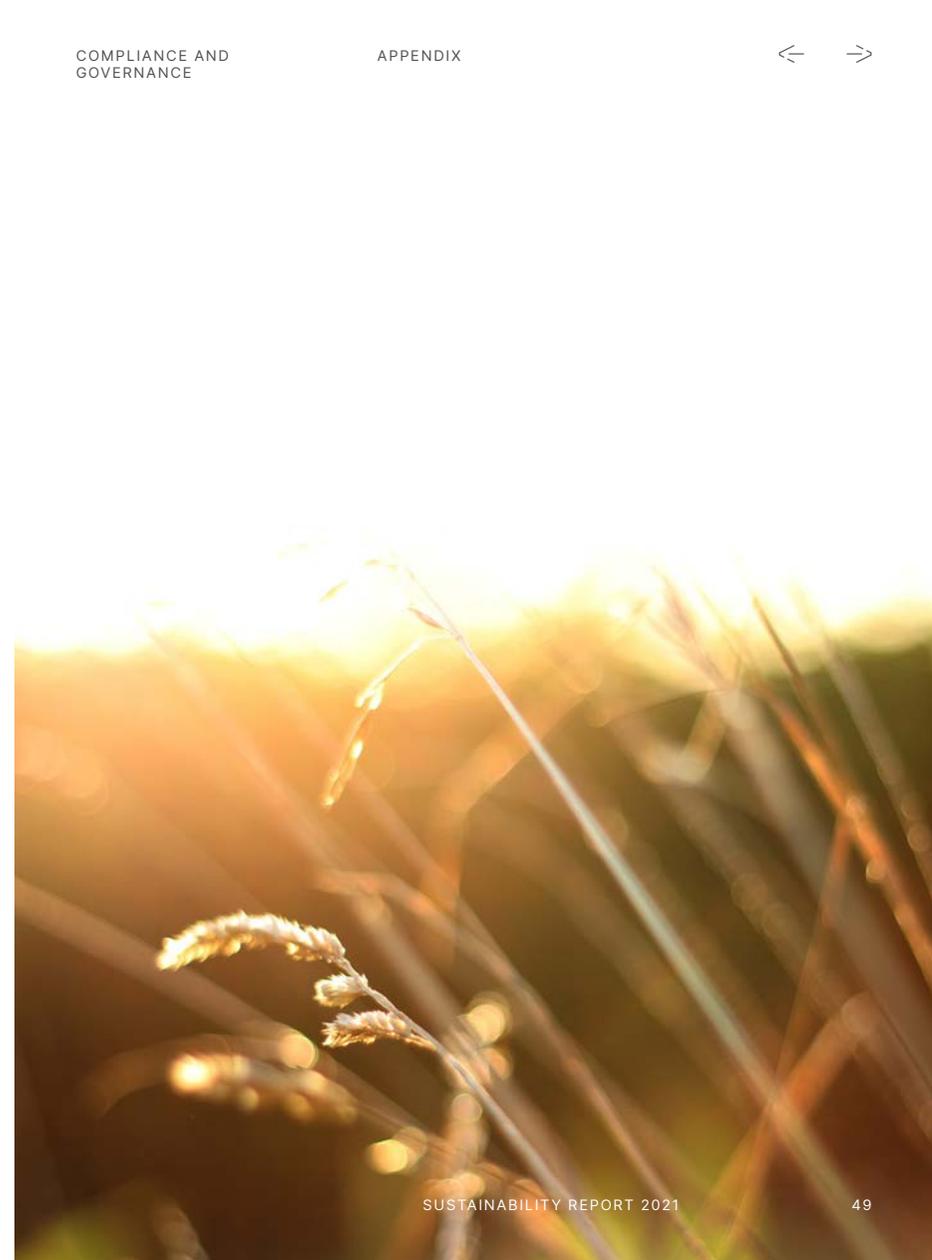
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CLIMATE
ACTION

Heat pumps for efficient climate change mitigation

Heat accounts for more than half of the world's total energy consumption. Despite all efforts to use renewable energy, heat is still mainly generated using fossil fuels. Heat pump technology offers the best alternative when it comes to heat decarbonization. GEA's RedGenium heat pump series is one example of an environmentally friendly product solution. It is the first choice for ensuring maximum efficiency and minimum energy costs. Based on GEA's successful BluGenium design and equipped with heat exchangers configured and optimized to meet each project's requirements, the RedGenium utilizes very low refrigerant volumes and has a low space requirement while delivering maximum efficiency. Using the natural and carbon-neutral refrigerant ammonia, this future-proof solution achieves target temperatures of up to 95 degrees Celsius. Not least because of its wide output range, the heat pump is suitable for all applications that require heat – from process heat in the food and beverage industry to district heating.

Any liquid media up to 60 degrees Celsius can be used as a heat source – for example, wastewater, groundwater, river water or sea water – with a secondary refrigerant in the case of combined cooling and heating applications.



Pollution Prevention & Control

Future EU-Taxonomy

Definition: Devices, technological solutions or software designed to prevent or reduce emissions of pollutants other than greenhouse gases into the air, water or soil.

In line with SDG 12, GEA's emission control systems contribute to the environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks; the systems also significantly reduce their release into the air, water and soil, thus minimizing their adverse effects on human health and the environment.



Transforming emissions into new products

For over a century, GEA has been a global leader in developing, constructing and installing systems and technologies to reduce emissions from the process industry. Our innovative strength and expertise enable us to identify customer needs and find the most suitable emission control technology. Not only does this bring lasting benefits for the environment, but also ensures that our customers remain competitive and comply with all regulations – both now and in the future.

Jet cleaning systems are ideal for treating the exhaust air from chemical reaction processes and production buildings, venting vessels and emptying tank cars. As with all wet scrubbing units, GEA's jet scrubbing plant circulates the scrubbing liquid. However, because it operates according to the ejector principle, there is no pressure loss; rather, it generates a pressure gain in the gas flow so that the need to use a ventilator is often eliminated.

Water, diluted acids or caustic solutions are used as the scrubbing medium. This means that the scrubbers are very well suited to the absorption of environmentally relevant halogens (F₂, Cl₂, Br₂, I₂), hydrogen halides (HF, HCl, HBr, HI), sulfur compounds (SO₂, SO₃, H₂S), ammonia (NH₃) as well as low molecular weight alcohols, carboxylic acids and amines.

If the exhaust gas contains a sufficient concentration of only one noxious substance, it may also be possible to generate products from exhaust gases, such as:

- Hydrochloric acid from gaseous HCl
- Ammonia solution from ammonia
- Sodium hydrogen sulfite from SO₂/SO₃
- Chlorine bleach from chlorine





Definition: Devices, technological solutions or software designed for treating, purifying or reducing consumption of process water, mains water, river water or wastewater.

Products such as our fully automatic milk powder plant not only reduce water consumption, but also save energy. In this way, we are supporting SDG 6 and 13.



Using water extracted from milk for plant cleaning and product chilling operations

Asia's largest milk powder plant for India's main dairy cooperative is just one example of a water-saving product solution. The plant combines cutting-edge technology with maximum resource conservation and low CO₂ emissions. Water consumption has been cut by a total of 420 million liters each year.

Read more. [🔗](#)





Definition: Devices, technological solutions or software designed to help conserve or protect the biodiversity of ecosystems.

GEA offers a comprehensive portfolio of advanced systems such as the decanters designed to protect biodiversity. In this way, we are supporting SDG 15 to halt biodiversity loss.



Bringing waters back to life

In India, a large amount of wastewater still ends up untreated in rivers and lakes, and the treatment capacity available is often insufficient to cope with the volume of wastewater. The consequences include silting, the death of freshwater flora and fauna as well as negative impacts on human health.

Lake Sarakki, one of the largest lakes in Bengaluru (formerly Bangalore), was in danger of dying. Not only was it considered one of the most beautiful lakes in the city, it was also home to thousands of birds. GEA has supplied 40 environmental decanters to Bengaluru for the treatment of municipal wastewater. Each year, the decanters help to recover almost 1.5 billion liters of water from the sewage sludge for further treatment, an amount equivalent to the content of 600 Olympic swimming pools. And that is not all. Plans are in place to recover a further 800 million liters of water each year.

GEA has decades of expertise in the wastewater business using decanter centrifuges as the core technology and almost 130 years' experience in centrifugal separation technology. The GEA biosolids decanters are designed for high-yield sludge and biogas recovery in municipal wastewater treatment. Clarifying decanters are used to separate solids out of a suspension to yield a clarified liquid. The high degree of standardization and the compact, modular design of the decanters allow them to be easily integrated into established processes with minimal need for modification. The units are also very energy-efficient, requiring as little as 0.7 kW/h of energy per cubic meter of sludge in need of dewatering. Since the decanters have been in operation at Lake Sarakki, not only has the water quality and life in the lake improved significantly, but the birds have returned, too.





Definition: Devices, technological solutions or software designed to implement the five Rs (Reduce, Remanufacture, Repair, Recycle and Re-use).

Our machines for processing the FoodTray support the attainment of SDG 12. By reducing plastic usage and increasing the recycling rate, GEA is helping to ensure greater sustainability in consumption and production.



Shrinking the waste mountain

GEA's FoodTray helps food manufacturers to minimize their use of plastic in their packaging, while at the same time increasing recycling rates. Or, to put it another way, the environmentally friendly cardboard and film composite is a packaging solution that improves sustainability.

GEA has been offering this kind of solution as a proven alternative to plastic-only packaging for many years. It has since been further adapted to meet the needs of the market, guaranteeing food manufacturers maximum flexibility. The product has been continuously optimized through cooperation with various partners in the packaging industry. Today, the GEA FoodTray is a packaging system that combines the criteria of product presentation, feel, safety, sustainability and industrial production processes in a single product. Above all else, it reduces the consumption of precious resources.

A composite packaging solution

The GEA FoodTray consists of a film-lined cardboard tray that offers the combined advantages of cardboard and plastic, while reducing the quantity of plastic by up to 80 percent compared with conventional packaging. Materials made from fossil resources are replaced by renewable fibers that have the potential to be fully recycled, thus increasing the proportion of recyclables to as much as 100 percent. To further reduce material waste during the packaging process, GEA can make software adjustments up front when designing the machine. That means fewer empty packages are produced as part of the feed-in process during product changeovers and hence less waste is produced. All of this is achieved without compromising on stability. Consumers can very easily separate the cardboard and film for disposal in separate recycling streams.



Resource Efficiency

Definition: Devices, technological solutions or software designed with lower energy consumption / water consumption / material usage compared with previous generations.

Our Water Saving Unit for centrifuges ensures that cooling water is recirculated, which reduces water consumption and improves water availability. In this way, we are supporting the attainment of SDG 6 and 12.

6 CLEAN WATER AND SANITATION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Centrifuges reduce water consumption

A typical dairy centrifuge uses cooling water for various purposes. The separator's hood and solids trap are cooled to facilitate the removal of product residues from the surfaces by the formation of a condensate film. GEA's direct-drive centrifuges also feature a water-cooled motor.

The space-saving new GEA Water Saving Unit is an optional component that is available for new machines and for retrofitting. Used cooling water is cooled to the optimum temperature and returned to the system in accordance with the respective centrifuge requirements.

The advantages of the GEA Water Saving Unit at a glance:

- Reduced water consumption for centrifuge cooling
- Cooling water for the motor, hood and solids trap is collected, cooled and returned to the system
- Cooling water throughput: 3,600 liters per day
- Savings potential: 99.9 percent compared with the previous generation, totaling around 1.3 million liters of water per year



RESPONSIBLE OPERATIONS



Responsible Operations

A MILESTONE IN OUR GLOBAL MANUFACTURING STRATEGY



The Factory of the Future is efficient, carbon-neutral and fully digitalized – all properties that contribute to one thing above all else: sustainable production. Carbon-neutral manufacturing is necessary to ensure that products, too, can be carbon-neutral – something that many customers already require. And GEA will achieve just that with its new factory in Koszalin, Poland.



In May 2021, the cornerstone was laid for GEA's new carbon-neutral production facility in the northwest of the country. Operations are scheduled to begin one year later. The facility is now being developed into a competence center for pump production and machining processes. We are investing around EUR 30 million to expand the site, turning the factory into a real showcase project and enabling efficient, flexible production in line with our commitment to increase sustainability across all GEA operations. Established in 1991, GEA Tuchenhagen Polska is one of six GEA sites in Poland, where around 80 employees currently produce pump and valve components as well as flanges for GEA factories in Germany and Switzerland.

Optimizing our production network

In 2019, Koszalin was chosen for expansion based on its location and available expertise. That means it has a pivotal role to play in optimizing our production network as well as in GEA's Global Manufacturing Footprint Strategy. This way, GEA aims to increase customer proximity by internationalizing sites, to leverage synergies, reduce production costs by consolidating expertise, increase efficiency and reduce waste.

"Koszalin's expansion is more than just a construction project," explains Johannes Giloth, Chief Operating Officer of GEA. "It is an opportunity to create a competitive, carbon-neutral production center in Europe based on GEA's own needs and industry best practices – a Factory of the Future."

The expansion includes a new two-story administration building, a large production hall as well as warehouse and logistics facilities, all located opposite the existing factory building. Some 190 new employees will be recruited in order to handle the more than 230,000 additional production hours likely to result from the expansion. The new factory will be managed by a cross-functional GEA team with support from external industry experts.

Generating our own power

The new facility will be pioneering, especially in terms of climate protection. Pending final local authority approval in 2022, it will produce its own electricity from a photovoltaic (PV) unit. Stored in batteries, the electricity will also be used for charging the company's electric vehicle fleet. Moreover, a combined heat and power (CHP) plant fueled by biogas and biomethane will be used to generate electricity as well as thermal energy for heating and cooling. The supply of green electricity, green gas and biogas is managed by our global cooperation partner NUS. Heat pumps are another element of the system, at the heart of which is a digitally networked energy and building management solution for the smart control of the entire factory, which contributes to continuous energy savings.

The photovoltaic unit is capable of generating up to 1.8 million kilowatt hours (kWh) of electricity and cutting carbon emissions by some 1,260 tons compared with coal-based electricity. At current electricity prices, the costs of the PV unit will be amortized after around six years. Our own CHP plant produces 2.4 million kWh of electricity during the winter months, thus contributing to a further 1,680-ton reduction in carbon emissions. We generate 3 kWh of electricity and 4 kWh of heat from every cubic meter of green gas. This amounts to around 3 million kWh of thermal energy each year, which in turn relieves the strain on the existing factory's old heating system and yields further savings. Best of all, the CHP plant is already equipped with the technology to operate using hydrogen, which, if produced using green electricity, is even better for the environment.





Annual carbon emissions almost 6,000 tons lower

Most of the approximately 5 million kWh of electricity and 3 million kWh of thermal energy required when the factory is operating at full capacity will be generated on site. Still, the site will produce between 900 and just under 1,300 tons of CO₂ each year from the use of green gas. However, we are reducing carbon emissions by up to 2,940 tons by generating our own electricity. And that's not all: The new factory in Koszalin will also cut carbon emissions at other GEA sites by around 3,000 tons as a result of reorganization measures.

The new building is lit with energy-saving LED lamps and features optimized building and ceiling insulation. Natural light is provided to the offices by the glass facade on the north side of the building, while skylights are fitted in the production and logistics areas. And the smart ventilation system not only creates the optimum indoor climate, but also reduces heating and cooling costs thanks to heat recovery from the exhaust air and the transfer of heat to fresh air.

Ready for further expansion

Right from the start, an important aspect of the project in Koszalin was the option for further expansion in the future. That meant the design took into account the construction of additional production, logistics and office space. It is also possible to expand the production and logistics facilities independently for maximum flexibility. Infrastructure and approvals are already in place for any additional service and utility requirements. This will help minimize the costs and complexity of any future construction work.

"With GEA's Factory of the Future concept and our new facility in Koszalin, we have a model that raises the bar when it comes to further optimizing our global manufacturing footprint and performance," states Giloth. "This marks an important step in building resilience into our business, ensuring the delivery of high-quality products to our customers when they need them, at a price they are willing to pay. Enhancing the energy efficiency of our sites is key to underpinning our viability going forward. That's why we are forging ahead with steps to reduce our own carbon footprint."

Responsible Operations

Environmental protection is the essence of sustainability

GEA is committed to the 1.5 degree target set by the Paris Climate Agreement and to the 17 Sustainable Development Goals of the United Nations. In facing our responsibility, we have adopted binding new sustainability targets as part of our "Mission 26" strategy. Climate protection is at the top of the agenda, and GEA aims to achieve net-zero emissions by 2040.

As we progress toward greater sustainability, we have set ourselves key milestones and ambitious interim targets for reducing emissions, using resources efficiently as well as cutting water consumption and waste generation. Social commitment in the communities close to our sites is also part of our agenda.



Our “Mission 26” sustainability targets:

- By 2030, greenhouse gas emissions from our own operations (Scope 1 and 2) will be reduced by 60 percent compared with the base year of 2019.
- By 2026, half of our total energy needs will be covered by a certified energy management system.
- All sites in water-scarce regions will implement a water strategy by 2026.
- The waste recovery rate will be at least 95 percent by 2026.
- By 2026, all preferred suppliers will meet our sustainability criteria.
- GEA has set the goal of conveying knowledge to a total of 100,000 people through voluntary work by 2026.
- Every year, GEA will donate one percent of its net profit.

Our CO₂ reduction targets up to 2030 were validated by the Science Based Targets initiative (SBTi) in September 2021. The SBTi is an independent, globally recognized organization for auditing climate targets. It has confirmed that GEA's interim targets are in line with the latest climate research findings and will make an effective contribution to attaining the targets set by the Paris Climate Agreement.

All GEA sites are required to save water as a matter of principle, thus reducing water consumption continuously. We will also recirculate more water in the future, and sites in water-scarce regions must implement a water strategy by 2026 to ensure a more responsible use of this key resource. Going forward, we will place greater emphasis on the circular economy in order to conserve raw materials and protect the environment. Recycling and converting waste into new and usable materials will be a top priority.

Environmental protection is a central goal of GEA's “Mission 26” strategy and an integral aspect with regard to our products, services and processes. We seek to design our value creation processes responsibly and provide our customers with increasingly efficient products and process solutions to help them contribute to sustainability and preserve natural resources. Efficiency comes from minimizing the amount of energy we use, conserving raw materials and increasing recycling rates, while at the same time improving performance.



60 %

By 2030, greenhouse gas emissions from our own operations will be reduced by 60 percent.

Systematic environmental and energy management

Environmental protection is not only enshrined in our business strategy, but also integrated into our daily processes in dialog with our business partners and other stakeholders. At GEA, environmental management is part of our central QHSE management, which reports directly to the Chief Operation Officer (COO). Environmental indicators are compiled and analyzed by all relevant GEA sites. The results are evaluated at regular intervals with those responsible for the divisions and regions, and the monitoring of target achievement is coordinated. Our binding “QHSE Environmental Factors” policy governs all environmentally relevant aspects and sets out how to identify the key environmental factors related to activities, products and services.

Our energy management system is decentralized so that we can meet local legal requirements. By 2026, half the annual energy needs of ten GEA sites will be covered by a certified energy management system (EMS). Two of these sites are already certified to ISO 50001, with the remaining eight to follow in the years ahead. Another GEA target is to reduce energy consumption by 1.5 percent year on year.

GEA reports on the following environmental factors:

- Energy: Energy consumption and greenhouse gas emissions (Scope 1 to 3)
- Water: Water consumption (water extraction minus wastewater) and water scarcity assessments
- Waste: Waste volume and waste recovery rate

Our CO₂ emissions are recorded by division for Scope 1 to 3. Since 2019, we have been reporting CO₂ equivalents (CO₂ e)¹ for those countries in which our energy suppliers can provide reliable fuel mix data that allows this. For the year under review, we were able to report the greenhouse gas emissions for 90 sites, including production facilities, service operations and administrative offices. Worldwide, the energy consumption

data for Scope 1, 2 and 3.6 is collected via a standard system (SoFi) and reported as follows:

- Scope 1: Direct greenhouse gas emissions, calculated from the use of mineral oil, various gases, diesel, kerosene and gasoline
- Scope 2: Indirect greenhouse gas emissions from the consumption of electricity, heat, steam and cooling
- Scope 3.6: Greenhouse gas emissions from business travel

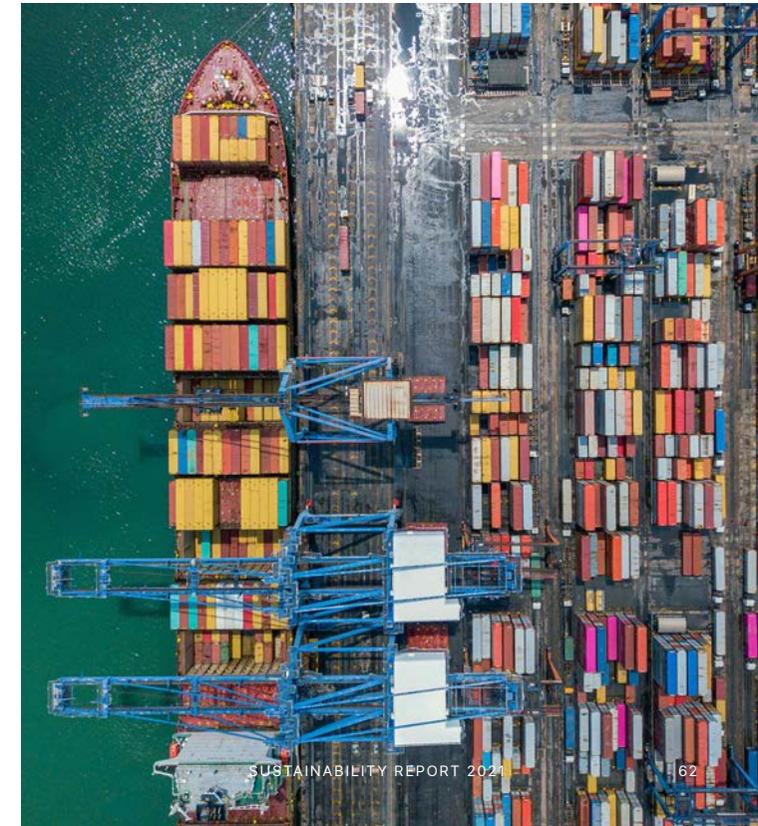
¹ Unless they are market-based, emission data is based on the conversion factors specified in the GHG Protocol/IEA Ver. 16 (11/2021) – IEA 2021. Scope 1 and 2 emissions are reported monthly for each site and annually in the Sustainability Report.

In addition, Scope 3 data was recorded in 2021 or calculated using internationally recognized methods:

- Scope 3.1: Purchased goods and services
- Scope 3.2: Capital goods
- Scope 3.3: Fuel- and energy-related activities
- Scope 3.4: Upstream transportation and distribution
- Scope 3.5: Waste generated in operations
- Scope 3.7: Employee commuting
- Scope 3.8 – 3.10: Not relevant for GEA
- Scope 3.11: Use of sold products
- Scope 3.12 – 3.15: Not relevant for GEA

Other emissions from combustion processes such as methane, nitrogen oxides (NO_x), sulfur dioxide (SO₂) and volatile organic compounds (VOC) are produced by GEA in only very small quantities. Since all climate-relevant emissions are converted into CO₂ equivalents, these are included in the overall figures.

Water and waste data is recorded by QHSE management teams at selected sites, especially production facilities, service organizations, repair shops, hygiene operations, locations with management systems certified to ISO 14001 as well as offices and warehouses with high environmental impact. We record wastewater and the extraction of water from the municipal network and groundwater from our own wells. The volume of waste we record includes municipal waste, hazardous waste and recyclable residual materials.



Environmental balance sheet 2021

Energy and greenhouse gas emissions

GEA's total energy demand (Scope 1 and 2) in the reporting period was 254,233 MWh. That means consumption has increased by 10.4 percent compared with the previous year. Total CO₂e emissions (market-based) amounted to 50.803 tons, which is a reduction of 13.3 percent compared with 2020. GEA is thus well on the way to achieving its target of reducing greenhouse gas emissions in Scope 1 and 2 by 60 percent by 2030.

With energy efficiency measures and electricity from renewable energy sources, we are making a significant contribution to a positive global carbon footprint. Since 2021, all GEA sites in Belgium, Germany, Italy and Austria have been supplied solely with green electricity, with the sites in other countries covering part of their needs in this way. However, our efforts will not stop there. More countries will switch to green electricity in the years ahead. And our "Factory of the Future" in Koszalin, Poland, will generate its own carbon-neutral electricity using a photovoltaic unit

as well as a combined heat and power system fueled with biogas. At our Oelde and Wallau sites in Germany, energy is supplied by highly efficient combined heat, power and cooling systems based on state-of-the-art cogeneration units.

At our sites in Northvale and Frisco in the United States, in Bakel in the Netherlands and in Hürth, Germany, we have converted lighting systems to energy-saving LED lamps. Work has begun on conversion at a total of 14 other sites, including Vadodara, India, where we are also installing a 250-KW photovoltaic unit on the roof. Taken together, both measures have cut annual CO₂ emissions by almost 227 tons. Looking ahead, the vehicle fleet will also be more environmentally friendly as we successively switch to fully electric vehicles. The first electric cars came into service in 2021. In Mexico, company vehicles were switched to hybrid models.





Water

In the year under review, 89 sites (2020: 82 sites), including production facilities, service organizations and administrative offices, extracted municipal and groundwater and water discharge. Total consumption increased by 8,975 cubic meters due to water losses caused by leaks of 17,900 cubic meters at one of our sites in France and another site in Italy. To achieve the continuous reduction targets, two sites in India, for example, are processing their own effluent and then returning it to the process loop. The Indian site in Vadodara started converting to waterless sanitary facilities in November and installing a reverse osmosis plant to treat wastewater in December. Both measures are set to save more than 2.4 million liters of water – and over a ton of CO₂. Several sites now collect rainwater to irrigate their green spaces. Contaminated wastewater that cannot be disposed of via the municipal network is collected and treated by external disposal companies.



Rainwater is a precious commodity

GEA's New Zealand subsidiary, Farmers Industries Limited (FIL), uses a filtration system to treat about one million liters of rainwater each year. Water is collected from the rooftops in two 30,000-liter tanks and then filtered. Using UV technology, the filtration system kills 99.9 percent of bacteria, which means that the water can be used in both production and cleaning processes.

"With 4,500 square meters of roof space on our Mount Maunganui hygiene facility, it made sense to use this natural resource in our production process as we strive to provide our customers with locally sourced, sustainable products," says Campbell Parker, Senior Director at GEA Farm Technologies NZ. Half of the installation was financed by the building's owner, resulting in a classic win-win situation – the system adds value to the building while reducing the tenant's operating costs.

Waste

In 2021, the waste volume was recorded at 75 GEA sites (2020: 71 sites), including production facilities, service organizations and administrative offices. In total, GEA generated 13.037 tons of waste during the reporting period, decreasing the absolute waste volume by 0.3 percent. The waste recovery rate was 95.6 percent. Hazardous aqueous substances and emulsions accounted for 832 metric tons (6.4 percent) of the waste are halogen-free machining emulsions and solutions as well as aqueous rinsing liquids. All hazardous waste is collected by external disposal companies. Plastic waste such as the disposable containers of cleaning agents from the Farm Technologies division are recycled.

Water dispensers replace plastic bottles

At our Parma site in Italy, we are working to eliminate single-use plastics. Instead of using disposable plastic bottles, employees can help themselves to free drinking water from three large water dispensers. As part of this campaign, GEA has provided all employees with a personalized water bottle made from a durable material. Since the health of our workforce is paramount, the water undergoes chemical and microbiological analysis before filtering and the area around the dispensers is regularly disinfected. A maintenance schedule documents routine water analysis by qualified personnel.



Other environmental protection measures

Netherlands

The lighting at all Dutch sites is now controlled by motion sensors. At almost all locations, plastic water dispensers have been replaced with mains-fed dispensers equipped with filters. This significantly reduces transport and waste volumes. Additionally, containers are now available on site to collect workwear that is no longer required. This is then sent for recycling. At some of GEA's Dutch sites, soups are delivered to the cafeterias by a local restaurant. The supplier is committed to avoiding food waste and processing any food that is still suitable for consumption.

Germany

At the Oelde site, GEA is building a bicycle park with 440 spaces and a charging station for 16 e-bikes. The best part about this is that the electricity will be produced in-house by a 99-kWp photovoltaic unit, reducing annual carbon emissions by around 26 tons. The charging station will be ready for use in the summer of 2022.

China

Six charging stations for electric vehicles with a capacity of 7 kW are to be installed at the Suzhou site. The infrastructure has already been prepared for nine additional charging stations. The electricity should come from a photovoltaic system with at least 1 MW capacity. The data for analysis and reporting is stored in a cloud. Employees will be able to recharge their vehicles' batteries free of charge until further notice.



Occupational Health & Safety

We provide a safe and healthy working environment

Our employees are our most important asset. The best way to protect them is to make sure accidents and health hazards do not occur in the first place. That is why GEA gives top priority to creating a safe working environment for all employees as well as for our contractors and service providers. Physical well-being is the key to professional performance and coping with the physical and psychological stresses of a company in a state of transition. Hence, we take a preventive approach to occupational health and safety, assessing potential workplace and process hazards at an early stage. Ultimately, a strong occupational safety culture contributes to improving performance across the entire company.



We have one long-term goal: zero accidents! That is why we protect all our employees and contractors wherever they work. Contracts with customers, suppliers and subcontractors are always subject to the respective safety standards of both parties. This means that, if the standards applied by our contractual partner are more stringent than our own, they will also extend to our employees. Contracts thus contain provisions governing occupational health and safety and the related procedures.

As part of our sustainability strategy, we have set ourselves the target of continuously reducing the number of accidents at work. By 2026, we plan to reduce the lost time injury frequency rate and the lost time injury severity rate each by ten percent year on year. We also aim to increase the number of other incidents reported, such as unsafe situations and near misses per million hours worked, by ten percent each year.

Similarly, we intend to implement a management system in accordance with the globally recognized ISO 45001 standard at all 57 production sites by 2026. Around 24% of the sites already have a certified management system in place.

Systematic management

GEA's Occupational Health and Safety (OH&S) Management System is part of our central QHSE management. It enables us to systematically avoid work-related accidents, injuries and illnesses, and to generally protect our employees' health at the workplace. Our OH&S Management System is certified to the stringent ISO 45001 international standard.

The central QHSE organization is supported by decentralized units in the divisions, regions, countries and entities. The main objective is to ensure a safe and healthy working environment for all employees and to comply with legal requirements as well as our own occupational safety standards. Depending on a site's size, several people may be responsible for occupational health and safety; alternatively, one employee may cover several smaller sites. Appointed by the GEA companies in accordance with the legal provisions of the respective country, the persons in charge will then act as so-called HSE managers. In Germany, for example, the tasks are performed by occupational safety specialists.

All of GEA's occupational safety guidelines are documented in the QHSE Policy. The GEA Safety Core Rules are central to the company's occupational safety standards. The OH&S Management System is reviewed via internal occupational safety audits and regular updating and adjustment of risk assessments performed within the framework of our health management scheme. Occupational healthcare is provided in accordance with the respective national requirements. The associated health services are contracted locally and in compliance with the relevant legislation. In Germany, the occupational physician at a site is a member of the Occupational Health and Safety Committee (Arbeitschutzsausschuss – ASA), which provides a platform for planning, coordinating and evaluating measures to improve occupational health and safety at GEA. Its work is governed by Germany's Occupational Health and Safety Act (Arbeitsschutzgesetz).



24 %

Proportion of production sites covered by an ISO 45001 management system.





14

Number of languages in which the GEA Safety Core Rules are available in the GEA Learning Center.



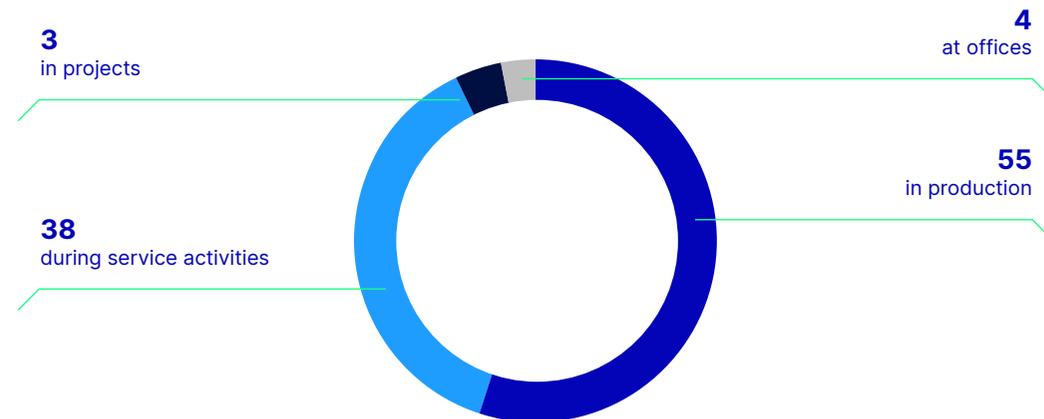
Our safety measures – education, training and briefings

Since 2019, we have systematically recorded the primary causes of accidents, the types of injuries, the body parts affected and other related data. Additional details facilitate our analysis, especially when it comes to identifying accident hotspots and causes. The GEA Safety Core Rules apply worldwide 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 14 languages. All GEA employees are regularly instructed in occupational safety risk measures, taking into account national requirements. In addition, there are briefings and checklists for specific hazardous activities or equipment – for instance, the use of forklift trucks. Country-specific training courses on health and safety at work in accordance with the respective national regulations fall within the remit of the local managing directors and site managers. Centrally organized HSE Excellence Audits are performed regularly at GEA companies to review their compliance with the company's occupational health and safety standards and support the implementation of specific action plans.

Worksite accidents by place of activity

(in %)



Using the Serious Events Reporting System to avoid accidents

The Serious Events Reporting System instantly alerts the Executive Board and divisional management to harmful events such as fatal and serious accidents, fires, explosions or environmental and safety incidents. The system also captures incidents involving individuals who are not employed by GEA or whose work and/or workplace is not controlled by the company. The reporting

system allows us to quickly respond to serious events, minimize their impact and promptly initiate investigations into incidents. This is followed by a dedicated lessons-learned process with the aim of avoiding similar incidents in other areas, identifying measures for improvement and communicating them to the organization. The Serious Events Reporting System also deals with incidents related to our products and plants, even if they were not the cause of the incident.

Lost time injury frequency rate

Accidents with period of absence per million hours worked



To achieve our long-term zero-accident target, we apply a consistent precautionary approach to occupational health and safety. This means that, for the purpose of detecting potential risks and hazards early on and preventing accidents, we have also been recording other incidents such as near misses as well as unsafe situations and actions worldwide since 2017. Just like actual accidents, these incidents are systematically analyzed to initiate a follow-up process with defined responsibilities and a specific set of actions. This process is greatly appreciated by our employees and, as a result, they have reported more near misses and unsafe situations than in the previous year, which confirms their growing risk awareness.

Occupational health and safety in 2021

Compared with the previous year, the number of accidents de-clined by 7.2 percent. Over almost the same number of hours worked, we cut the lost time injury frequency rate in 2021 to 5.15 accidents per million hours worked (2020: 5.44). A total of 205 accidents (2020: 221) were reported. Those accidents which resulted in zero lost days occurred at 260 sites, representing 76 percent (2020: 73 percent) of the GEA sites covered by the reporting system. There were no fatal accidents at work in 2021 (2020: 1). The lost time injury severity rate increased slightly due to long-term sickness due to occupational accidents to 128 days lost after accidents per million hours worked (2020: 114.56). The increase in the rate of other incidents to 264 (2020: 92) is positive. Measures that can be taken to eliminate unsafe situations or actions can help to prevent accidents.



Sustainable supply chain

Transportation must become more environmentally friendly

The transportation sector accounts for about one quarter of the world's CO₂ emissions. At the same time, it holds a great deal of potential in terms of climate protection. For example, large volumes of goods are still transported by plane or truck although they could just as well be moved from A to B by container ship or railway. As part of its climate strategy, GEA is committed not only to reducing the carbon footprint of its own activities, but also to cutting emissions from transport operations in the supply chain (Scope 3). This is because GEA's transport activities are the third largest contributor to group-wide greenhouse gas emissions in Scope 3.

Two measures are designed to achieve this. First, we will be increasing shared transportation in the future; and second, we will be making greater use of sea freight. The advantage is that the specific energy consumption per ton of goods transported is significantly lower for seagoing vessels than it is, for example, for air or road transportation. More than 80 percent of global freight is transported by sea, making this the most important mode of transportation in international trade. To achieve its targets, GEA initiated a project in 2021 aimed at reorganizing the company's transport management process. This created the framework for introducing sustainability criteria alongside delivery times and costs to our transport planning and execution.



“Polarstern” and “REV Ocean” fitted with environmentally friendly GEA technology

Despite all its advantages, maritime shipping still accounts for some one billion tons of CO₂ emissions worldwide, which is around three percent of the total greenhouse gases caused by human activity. This means there is still plenty of scope for improvement – maritime shipping must do better and cut emissions even further. In this connection, stricter laws and regulations coupled with shipping industry initiatives are setting the course for more environmentally friendly shipping. As one of the market leaders in marine technology, GEA is working with its customers and partners to make “green” maritime shipping a reality. The research vessels “Polarstern” and “REV Ocean” are two examples of these efforts.

“The fuel used to power the main and auxiliary engines of a ship requires treatment before combustion to remove fine particles known as cat fines, as well as the dirt and water that have accumulated during storage in the ship’s bunker,” says Cathrin Janßen, Marketing Manager, Business Unit Separators, Separation & Flow Technologies. GEA offers leading technologies for the onboard separation of these contaminants. The GEA marine Separator prime with integrated direct drive sets new standards in efficiency. It can reduce the disposal costs for the residues or sludge removed from fuel by up to 50 percent as well as cut fuel losses and CO₂ emissions.



In June 2021, eight of these new separators were installed on the “Polarstern”, helping to reduce annual CO₂ emissions by more than 15 tons.

GEA is also working on another sustainability project involving a different research vessel. The “REV Ocean” is the largest yacht in the world and is used by World Wildlife Foundation (WWF) Norway for research purposes. It is equipped with six compact GEA units for efficient diesel and lube oil treatment. The ship’s teams study the effects of CO₂ emissions and plastic waste on the oceans, collect fish population data and develop proposals for sustainable fishing methods. The “REV Ocean” can also recover and process around five tons of plastic from the sea each day.

We are currently planning to expand our portfolio with a focus on the decarbonization of maritime shipping. Looking ahead, we would also like to offer products and services for alternative fuels such as LPG, ammonia and methanol.

“We want to continue developing our technologies so we can contribute to greater sustainability in shipping, whether for individual research vessels or for the shipping companies that are our largest customers,” says Cathrin Janßen.

And, of course, GEA’s efforts actively contribute to reducing the environmental impact of its own supply chain.



15

With GEA separators on board, “Polarstern” has reduced annual CO₂ emissions by 15 tons.



Cathrin Janßen, Marketing Manager

Sustainable supply chain

Our partners take responsibility

It used to be just a small group of human rights activists and environmentalists who were interested in the environmental impacts and working conditions associated with the extraction of raw materials or the manufacture and sale of products. Today, these issues are frequently a matter of public concern. Critical investors, customers, prospective employees and – just as importantly – the general public want companies to demonstrate how sustainable their supply chains are and whether they are exercising human rights due diligence in accordance with the United Nations Guiding Principles on Business and Human Rights.



The cost of materials accounts for around half of GEA's group revenues. This means that procurement is of considerable economic importance to profitability and also highlights the company's significant influence on the ethical and environmental aspects of the supply chain. By initiating the transformation process, we want to leverage this influence even more to make our supply chains more sustainable.

The long-term target of our climate strategy is to become net-zero by 2040. As we work toward this, we have set the interim target for 2030 of an 18 percent reduction in greenhouse gases in the supply chain – including upstream Scope 3 emissions. Other sustainability targets for our supply chain are derived from the 17 Sustainable Development Goals (SDGs) of the United Nations. That means we have defined and increasingly applied sustainability criteria in the selection, assessment and development of our suppliers. Our sustainable supply chain management system contributes to SDG 8 “Decent Work and Economic Growth” and SDG 12 “Responsible Consumption and Production”.

If we wish to achieve our own climate goals, we need to develop a deeper understanding of the most important megatrends in procurement. Global supply chains are becoming increasingly vulnerable to unpredictable events and GEA, like other companies, may experience losses in the event of any disruptions. In addition, consumers, governments and other stakeholders are increasingly demanding product traceability and transparent reporting along the supply chain. With this in mind, we are seeking to pool our resources and make an impact in those areas that matter most to us and our stakeholders.

For our manufacturing operations, we purchase raw materials, semi-finished and intermediate products as well as notably components that are not based on our own core technologies from suppliers. We also buy in plant components for the construction and delivery of process solutions for various applications and outsource especially construction site and installation services to subcontractors. In the case of steel construction projects, the steel itself is often included in the subcontracting scope.



Supply chain management

Last year, the Covid-19 pandemic posed major challenges to GEA's supply chain management. Among the most pressing problems were the highly volatile air and sea freight markets as well as acute material supply bottlenecks. To make our supply chains more sustainable and climate-friendly, we took steps that included shifting a large part of our freight volume from air to sea transport.

The purchasing, production and supply chain function had already been established in 2020 and Johannes Giloth had joined the Executive Board with global responsibility for this new function. In the same year, the Executive Board implemented a new global procurement and supply chain organization aimed at ensuring clear-cut responsibilities and interfaces. It replaced the three previous purchasing organizations with one central unit. The supply chains of each of the five divisions are designed to reflect this and are assigned consistent control and full accountability.

Although the new procurement and supply chain organization has a more global focus, the local business units remain largely independent. The appointment of a global supply chain manager is a significant

step toward further harmonizing our global supply chain processes, thereby aligning them more with the group-wide sustainability strategy to achieve the targets we have set.

Since the year under review, supply chain management has been operating on three levels: divisions, regions and the multifunctional sites that serve more than one division. In 2021, around 700 GEA employees – from warehousing employees to managers with regional responsibility for several sites – performed supply chain tasks. They work in different areas of the company and have very different qualifications. All supply chain management tasks can be grouped into the following areas: planning and scheduling, materials management, warehousing and distribution, transport and customs clearance and the Supply Chain Excellence – Analytics & Projects department.

Procurement accounts for almost EUR 2.7 billion out of revenues totaling some EUR 4.7 billion. It is structured in such a way that product groups can be managed strategically on a global scale. Operational purchasing acts locally and is responsible for implementation.



The GEA Code of Conduct for Suppliers and Subcontractors

Our business success depends on the trust of our customers, shareholders, employees, the authorities and the public. That is why we do everything we can to gain and maintain the trust of these stakeholders by trading fairly. Our philosophy and values are based on excellence, passion, integrity, responsibility and GEA-versity, a combination of international cooperation, diversity and mutual respect. We expect our suppliers and subcontractors to share our values.

Fair working conditions, environmental protection, human rights and the fight against corruption and financial crime – all these require clear principles. We fully recognize the Guidelines on Corporate Social Responsibility (ISO 26000) and thus also the Ten Principles of the United Nations Global Compact. Our activities

are fully aligned with the social responsibility principles contained in the Code of Conduct. We also expect our suppliers and subcontractors to recognize and act in accordance with these principles and the core topics of ISO 26000. In our decision making, we consider not only quality, delivery performance and costs, but also responsibility and transparency with regard to our Code of Conduct and our values. These play an essential role in our procurement processes and must be implemented along our supply chain. In this context, we are seeking to achieve greater transparency concerning the origin of our raw materials and conflict minerals so we are able to identify potential risks as early as possible. As a matter of principle, all preferred suppliers and those suppliers that enter into a master agreement with GEA are required to sign our Code of Conduct for Suppliers and Subcontractors ahead of any order.

Principle 10

Businesses should work against corruption in all its forms, including extortion and bribery.

Principle 9

Businesses should encourage the development and diffusion of environmentally friendly technologies.

Principle 8

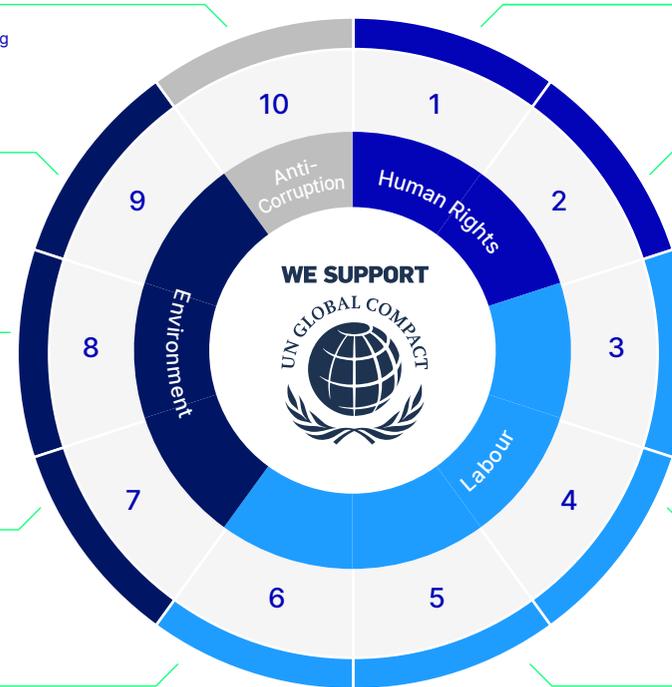
Businesses should undertake initiatives to promote greater environmental responsibility.

Principle 7

Businesses should support a precautionary approach to environmental challenges.

Principle 6

Businesses should uphold the elimination of discrimination in respect of employment and occupation.



Principle 1

Businesses should support and respect the protection of internationally proclaimed human rights.

Principle 2

Businesses should make sure that they are not complicit in human rights abuses.

Principle 3

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

Principle 4

Businesses should uphold the elimination of all forms of forced and compulsory labour.

Principle 5

Businesses should uphold the effective abolition of child labour.

Sustainable purchasing

A technology group with a high level of materials expertise, GEA is aware of its responsibility to ensure sustainable value creation. This is why we source raw materials, commodities and services worldwide exclusively from verifiably qualified suppliers. Nevertheless, as part of GEA's "Mission 26" strategy, we have set ambitious targets for monitoring sustainability in the supply chain. One of these requires all preferred suppliers – i.e. those that meet GEA's criteria in terms of price, quality, cooperation as well as global and regional presence – to likewise comply fully with GEA's sustainability criteria by 2026. The Sustainable Procurement department was established to ensure that we achieve this ambitious target. It will define and publish GEA's sustainability criteria in 2022 – criteria which will significantly exceed the requirements of Germany's Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz) that comes into force in 2023. This law is intended to improve the international human rights situation by defining requirements for responsible supply chain management. The due diligence obligations are categorized according to the companies' potential influence.

We have initiated strategic sustainability initiatives with a number of global suppliers, including a trial agreement with a German car manufacturer to equip our service car fleet in Germany with electric vehicles. And this is just the start. In the medium term, we aim to gradually replace our 4,300 company cars worldwide with fully electric vehicles wherever possible. Additionally, in the year under review, we published a company guideline to promote green mobility. This stipulates that all new vehicles for GEA's managers in Germany must be fully electric. To support this initiative, charging stations will be installed at GEA sites (see also "We support climate-friendly transport" on page 34).

Without the support of our employees, however, it will be impossible to achieve these ambitious targets. That is why we need to raise their awareness of climate protection and sustainability in the supply chain. Looking ahead, managers will be expected to broaden their knowledge of sustainability, including how they can reduce carbon emissions in their area of responsibility. We have also set up an in-house digital platform that covers various topics including

sustainability. Employees can use the platform, for instance, to share ideas for reducing emissions in the supply chain. However, climate protection affects more than the workplace. In the course of the group-wide "GEA climate week" following the UN Climate Change Conference in Glasgow, employees discussed how to be more climate-friendly both at home and at work.

Procurement applies the "Local for Local" principle wherever it can, thus shortening delivery routes and becoming more environmentally friendly. This also means that we are indirectly supporting the local economy in the vicinity of our own sites. Responsible resource extraction and sustainably produced upstream goods enable us to avoid raw material risks and thus ensure supply reliability. Moreover, responsible procurement bolsters the company's reputation, its attractiveness as an employer and ultimately its own profitability. Particular attention is paid to respect for human rights in the supply chain.



Employees can use an in-house digital platform to share ideas for reducing emissions in the supply chain!

Human rights are non-negotiable at GEA

Respect for human rights is an indispensable aspect of corporate responsibility. GEA's newly created Sustainability department is responsible for human rights issues.

We expressly require our business partners to share our values and to apply corresponding regulations consistently. Our Code of Conduct for Suppliers and Subcontractors ensures compliance with our values and the Guidance on Social Responsibility at every link in the value chain and covers every kind of purchase (direct and indirect expenditure). To complete a transaction, suppliers must accept the Code of Conduct for Suppliers and Subcontractors if the following third-party policy thresholds are exceeded: EUR 2,500 for individual orders, EUR 10,000 for longer contracts.

GEA will not tolerate unethical business conduct, in particular bribery, corruption, money laundering or the use of child and forced labor. The obligations arising from the Code of Conduct also include recognition of the ISO 26000 Guidance on Social Responsibility, compliance with international standards, respect for human rights (including the pro-

hibition of discrimination), fair wages and working hours, freedom of association as well as occupational health and safety.

We regularly audit our key suppliers in respect of their compliance with human rights and assess them by way of self-declarations. If violations of GEA's Human Rights Policy and Code of Conduct for Suppliers and Subcontractors are identified or suspected, we encourage corrective action to improve adherence to these standards going forward. We also expect our suppliers to investigate and resolve non-compliance issues within a reasonable period of time. If a supplier is not willing to remedy problems identified, this will result in termination of the business relationship.

In the year under review, a total of 165 supplier audits (previous year: 269) were carried out. Of these, 23 (previous year: 73) were audits of new suppliers. GEA performs these evaluations by way of supplier visits, audits and self-declarations, which are undertaken by the Goods and Service Group Management of the purchasing organizations, country organizations and divisions.

„Human rights are non-negotiable at GEA. Respecting them belongs to the core values of our company and is reflected in clear, binding guidelines. These are not only the yardstick for our own conduct, but also apply to our business partners.“

Johannes Giloth, Chief Operating Officer



165

The number of suppliers GEA evaluated by way of audits, visits and self-declarations in the year under review.

Suppliers in countries carrying risks for human rights

The risk analysis process designed to counter human rights risks also includes a procedure for suppliers and contractors. While we seek to ensure full compliance with the Code of Conduct for Suppliers and Subcontractors, the human rights situation in some countries calls for greater attention. Using a multi-index approach, we currently rate 28 countries with existing purchasing volumes as critical. To this end, the assessments of these four well-known indices are combined:

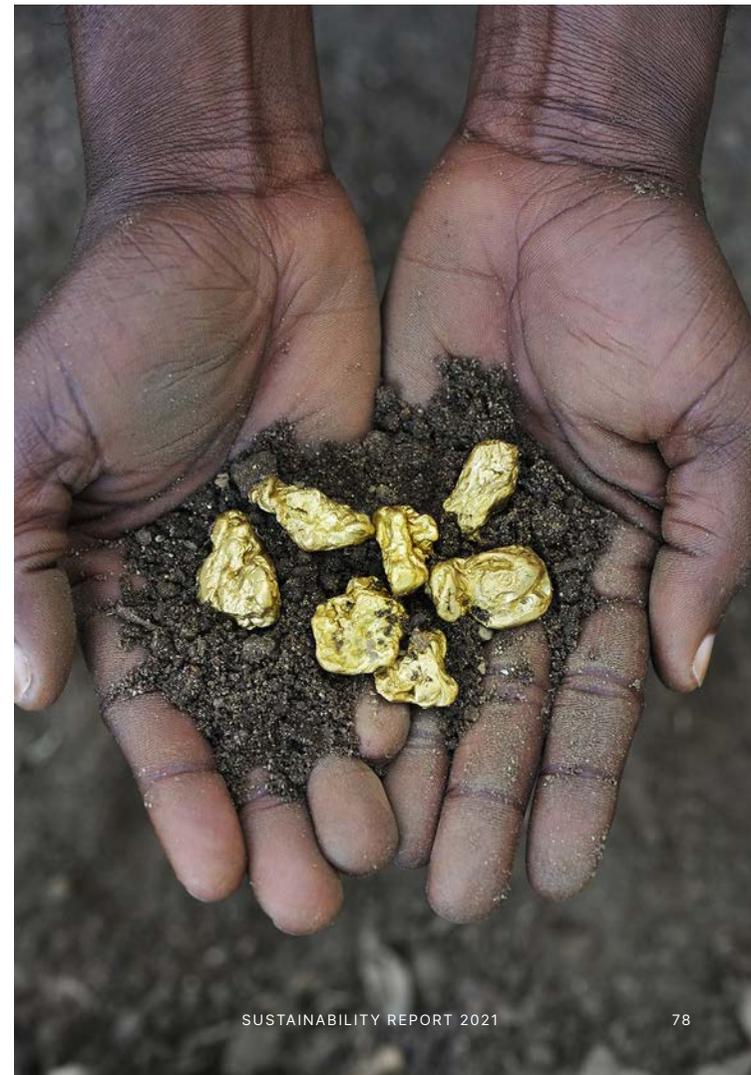
- “Freedom in the World”, published by Freedom House, an American nongovernmental organization
- “Index of Economic Freedom”, published by the Heritage Foundation and the Wall Street Journal
- “Press Freedom Index”, published by Reporters Without Borders
- “Democracy Index”, published by the Economist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

The assessment also takes into account the OECD membership of those countries with the lowest score in at least one of the four indices. In terms of value, we source about nine percent of our total purchasing volume from human rights priority countries. All suppliers and subcontractors that account for this critical volume have accepted the Code of Conduct. In these countries, we plan to carry out regular audits with a special focus on compliance with human rights.

Responsible sourcing of minerals

Minerals and metals play an important role in the manufacture of many products and components. However, the mining, trade and transport of metals and mineral ores may have extremely negative impacts. Tin, tungsten, tantalum and gold, also known as the 3TG or conflict minerals, are of particular relevance. They are used in everyday items such as cellphones, cars and jewelry. Many armed conflicts and the associated human rights violations have been and continue to be financed directly or indirectly through the extraction, trade, handling and export of these minerals. This is why GEA supports authorities, nongovernmental organizations and industry associations in stopping the trade in 3TG minerals from such sources. We aim to avoid the use of conflict minerals by carefully monitoring and reviewing our supply chains.

However, GEA procures only very small amounts of conflict minerals. In 2020, under our Code of Conduct for Suppliers and Subcontractors, we undertook to purchase components and materials only from those suppliers that share GEA's values with regard to the respect of human rights, integrity and environmental responsibility. We also comply with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. This is in line with our general policy on global fair trade, the Ten Principles of the United Nations Global Compact and the ILO core working standards.





Distribution of transport volume in the year under review

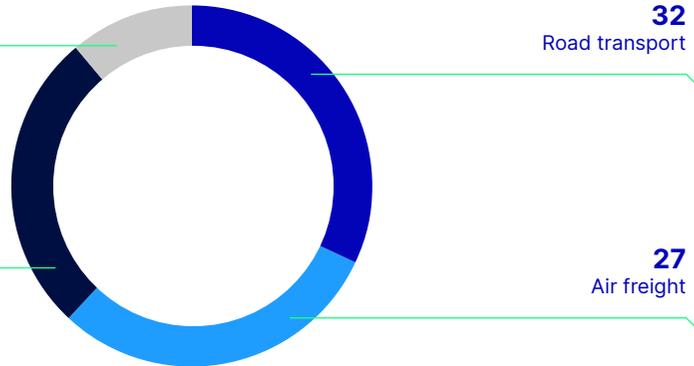
(in %)



11
Courier services



30
Sea freight



32
Road transport

27
Air freight



3

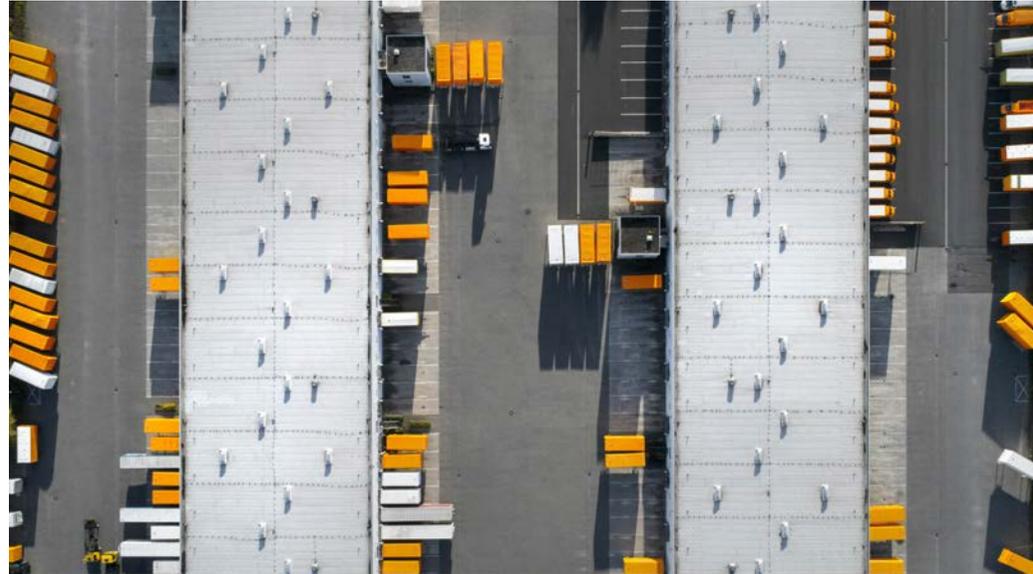
GEA's transportation activities are the third largest contributor to group's greenhouse gas emissions.

In the year under review, GEA published its first policy on conflict materials in line with the OECD guidelines. We also established a due diligence process in accordance with the OECD Due Diligence Guidance and asked our 71 suppliers with the highest revenues to report their sources of conflict minerals using the recognized CMRT (Conflict Minerals Reporting Template). Suppliers are required to do the same with their own suppliers to ensure full transparency along the supply chain.

Transport and logistics

In accordance with our "Local for Local" principle, transport and logistics account for only a small proportion of our procurement volume. However, as announced in our "Mission 26" strategy, we must continue to reduce our transport volumes in order to make our carbon footprint even smaller. The means of transport GEA uses depends on various factors such as distance, infrastructure, costs, urgency of the delivery and the possibility of grouping deliveries. In 2020, we introduced an air freight policy

requiring divisions to obtain prior approval for air freight shipments. As a matter of principle, we aim to move more goods by ocean freight than by air because of the better greenhouse gas balance. The reporting related to this change was introduced in 2021. Any request for proposal from a new supplier now includes the condition that they must provide transport data. Since October 2021, the carbon footprint of every air shipment can be tracked and this will be included in reporting from 2022.



Analyzing impacts in the supply chain

Since 2020, GEA conducts an analysis of the sustainability impacts along the group's entire supply chain. The analysis also examined the greenhouse gas emissions, air pollution, water consumption and waste generated by our suppliers and upstream suppliers, as well as workdays lost due to work-related accidents. From this analysis, we are able to identify the hotspots of selected sustainability risks in the supply chain and work with the suppliers to reduce or even eliminate them altogether. 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 2021 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 reveals that these are greater than the greenhouse gas emissions from GEA's own business activities by a factor of 25 (Scope 1) as well as emissions from the use of purchased energy (Scope 2).

The majority of supply chain emissions are generated by upstream suppliers, especially the energy utilities that supply our electricity. When we analyzed water consumption and waste generation along the value chain, we found a similar pattern of sustainability impacts. Again, the supply chain impacts exceed those of our own business activities. The largest proportion of waste and water consumption along the supply chain comes from the extraction of fossil fuels for electricity generation as well as from the manufacture of machinery and components used in our own production activities.

Social Responsibility

Climate change is the world's most pressing challenge

Climate researchers and meteorologists have been warning for years that if we do not take immediate action against global warming, Germany, too, will increasingly face devastating floods and extreme droughts in the future. That warning became bitter reality when the disastrous floods hit in the summer of 2021. An international study by 39 researchers from Europe and the USA confirms that such unprecedented rainfall can, in part, be attributed to climate change. Germany had not experienced rainfall of 93 liters per square meter since records began. In July, however, the devastating floods hit not only parts of Germany, but also areas of Central Europe and China. Many people lost their homes and a significant number lost their lives. At GEA, we responded immediately, pledging more than EUR 100,000 to support the victims of the disaster.

"The extreme weather events in Germany and China are a stark reminder that climate change is the world's most pressing challenge. Every business has a responsibility to systematically pursue their efforts to protect our planet," says Stefan Klebert, CEO of GEA. "Our thoughts are with all of those suffering such devastation through no fault of their own, and with the many tireless aid workers. To mitigate the impact of this natural disaster as far as possible, the Executive Board decided that GEA provides rapid and effective assistance."



North Rhine-Westphalia, Rhineland-Palatinate and Bavaria were Germany's hardest hit regions. A committee of employee and group representatives decided which projects and organizations to support with donations. Their chosen beneficiaries included the Catholic Women of Germany in Ahrweiler, who are caring for the children of those affected by the flood, and the Firefighter Bereavement Fund of Altena, which was set up to help the family of a firefighter who died in the line of duty. Other projects include the VfB Blessem sports club, a badly damaged sports hall as well as the restoration of both the Dahl village church in Hagen and the Martin Luther Church in Bad Neuenahr-Ahrweiler.

"I am proud that GEA has stepped up to its responsibility to support those affected by this natural disaster. Above all, my thanks go to our many colleagues who took the time to nominate these worthy projects. Thanks to them, GEA's donations can get to where they are most urgently needed," says Klebert.

In China's central province of Henan, the floods claimed more than 300 lives and destroyed countless homes. Again, GEA's response was immediate, supporting the local population and the rebuilding work. *"The situation in Henan is close to the heart of every GEA employee in China. We are very moved by the rapid and effective response of everyone involved and hope that our contribution has helped*

actively support the reconstruction efforts following this disaster," says Richard Zhang, Country Managing Director, GEA China.

Social engagement at GEA

GEA has more than 350 sites worldwide. It is not least the cities and municipalities surrounding our sales and factory sites that form the core of our business activities at these locations. We therefore support projects and initiatives committed to charitable causes local to our sites. To date, social engagement has been carried out locally and at the sites' own initiative. However, the new central Sustainability department created in 2021 is now in charge of social responsibility as part of the company's new sustainability strategy. This is demonstrated by the two sustainability goals we have set. Concepts and initiatives will be elaborated in detail in 2022. All sites and subsidiaries will naturally still have the opportunity to act on their own initiative going forward.

As part of the "Mission 26" strategy, GEA has decided to donate one percent of the group's net profit in the future. GEA has also set the goal of conveying industry and function specific knowledge to a total of 100,000 people through voluntary work by 2026.



GEA apprentices help flood victims in the Ahr Valley

Following the devastating floods in the German states of North Rhine-Westphalia and Rhineland-Palatinate, many students and trainees joined the relief efforts. In one such story, two teachers teamed up with the student council of Beckum Vocational College to organize a two-day relief effort in the Ahr Valley at the



start of October. They were joined by four apprentices from GEA. Eva Wiebe, Marcel Großbeckmann, Jason Jaskulski and Lucas Teckentrup traveled to Dernau alongside 115 students and six teachers to support the locals and recovery teams in their difficult work in the Ahr community. Eva is training to become a cutting machine operator, and Marcel, Jason and Lucas completed their training as industrial electrical engineers in February 2022.

Almost three months after the catastrophic floods, the picture remained disturbing. *“It looks like a war zone.”* This and similar descriptions by the volunteers came, however, after a large part of the rubble, mud and debris had already been cleared. Ruined houses, broken streets, landslides and heaps of waste at the foot of the vineyard slopes still dominated the townscape.

On arrival, the “helper shuttle” in Grafschaft took Eva, Marcel, Jason and Lucas to their deployment points. The first day was dedicated to clean-up work on the river Ahr. Even in October, the banks were still littered with debris and waste. The removal process was extremely slow going due to the sheer volume of waste that had to be cleared away. The following day, Eva helped harvest grapes at a vineyard, while her three colleagues were needed to clear out a 500-year-old



half-timbered house. They removed soaked plasterboard and the ruined electrical system, and laid temporary flooring in one of the upper floors so work could continue safely. By the end of the day, four big bags of rubble and a mound of old cables lay in front of the house. Its owner gave a bottle of wine to each helper as a thank-you.

People want to talk above all

The memory of the residents, who were visibly moved by the volunteers’ heart-warming support and solidarity, will leave an even more lasting impression on the four GEA trainees than the devastated landscape. *“Many people still really needed to talk about what happened,”* says Jason Jaskulski. *“Some chose to deal with the experience in their own personal way, but many wanted to talk about it and were glad that there were others who would just listen.”* It was not so much about what they experienced when the flood hit, but more about what the future would hold. *“Many are just afraid that a similar disaster could*

happen again in the narrow and densely populated Ahr Valley,” says Marcel Großbeckmann. Despite the incredible amount of work to be done, it was a successful mission for everyone involved, bringing hope to the flood victims and a great sense of community spirit. It also helped forge new friendships. Jason Jaskulski returned to the area shortly afterwards and dedicated a week of his annual leave to helping out. He is still in touch with some of the other helpers today.



“I am very proud of this team effort”

In many countries, the Covid-19 pandemic is pushing the health system and related facilities to their limits. India is no different. In light of this, GEA has donated medical supplies worth EUR 30,000 to hospitals and public health centers in Bengaluru (formerly Bangalore) and Vadodara. We have production facilities and offices in both cities, which were severely impacted by the second coronavirus wave. At the end of April, the management in Bengaluru decided to take action. “Together with the plant management from Vadodara, we met with the local authorities and charities to clarify what we can do for the hospitals in these difficult times,” says Raman Mehta, Vice President Bengaluru Plant, Global Production. No time was wasted in putting together the aid package. In early May, oxygen cylinders, oxygen monitoring kits, health monitoring instruments as well as masks and other medical kits were delivered to the Deputy Commissioner and District Magistrate of Bengaluru for distribution to the hospitals in need. “The team has done an excellent job in implementing this relief effort so quickly,” says Mehta. “Within five days, everything

had been purchased and sent on its way. I am very proud of this team effort.”

The health centers in the villages of Savli, Asoj and Dumad near GEA's Vadodara branch similarly received support to help fight the pandemic. They were supplied with pulse oximeters, blood pressure monitors, thermometers, protective masks, gloves, disinfectant and water bottles. “In the midst of a pandemic, companies must rethink their social responsibility. For GEA, this is another opportunity to work with communities and strengthen the medical infrastructure,” says Suket Gohil, Country MD of GEA India. “We have more in common than just business. I would like to express my sincere thanks to the Executive Board, chaired by Stefan Klebert, for extending its financial support to India. This has helped us make a small but significant contribution to those most in need in our communities.” The work carried out by police forces during the pandemic was also recognized. Working together with Indian NGO Voluntary Youth Organisation for Motivation, GEA Vadodara distributed a total of 1,400 PPE kits to the police and traffic police.



An act of solidarity

In response to headlines about the lack of PPE for Belgian healthcare workers during the Covid-19 pandemic, GEA Pharma colleagues in Belgium took immediate action, donating much-needed protective face masks to local hospitals in May 2021. Ivan Bogaerts, team leader at the GEA Pharma Solids Center in Wommelgem, offered the local hospital a shipment of 200 FFP2 and FFP3 masks that the plant had just received. In Halle, Koen Van De Voorde, Head of Application Group Pharma at GEA, also acted quickly. *"We were very pleased to be able to provide about 150 masks to the Sint-Maria Hospital in Halle and the Onze-Lieve-Vrouw Hospital in Aalst,"* says Mr. Van De Voorde. *"Although these masks are required for*

our production processes, the local hospitals' need is much greater than ours at the moment. My wife works in the intensive care unit at Onze-Lieve-Vrouw Hospital and the stories she has told me about patients are truly shocking. We are also looking at providing special protective suits. We cannot give much, but something is better than nothing and the support we have provided so far is very much appreciated." One of the employees at Sint-Jozef-Malle Hospital expressed their thanks: *"This act of solidarity in difficult times is a sign of a compassionate and good nature. Thank you for your kind gesture."* In addition, workers at the Kontich site also donated the few masks they had to Rivierenland General Hospital in Reet.



Viva México

In July, 35 GEA employees in Mexico and other volunteers took part in a reforestation campaign organized by the Secretaría del Medio Ambiente (Mexico's Office for the Environment). More than 600 perilllas were planted in the Desierto de los Leones National Park in Mexico City. The perillla is a native plant species in danger of extinction. *"We are making great efforts to encourage our coworkers not only to be aware of environmental issues, but also to take practical steps to protect the climate and future generations,"* says Armando Rosete, QHSE Manager in Mexico. Ultimately, this supports GEA's aim of "engineering for a better world." *"However, it's important to find a balance between meeting local environmental requirements and achieving business goals. I think we are doing really well in that respect."* A second planting campaign is already planned – hopefully even more coworkers will participate this time.



GEA's tour around the world

27 September - 17 November

Are you in?
Register and join the Strava app club
GEA Netherlands in beweging

Exercise is good for the body and mind, so GEA Netherlands challenges you and all your colleagues to move around the world together. Covering 40,075 km! Running, cycling, swimming, walking, every mile counts.

You move, you receive
If you sign up (or you are a member of the Strava group already) and register for at least one activity this period, you will receive a super nice, reflective sports jacket with LED light. Very handy and safe especially now that the days are getting shorter again. What is Strava? It's an app that keeps track of your and your colleagues' sporting achievements. You can also post photos and messages.

Stay up to date
Every week we keep you updated on how many kilometers we move together. In which country we have virtually arrived and we put a sporty colleague in the spotlight. You can read it on Yammer and Strava.

Your km's are worth money
We also link GEA's round-the-world tour directly to our annual charity. At the end of November, GEA Netherlands will donate a financial contribution to the Dutch Heart Foundation, as it did in 2020. And if on 17 November, we have collectively covered 40,075 km, we will also donate 1,000 euros to a charity chosen by a colleague. Scan the QR code for more information.

Want to know more?
Read everything on our webpage. Scan the QR code with the camera of your phone. (The website is in Dutch, is it difficult for you to understand? please ask the contact person at your location or mail to marketing@gea.com / geavitaa@gea.com)

engineering for a better world

Moving around the world

Once around the world – keep fit while helping people with heart disease. GEA Netherlands has challenged its workforce to cover 40,075 km together. This represents the full circumference of the Earth. Running, cycling, swimming or walking – every kilometer counts. Those who registered between September 27 and November 17 for at least one activity using the Strava app are now the proud owners of a stunning sports jacket with an integrated LED light. Strava lets everyone track their activity and that of their coworkers, as well as post photos and messages on Yammer and Strava. This virtual circumnavigation of the globe was linked to the "De Nederlandse Hartstichting" (Dutch Heart Foundation) annual fundraising campaign. A total of EUR 5,000 was raised this year. In recognition of the fact that the full 40,075 km were covered by November 17, we also donated EUR 1,000 to the "Stichting Verborgene Wensen" (Secret Wishes Foundation), a cause nominated by employees.

PEOPLE



People

INDIVIDUAL COMMITMENT FOR THE GOOD OF ALL

GEA views sustainability as key to corporate development. This view is reflected in efforts such as the targets defined in the group's "Mission 26" strategy. One of the first measures toward achieving these targets was the group-wide, virtual Climate Week in 2021 to which all employees worldwide were invited. Among other topics, the event centered on how each and every individual can reduce their personal carbon footprint. All employees were called upon to ask themselves two fundamental questions: What will be your first concrete step to incorporate sustainability into your daily life? And what are you already routinely doing to reduce your carbon footprint? After all, it's the many small steps that can ultimately make a big difference.



**We commit to Net Zero by 2040
The GEA Top Management**

Barcelona, 2021

The GEA Commitment Tree embodies the engagement of GEA's senior management for enhanced climate protection and the company's goal of becoming net carbon-neutral by 2040. In early October 2021, the executives attending the Global Management Meeting in Barcelona left their fingerprints as a symbolic gesture of their pledge to implement our climate strategy.

The aim of the first GEA Climate Week was to ...

... prompt a long-term, ongoing commitment to sustainability among employees – not only during Climate Week, but far into the future,

... provide insights into sustainability and climate protection at GEA, but above all inspire employees to share their personal experiences, and

... generally raise employee awareness around climate issues.

In addition to introducing employee training on climate change and climate protection measures, a video speech by the CEO, interviews with managers responsible for sustainability and a range of other activities, a key element of GEA's Climate Week was the exchange of ideas between employees using the company's internal social network. Employees responded in their droves and, by the end of 2021, a multitude of posts and comments had been published under the hashtag #GEAClimateWeek.

"I separate paper and plastic, drink water from the tap (boiled or filtered, tastes great!) and reuse bags – for example, for garbage. I avoid accepting plastic bags at stores and I eat a vegetarian diet. I also think very carefully about which products I buy. I try to walk whenever possible."

Magdalena Przeslawska, Poland

As a follow-up to Climate Week, our employees were given the opportunity to participate in a virtual training event consisting of four separate sessions. The first took place as part of Climate Week while the remaining three will be held in the first half of 2022. The training covers climate change and climate protection measures. The aim of the training sessions is to provide employees with information on climate change, present GEA's strategy and objectives and, last but not least, motivate people to actively contribute to climate protection.

"The most important change I made is that I now compost organic waste at home. This has reduced the amount of garbage I put into the waste stream, and my mom can use the composted waste as fertilizer in her garden."

Debora Souza, Brazil

"In Germany there is the "Stadtradeln" (city cycling) initiative, with communities and teams competing against each other to rack up as many kilometers as possible on their bikes. GEA Messo GmbH in Duisburg put together a team for the first time and was able to cover a total of 1,597 kilometers in three weeks! According to Stadtradeln, we saved 235 kilograms of carbon dioxide. Not only that, but a fundraiser was organized at GEA Messo based on the kilometers covered, raising EUR 506.20 for victims of the recent floods in our country. Many thanks to all participants and donors. We look forward to Stadtradeln 2022!"

Robert Buchfink, Germany

"We collect plastic bags in our factory and reuse them so we avoid throwing them away for as long as we can."

Muliana Tjindra, Indonesia

"We were overwhelmed by the great response to Climate Week," said Dr. Nadine Sterley, Chief Sustainability Officer. "It clearly demonstrates that we take our responsibility to our planet and future generations seriously and underscores the high level of our existing commitment to curbing global warming. This year's employee survey also confirmed that we are very well positioned as a company when it comes to sustainability. Out of a total of twelve aspects covered in the survey, sustainability scored highest. I am really proud of that!"

Dr. Nadine Sterley, Chief Sustainability Officer



“Sustainability is part of our company’s DNA”

Four questions for Dr. Nadine Sterley,
Chief Sustainability Officer

Dr. Sterley, first question: What do you do personally to incorporate sustainability into your daily life?

“Like many people, I have made a few changes to my daily routine. For example, I eat as little meat as possible. And that works really well without me feeling like I’m missing out. Today, I had a delicious veggie pasta for lunch, for example. I also use re-usable bottles and lunch boxes instead of single-use plastic as a way to consciously reduce waste. I also avoid printing out hard copies, which digital tools make easy to do.”

Do you think it’s important for a company and its employees to “live” sustainability values in order to attract new talent?

“Definitely. New talent today scrutinize companies very carefully before choosing an employer. Given the shortage of skilled labor, they can often pick from

a variety of offers. Whether the prospective employer is honest and genuine when it comes to acting sustainably is definitely a major factor in their decision-making. Applicants quickly pick up on whether or not sustainability is embedded in a company’s DNA. This is why, for instance, our approach to sustainability as part of our “Mission 26” group strategy is based on three pillars: development of sustainable product solutions, responsible management of our operations and establishment of GEA as an employer of choice in our industry.

What exactly does it mean to be an “employer of choice” in the industry?

It ideally means, among other aspects, that talents actively look for a position at GEA – that we are the preferred employer in our industry. An additional goal is for around 80 percent of employees to agree with the statement that they would recommend GEA to others as a good employer by 2026. Our focus is

to create an attractive working environment and a culture rooted in honesty, sincerity and loyalty. Of course, these principles are not new to us, but we have now expressed them clearly as well as made them transparent and verifiable.

Do you also have a sustainable recruitment process?

Yes, because our process is completely digital. Jobs are posted on online portals and on our careers page. Applicants are asked to submit their applications directly in digital format. Any incoming paper-based applications are digitized and integrated into the digital recruitment process. The hiring staff also review the applications using the central, digital platform, so they no longer need to be printed out later on. And it’s not just for reasons of the Covid-19 pandemic that we are increasingly using video conferencing for job interviews. It saves job applicants travel time and is also good for the environment.

People

We are GEA

A company is only as good as its people. At GEA, our business success relies on the expertise and commitment of our more than 18,000 employees worldwide. Each individual personally contributes to the bottom line through their daily work and helps us become a little better every day.



As a global group, diversity and equal opportunities are not just core values for GEA, but are essential to our long-term success in the face of international competition. That is why we have also set quantifiable targets for our Human Resources department as part of our “Mission 26” group strategy. For example, one of our goals is for around 80 percent of employees to agree with the statement that they would recommend GEA to others as a good employer by 2026. That figure currently stands at 75 percent. We are also making good progress with regard to gender equality. Our goal is to fill 21 percent of positions in the three upper management levels with women in the coming five years. That figure currently stands at 17 percent. GEA remains committed to respecting human rights as well as the generally accepted core working standards of the International Labour Organization (ILO).

All of these measures are designed with an overarching objective in mind, namely to consistently improve GEA's appeal as an employer and to cement our status on the labor market as the employer of choice. This does not affect our firm commitment to a culture of honesty, sincerity and loyalty. In 2021, we increased our support for individual employee training and continuing education opportunities, as well as for achieving personal career goals within the company. We create a work environment that prioritizes occupational health and safety, with responsibility shared between all those involved.

Human resource management

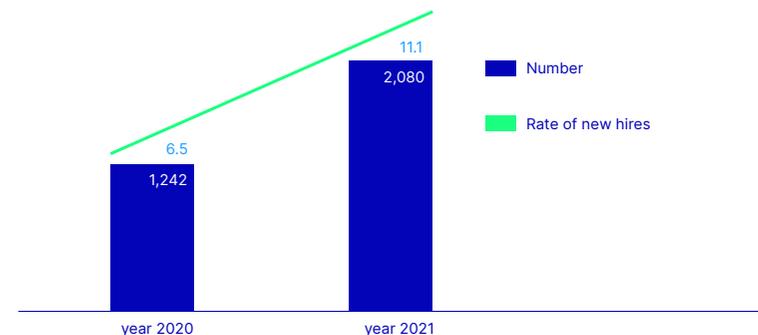
GEA employees are the backbone of our company. That is why it is in our own best interest to ensure that human resources (HR) is optimally positioned for the future, given the skilled labor shortage, and that the managers have all the relevant expertise and support they need for their work.

“To achieve this, HR went through a transformation process in 2021, which began the year before. As a result, the role of HR was fundamentally realigned to ensure it can provide the best possible support to the current GEA organization in the implementation of its strategy.”

Ulrich Braig, Chief Human Resources Officer

HR is now closely involved in the operational business through the HR Business Partners organization. Human Resources is a global corporate center and reports directly to the CEO. The HR business partners support the divisional and regional managers and are available to answer any questions related to human resource management. The internal HR operations teams at the Berlin and Kuala Lumpur sites provide state-of-the-art HR support services. And the centers of expertise develop new ideas for how to establish GEA as the “employer of choice” over the long term. The centers of expertise include Labor Relations/Labor Law, People & Talent Development and Total Rewards & Mobility.

Total number and rate of new hires



Employment

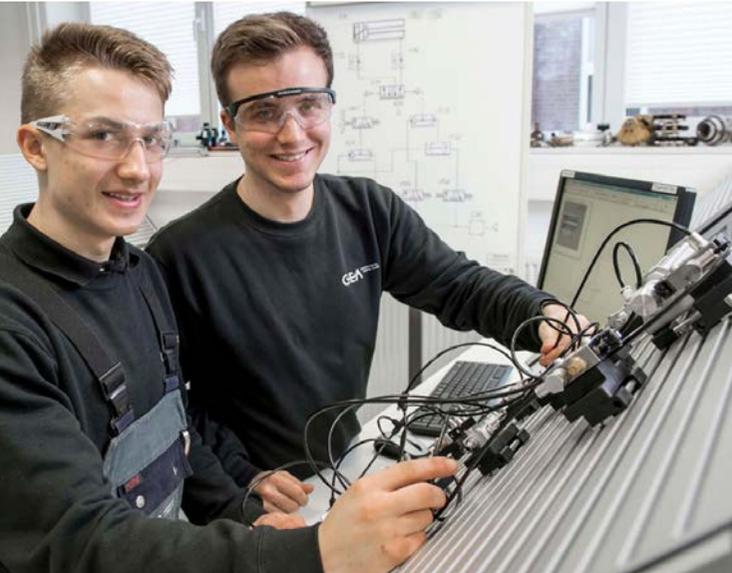
Due to demographic change and growing competition for talent on the labor market, increased effort is required to find diverse and qualified employees. Retaining employees over the long term is another important focus for us as a sustainable company. To ensure that we are viewed as an attractive employer on the labor market and to secure the company's future viability, we attach utmost importance to having a diverse, equitable and inclusive corporate culture. As part of “Mission 26,” we actively encourage all employees to obtain specific further training and to achieve their medium- and long-term career goals.

With a view to improving the effectiveness of our search for talent, we set up a talent acquisition team in the HR department, with headquarters in Berlin and Kuala Lumpur. The goal of these teams of experts is to scour the market to find and recruit the right talent

using the latest methods such as active sourcing. They are also tasked with advising GEA managers and HR business partners on how to find the best solution for successful hiring on a case-by-case basis. At the same time, our talent acquisition teams establish external talent pools through the careers page and relevant career portals. These platforms are used to cultivate continuous contact with external candidates in order to improve the applicant experience.

GEA has also introduced a referral bonus for employees at various sites, since we know that our employees are our best and most authentic ambassadors.

We hired a total of 2,080 new employees worldwide in 2021 (2020: 1,242). The total number of new hires as a percentage of the average headcount increased from 6.5 percent last year to 11.1 percent as of December 31, 2021.



Vocational training in Germany

We believe that only companies that provide training can retain and grow their expertise. Affording extensive training to young people is hence a mainstay of our HR policy.

In fiscal year 2021, GEA provided training in Germany to 363 young people at 12 sites in 11 commercial and industrial/technical occupations, which fall into different specialty areas depending on the product portfolio of the individual GEA site. The Oelde site is the center for technical training, coordinating these activities in Germany.

In addition, 15 combined vocational training and degree programs were organized in cooperation with polytechnics and universities. Lasting six semesters, these programs lead to bachelor's degrees in various fields of expertise. GEA has lent a more international focus to the practical phases of these programs by offering projects at GEA companies outside Germany.

GEA provides training in the following professions:

Commercial professions (m/f/d):

- Plant Mechanic
- Electronics technician
- Specialist for warehouse logistics
- Warehouse clerk
- Industrial mechanic
- Construction Mechanic
- Mechatronics engineer
- Materials tester
- Cutting machine operator

Commercial/technical professions (m/f/d):

- Industrial clerk
- Technical Product Designer

In 2021, GEA organized 15 dual study programs:

Courses Dual Studies:

- Bachelor of Arts, Apprenticeship (m/f/d):
 - Industrial clerk / specializing in business administration
- Bachelor of Science, apprenticeship (m/f/d):
 - Electronics engineer / specializing in electrical engineering
 - IT specialist / specializing in computer science
- Bachelor of Science, practice-oriented course:
 - Specialization in digital technology
 - Specialization in electrical engineering
 - Specialization in mechanical engineering
 - Specialization in process engineering
 - Specialization in industrial engineering
 - Specialization in business informatics
- Bachelor of Engineering, Apprenticeship (m/f/d):
 - Industrial mechanic / specializing in mechanical engineering
 - Industrial mechanic / specializing in industrial engineering
 - Mechatronics technician / specialization: mechatronics
- Bachelor of Engineering, practice-oriented course:
 - Specialization in electrical engineering
 - Specialization in mechanical engineering
 - Specializing in mechanical process engineering

GEA supports Kosovo Professional Development Initiative

One of the Republic of Kosovo's main barriers to steady economic growth is its shortage of qualified experts. Aware of this problem, the Kosovan government introduced a dual education and vocational training program modeled after the German system. The "Kosovo Professional Development Initiative" gives young Kosovans the opportunity to undertake vocational training in Germany after graduating from high school. This model has proved successful for everyone involved, offering prospects to young people in a country with the highest youth unemployment rate in Europe.

Students at the Loyola Gymnasium school in Prizren, Kosovo, complete their high school graduation exams, learn German and have the opportunity to take the Deutsche Sprachdiplom (DSD) certificate of

German proficiency. The training in Germany primarily benefits the young people involved, but also offers advantages for Kosovo as a whole. For example, the wide network of contacts established as a result of the initiative has led to the creation of the first dual education and vocational training program in Kosovo itself.

Apprenticeships at GEA Westfalia Separator

GEA Westfalia Separator has participated in this project since 2012, giving one Loyola Gymnasium student the opportunity to complete vocational training in our company each year. Training is offered for apprentice mechatronics engineers, industrial electrical engineers, industrial technicians, IT specialists and metal technology materials testers, among others. Apprentices receive a training allowance and are provided with company accommodation for the duration of their apprenticeship. The initiative has been a success, with some graduates already working in permanent specialist positions at the company, while others have started dual work-study programs since completing their apprenticeships.

For example, Arber Gegaj started his internship at GEA Westfalia Separator as a materials tester for metal technology in April 2018. His remarkable eagerness to learn was clear from an early stage and enabled

him to finish his vocational training six months early in 2021, after just three years. His final grade was "very good." Arber was also named one of the "Best Trainees of 2021" by the North-Westphalia Chamber of Industry and Commerce (IHK Nordwestfalen). But his relationship with GEA has not ended: In October 2021, he began a "Bachelor of Mechanical Engineering" dual work-study program with a GEA scholarship.



"I am so grateful and happy that GEA offers this opportunity and that I was able to take advantage of it. Without the training initiative and GEA, my experience and career path would probably have been very different. Thank you, GEA!"

Arber Gegaj, materials tester for metal technology at GEA Westfalia Separator



"At GEA Group, we appreciate the standard of education and dedication of Loyola Gymnasium graduates, which ultimately also reflects the potential within Kosovo. This is why opportunities such as the Loyola exchange program are so important for the country's future."

Ralph Hackelbörger, Head of Apprenticeship Germany, GEA Westfalia Separator



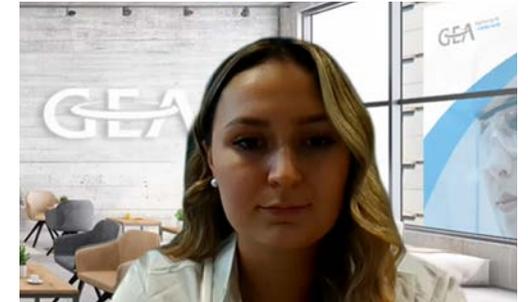


Employee assessment of GEA

Since 2019, GEA has conducted a global employee survey once a year. The main objective is to maintain a culture of dialog and communication, to actively involve the workforce in the company's development and to respond specifically to the feedback provided after evaluating the survey findings. To optimize comparability, the standardized questions are always asked in the same form. The survey consists of 37 statements, which for the purpose of reporting and analysis can be grouped into 12 areas of activity: commitment, pragmatic leadership, opportunities for growth, trust in management, employee communication, positive working environment, meaningful work, remuneration & fringe benefits, effectiveness of the organization, customer centricity, innovation and sustainability. This helps us evaluate factors such as workforce acceptance of the measures that have been implemented.

Accompanied by extensive internal communication at all levels, the employee survey is intended to strengthen employee confidence in the survey program as well as in management. In addition, all executives received training to help them respond to and implement the survey findings, with a view to continuously improving GEA's employer branding.

In 2021, approximately 6,500 initiatives were launched throughout the company in response to employee feedback provided in the 2020 survey. Moreover, the group focused on three issues that were identified in the previous year's employee survey: improving employee communication, improving GEA employee development and learning opportunities as well as strengthening cooperation within GEA. You can also view responses to the 2020 employee survey in the videos on this page. To improve dialog with employees, additional optional comment sections were included in the 2021 survey form. Employees were invited to submit their comments on the two following questions: "What do you like most about GEA?" and "What improvement or change would you like to see at GEA?"





Percentage of participants in employee survey in total workforce

in %



The 2021 survey showed that employee willingness to participate actively in the company’s development is very high. The response rate was just 58 percent in 2019 and reached 74 percent in 2020. In the year under review, 81 percent of all employees participated in the survey.

Analysis of the 2021 survey showed substantial year-on-year improvements in the areas of “pragmatic leadership” (approval up by five percentage points), “employee communication” and “personal develop-

ment opportunities” (both up by six percentage points). The consistently high scores for “commitment” and “sustainability,” each with an approval rating of more than 70 percent, were also encouraging. These trends are a testament to our efforts. The previous survey helped us identify issues such as improving employee communication and improving development and learning opportunities as global focus areas and we responded in 2021 with specific measures. The results clearly show that we took the right steps.

In addition to being well received by the workforce, the employee survey is also held in high regard, as indicated by the high participation rate. Likewise, it is fair to say that our employees know the survey results will be addressed and acted on. The main category, “commitment,” remains highly rated, and we are seeing improvements across all categories. Nevertheless, the results indicate a number of areas we need to improve on as we follow up on the results together with our executives and employees.



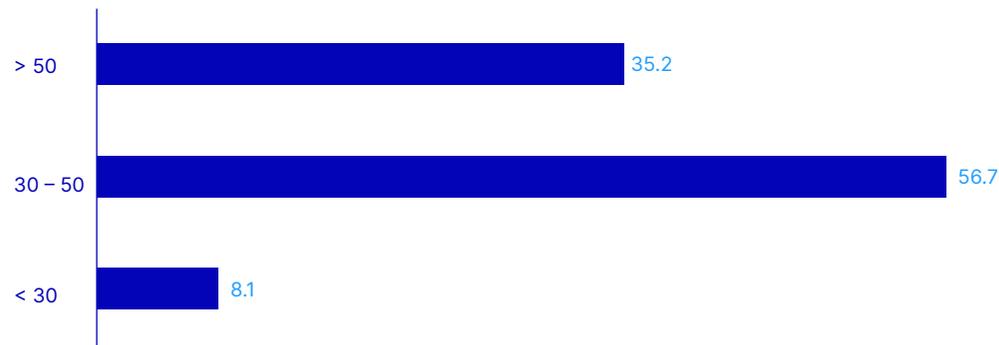
6,500

The number of initiatives launched throughout the company in 2021 following the previous year’s employee survey.



Employees by age groups*

(in %)



*) Number of employees excluding apprentices and dormant employment contracts; excluding non-consolidated entities.

Diversity, inclusion and equality

For GEA, “Engineering for a better world” also means creating a work environment where diversity, equal opportunities and inclusion are encouraged and supported. Diversity is a cornerstone of any ambitious company with a global presence. Not only does it enhance our attractiveness as an employer, but also improves the competitiveness of the group as a whole and thus contributes to the company’s future success.

The policy of “sustainable value creation at GEA” includes the principle of diversity. By this we mean a workforce with a wide range of personality traits, individual abilities, knowledge and skills. These include gender and gender identity, age, ethnicity and nationality, physical and mental abilities, sexual orientation, religion and ideology as well as social background. At the same time, external and organizational aspects such as professional experience can also influence diversity. We view inclusion as the empowerment and involvement of all employees regardless of their individual differences, including equal access to opportunities and resources for all employees.

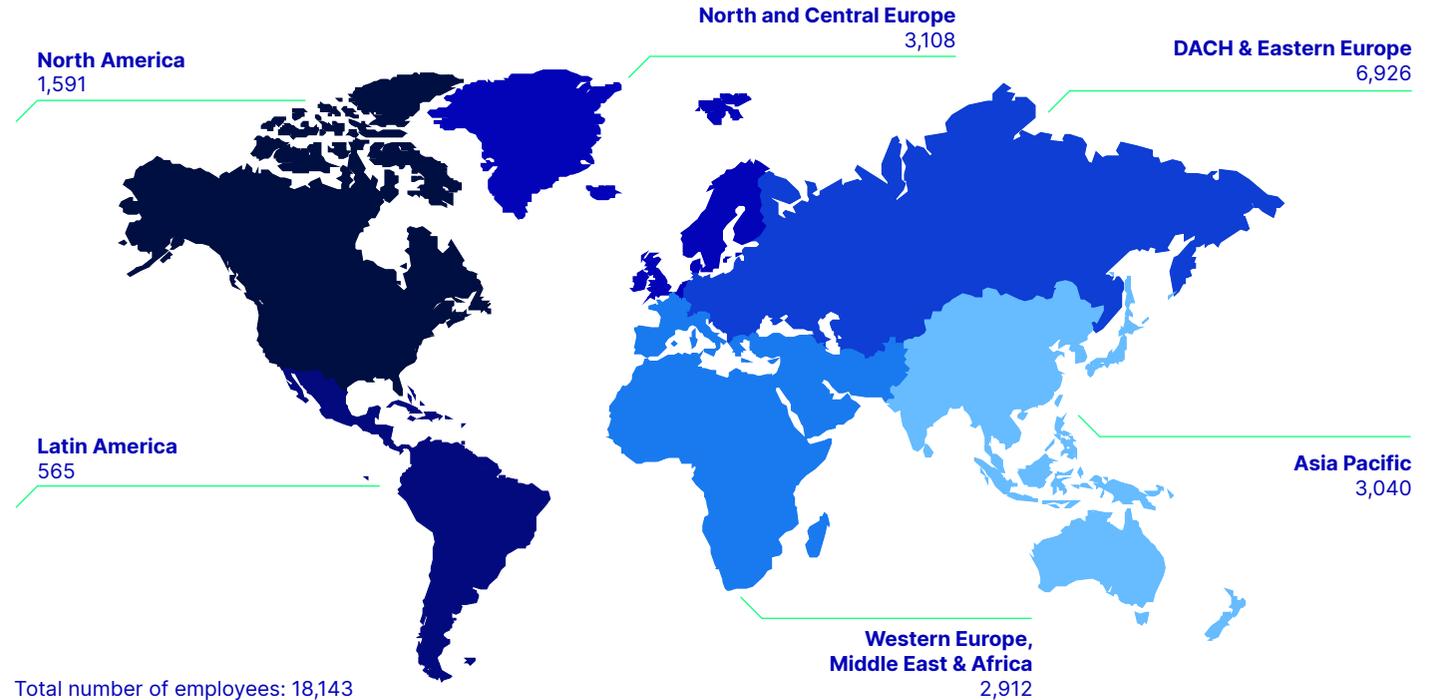


In 63 countries 98 nations are working at GEA

Managing diversity, inclusion and equal opportunities is the responsibility of HR and falls directly under the remit of the CEO. In the year under review, we developed a new policy focused on preparing a detailed concept, including the implementation of various measures worldwide in 2022. Implementing additional measures remains the responsibility of the local organizations. Each of our organizational units is responsible for setting diversity, inclusion and equality goals as well as for developing and implementing sustainable programs to achieve them. However, individual initiatives can still be launched at group, department and local levels.

When implementing diversity and inclusion initiatives, we are guided by the "Charta der Vielfalt" (German Diversity Charter), a corporate initiative to promote diversity within companies and institutions. GEA is thus committed to the equality of all people within the group. We have also set additional, quantifiable targets related to diversity and integrated them into the "Mission 26" group strategy. For instance, the "Strategy for

GEA employees worldwide



Diversity & Inclusion" originally introduced by GEA in 2014 was revised in the year under review. It contains a two-step plan to further bolster and improve diversity and inclusion by 2026. The strategy is based on three main pillars: establishing and maintaining an inclusive workplace, taking advantage of diversity and inclusion on the market as well as attracting, developing and supporting diverse talent. A further aim of the

"Mission 26" group strategy is to fill 21 percent of positions in the top three management levels with women and 80 percent of vacant positions with our own junior staff by 2026. Additionally, we are an active member of the Rhein-Ruhr Diversity Network and hold a Diversity Day each year as part of this network. Employees also have the opportunity to participate in the event.



We firmly believe that diversity in the workforce begins with shared understanding and actions based on common values. This is why we seek dialog focused not just on quotas or hiring, but also based on conduct and values. The “Diversity & Inclusion Policy & Guideline,” revised in 2021, provides the framework for the entire group. The purpose of this guideline is to establish a GEA-wide global standard on how to address diversity and inclusion by providing guid-

ance to managers and employees on how to navigate the complex issues of diversity and inclusion in an organizational context. We want to do more than just comply with legal requirements; we want to encourage genuine commitment within the company.

This approach to diversity and equal opportunities is firmly enshrined in our HR processes. For example, it is integral to the “Global Placement Policy,” which

governs our recruitment process. Specific selection criteria that take into account diversity apply when nominating candidates for leadership development programs. In this way, we aim to ensure that genders are equally represented in leadership development and that we achieve the goal described in “Mission 26.”

A unique working relationship

Since 1974, the GEA assembly shop in Wallau has worked with Lebenshilfewerk Marburg-Biedenkopf, an organization that provides social assistance, to offer people with intellectual or physical disabilities employment and enable them to establish closer ties with the local community. Currently there are twelve employees with disabilities working at the Wallau site.

The shop employees handle a wide range of tasks, such as assembling conveyor chains, electrical and mechanical assemblies and other support services. Today, they are a permanent part of the “GEA Wallau Family” and not only contribute to our daily work, but also participate enthusiastically in company events.

“The initiative is well known in the region. Other local companies were so impressed with our work that they started a similar partnership.”

Axel Meier, QHSE-Manager, Business Unit (BU)
Slicing & Packaging, Food & Healthcare
Technologies



“Diversity makes the difference”

Interview with Ulrich Braig, Chief Human Resources Officer

Mr. Braig, what role does diversity play at GEA?

The subject of diversity is gaining momentum and this is also true within our company. GEA Group very deliberately applies a comprehensive diversity concept. For example, knowing how many women are in managerial or executive positions is important to us – but this is just the start. We believe it is beneficial to have a highly diverse management team as well as a diverse workforce overall. Studies show that a diverse culture makes companies more attractive to exceptional talent on the labor market. Our company also has a set of values that we are committed to.



Diversity is one of those core values, alongside integrity, passion, excellence and responsibility.

The labor market is highly sensitive to how a company presents itself ...

Yes, and that includes flexibility, diversity in the workforce or the question of how the needs of different employee groups are accommodated. We have made diversity a key part of our sustainable development strategy. Ultimately, we consider anything that can distinguish one person from another to be covered by this term: gender, age, ethnicity, nationality, mental and physical abilities or limitations, sexual orientation and religion. We think of diversity as a very broad term because we firmly believe that it is exactly what makes the difference. It is also a question of inclusion and how we can ensure that people with all these different backgrounds can feel welcome and comfortable contributing to the group and putting their ideas into practice.

You have launched the “Mission 26” program, which defines priorities. What is its main purpose?

The plan for the next five years is based on seven key levers designed to accelerate our sustainable,

profitable growth. It focuses on sustainability, innovation, digital solutions, new food and excellence initiatives. According to CEO Stefan Klebert: “It is our responsibility to protect future generations by offering sustainable solutions for the food and pharmaceutical industries.” Just take a look at new food. How do we ensure that it will be possible to feed the world’s population in the future? This is an interesting question – and we have solutions.

As part of this strategic plan, you envision filling 21 percent of positions by women. Isn’t that figure rather low?

Our target for the sustainable development of our company includes filling 21 percent of the three top management levels with women by 2026. The current figure is around 17 percent. Consequently, every third position that opens up at this management level is being filled with a female employee. This is extremely ambitious. The percentage of women in Germany in the mechanical engineering field was 16.9 percent at the end of 2020. And just over 9 percent of engineers in the German mechanical and plant engineering industry are women.



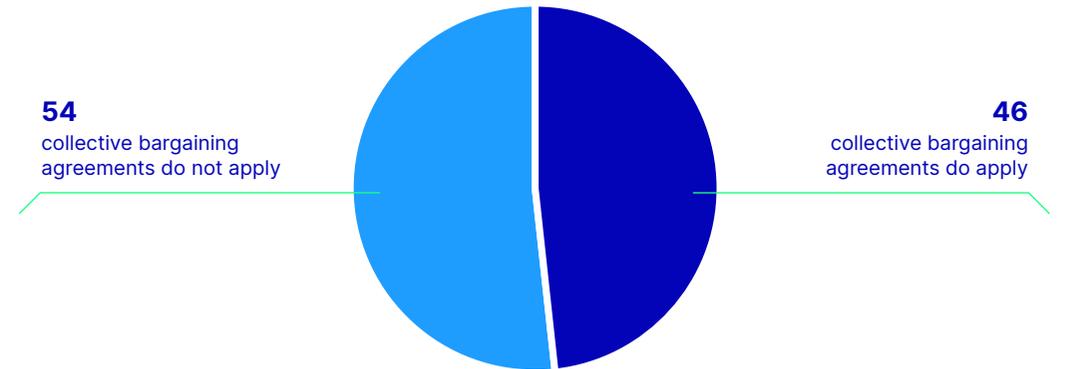
Labor/management relations and co-determination

We are proud that labor/management relations at GEA are characterized by long-standing, respectful dialog and interaction with employee representatives as well as equal 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. The employee representatives on the Supervisory Board are elected by the entire German workforce, but the Board represents the interests of all employees. In

addition to numerous local and general works councils, GEA has a Group Works Council (GWC) established in accordance with the German Works Constitution Act. At the 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 Exe

Percentage of employees under collective bargaining agreements (in %)



cutive Board and Human Resources. The activities of the European Works Council mainly focus on the cross-border impact of decisions and developments related to 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.

Collective bargaining agreements apply to about 46 percent of the workforce worldwide (previous year approximately 50 percent). These figures are based on data from the global "Workday" human resource management system. In countries that do not have these types of legal requirements, we have collective arrangements in the form of policies and directives that are based on global GEA standards and which complement the individual working conditions, taking local requirements into account.



Leadership development

In the year under review, two strategic leadership development programs were devised and implemented to prepare executives for new challenges and thus support GEA's transformation and business success. This includes 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 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.

In addition, GEA offers training for executives at the GEA Learning Center, which has been the central learning and development provider for employees worldwide since 2015. Executives can select development sessions based on their individual learning requirements. Alongside a broad range of e-learning

content, trainer-led webinars are available. At the same time, all young talent and executive staff 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.

As part of the group's transformation, leadership training opportunities were expanded in 2021. This resulted in three new training courses (GEA Management Essentials, Leading Effective Teams, Leading People through Change) aimed at maintaining a consistent global management style based on the "Signature for Leadership" model. Executives can also participate in the "Boost your dialog skills" trainer-led webinar, which is geared to improving the quality of executive feedback.

We have also introduced leadership reviews, which provide an annual framework for identifying de-

velopment needs, selecting talent and determining succession requirements. The goal is to cultivate a uniform leadership culture and to ensure the continued development of executives. GEA can attract and retain the best labor market talent only by offering exceptional leadership that can be felt by each individual personally.

In addition to the needs-based training and continuing development of all employees, special development pools have been set up to provide medium and long-term succession planning for GEA's key positions. Candidates nominated by their superiors for these positions undergo a selection process to confirm they have the relevant potential, while also providing a starting point for selective personal professional development.

Learning and development

The strategic management of training and education is of particular importance at GEA. That is why we have created a learning environment closely tailored to the needs of the company and employees. This combines global, centrally managed opportunities (available through the GEA Learning Center) and local in-house training courses in the form of self-directed learning, as well as education opportunities and specific external training opportunities. In this way, GEA ensures that employees are prepared for the current and future challenges of their work environment and can continue their personal development. Our "Mission 26" group strategy expresses our ambition to be an employer of choice. Moreover, we are convinced that extensive training and education coupled with life-long learning are essential to a fulfilling working life.

The GEA 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 as GEA product and application training courses. It also includes a comprehensive range of e-learning content covering 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. Additionally, the following initiatives are particularly noteworthy:

- GEA Digital Transformation Workshop: A program on digitalization for members of top management conducted in cooperation with a renowned business school.
- Boost Your Dialog Skills: A training program open to all senior executives developed to boost leadership feedback and communication skills. This training initiative was associated with the implementation of the "Perform & Grow" policy.
- Professional Service Sales: A learning initiative developed to improve expertise in service sales in order to support company growth. The program was launched in 2021 in the

Separation & Flow Technologies and Farm Technologies divisions.

- Project management learning path for the Liquid & Powder Technologies division: Existing project management training programs were updated in 2021 based on current needs. Learning paths were defined for the division project managers and made mandatory for project managers to ensure the same standard of qualification worldwide.

Fundamentally, we support and encourage all needs-based employee training measures which are required for employees to carry out their jobs. The results of the employee survey, however, identified the need to continue improving on employee career and development opportunities. This is why group-wide measures have been taken and programs such as “Perform & Grow” have been introduced. Perform & Grow focuses on creating the framework for regular, structured feedback to offer clear direction for the daily work of GEA employees, as well as opportunities for continued professional development. The Perform & Grow process is divided into various interviews and conversations between managers and employees and takes place throughout the year. During the first interview, the employee and manager agree on short- to medium-term goals. They also have the opportunity to discuss the employee's personal development plan and career aspirations. During the course of the year, the manager and employee may meet several times to give both of them the opportunity to provide ongoing feedback and exchange ideas. At the end of the year, the line manager and employee review the employee's performance and training achievements.



“There were various local approaches to performance and development at GEA, but we did not have a standardized global process. ‘Perform & Grow’ introduces a structured approach. The module consists of two main reviews: the ‘expectations and development review’ and the ‘results review.’”

Birgit Lechelmair,
Senior Director People & Talent Development,
Human Resources

Due to the Covid-19 pandemic, which persisted through 2021, it was necessary to adapt the training content and format to the unusual circumstances. Training was primarily offered in the form of trainer-led webinars. Thanks to the successful use of digital technologies, this format was well received by participants. The impact of Covid-19 was also reflected in the participation numbers, although it should be noted that the reporting might not include all short-notice adjustments to the training opportunities offered.

GEA training opportunities in 2021

- 17,675 employees (97 percent of the workforce) made use of the training and learning opportunities in 2021
- 631 employees attended in-person training
- 1,392 participated in integrated training initiatives
- 13,520 joined trainer-led webinars
- 74,810 e-learning seminars were held



Work-life balance

GEA explicitly endorses a good work-life balance. Employees can only realize their full potential when they can balance their family life with their work. This is why we have established a wide range of measures to support our employees. For example, it is in principle possible for GEA employees to take advantage of different types of flexible working arrangements – in agreement with their line managers – that best accommodate their particular situation. This could be for education purposes or for family or personal reasons. For instance, there are experienced contact partners at some GEA sites who can answer any questions expectant mothers and fathers may have about flexible work arrangements. Similarly, GEA also provides support in finding childcare and, under certain conditions, pays tax-free allowances for places in daycare facilities in Germany. To help employees

achieve a better work-life balance, GEA offers five extra days of parental leave per child during the first three years of the child's life, in addition to statutory parental leave. GEA employees who are caregivers for dependants receive special support over and above the statutory requirements. For example, they receive additional caregiver leave from the company in the form of ten extra personal days per calendar year.

To raise awareness of this issue, employees struggling to strike a work-life balance due to the birth of a child or caring for a family member created videos for managers in the year under review. GEA also partners with an external service provider in Germany to help employees find suitable daycare options for their children and dependants in need of care. This service also includes free social counseling.

Employee remuneration

GEA employee remuneration is in line with the market and is specific to each country. Collective bargaining agreements apply to about half of employees worldwide. For all other employees, regulations based on international or local directives and agreements apply.

For executives and individuals in other select positions, remuneration includes variable performance-based salary components, which can amount to between 10 and 40 percent. The targets are set out in the group-wide “GEA Uniform Bonus Plan.” This bonus plan supports the company’s financial and strategic targets by incentivizing employees based on company performance, thus promoting GEA’s profitability and development.

Specific incentive schemes are also in place, including the “GEA Sales Incentive Plan,” which creates a clear and objective framework for incentivizing employees to attain and surpass challenging sales performance targets. The GEA Sales Incentive Plan promotes the overall success of the company by aligning business and individual goals. The bonus payment also depends on factors such as achieving key performance indicators, including order intake, gross margin on order intake and payment targets.

An annual review of pay and fringe benefits is conducted both at the collective level (comparison with other companies or with inflation, for instance) and at the individual level (such as performance and skills profile). Overall, the goal is for the remunerati-



on programs to strike the best possible balance between cost-efficiency and employer attractiveness. GEA offers additional market-based remuneration components (benefit structures), such as company pension plan benefits, in all countries. These components are also subject to an annual review.



We are expressly committed to equality – including equality with regard to wages and salaries. To this end, we have implemented mechanisms in many countries to prevent wage differences between genders by enabling us to conduct sustainable analyses and close any gaps. Some of the steps taken

to make sure that jobs are comparable and offer fair pay include global job family structures and the grading of management positions.

Company pension schemes

Our employees are able to take advantage of company pension benefits, primarily in the form of defined contribution pension plans. Employees can actively shape their pension plans together with GEA. Supporting company pension schemes allows the company 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 plans. In doing so, the company ensures that the pension plans fully comply with all statutory and regulatory requirements.

Mobility

Despite advances in digital technologies and the possibilities they offer, such as working from home and video conferencing, companies – including GEA – are dependent on employee mobility. Minimizing the carbon footprint of work-related travel is important to us, so we launched various initiatives in the year under review.

In Germany, for example, a new company car policy for executives was put in place, which provides for converting the vehicle fleet to fully electric vehicles in the near term. A similar policy was also trialed in other countries in the year under review. Additionally, employees have a greater incentive to use more environmentally friendly modes of transport to get to work, including higher subsidies for local public mass transit passes.

GEA works with a central service provider to book travel for essential long-distance business trips. To meet market demands and ensure that the company remains competitive over the long term, it is increasingly important to be able to deploy the knowledge and expertise of GEA's employees worldwide. The service provider makes it possible for employees to carry out their important work assignments efficiently and in an environmentally friendly manner.



Occupational health management

Health paves the way for a happy and productive life. Employees can only perform at their best when they are healthy and feel good. GEA's health promotion measures extend well beyond legal requirements, since its investment in the health and well-being of its employees is an investment in the future.

The health management system is decentralized and run by the divisions and regions or the respective GEA sites, which are guided by local laws and can also implement additional voluntary measures. Measures and initiatives to reduce non-work-related health risks are the responsibility of the local GEA companies. These companies are guided by local laws and can similarly implement additional volun-

tary measures. The "GEA Care" health management program, which will centralize health management going forward, was integrated into the "Mission 26" group strategy in 2021. The objective of this program is to optimize existing local services and create new global, digital services for the entire GEA workforce. The Group Works Council Agreement on "GEA Care" was signed in 2021.

One part of this system focuses on protection against accidents and hazards in the workplace. The other focuses on general health, individual care and prevention. Protecting and promoting health is not only a natural social obligation and an expression of our corporate culture but is also an integral part of the HR strategy.

**Healthcare benefits**

Our local-level health management system often exceeds statutory healthcare and established occupational safety and health requirements. It includes additional benefits and various initiatives such as health days, nutrition counseling and programs to combat mental overload.

Employees also have access to a health portal provided by an external service provider. Various measures, programs and initiatives can be implemented locally in cooperation with national health insurance programs. The future goals for the health management program will be defined in 2022 within the framework of the "GEA Care" policy, which is still to be established.

Navigating the coronavirus

We continue to work hard to fully protect our employees during this second year of the coronavirus pandemic. As in the previous year, a central crisis team as well as local crisis teams in the respective countries and sites made great efforts to meet local legal requirements and safety standards to protect employees and offer them a safe workplace. At the same time, employees have access to a group-wide dashboard, which provides an overview of important developments at GEA. Information such as current case numbers and their development is a permanent feature of weekly reporting and forms the basis for decision making with regard to establishing or relaxing health-related protocols.

Every coronavirus case in the company is reported immediately and then notified to the central crisis team. Clear procedures (company directives, pandemic plan and travel warnings) are in place for work and travel during the pandemic. The company directives comply with the procedures set forth in the Arbeitsschutzverordnung (Occupational Health and Safety Regulation). In 2021, it was possible to relax some protective measures under local responsibility in accordance with legal requirements. Additional measures are adjusted by the local crisis teams in line with current infection rates.

Employee vaccinations

GEA offered vaccinations to employees and their families. Around 1,600 people at 16 German sites took



advantage of this offer. The vaccinations were administered with the help of external service providers.

In addition, vaccination campaigns were launched at other GEA companies, including in the USA and India. We also lobbied the governments of other countries to obtain timely vaccinations for our employees. As in the previous year, we distributed hygiene products such as face masks and disinfectants in 2021.

GEA Aid Commission

We support 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, such as in the event of accidents or sudden serious illness. Under such circumstances, employees and their families affected may turn to the GEA Aid Commission for help.



COMPLIANCE AND GOVERNANCE



Compliance and Governance

ROBUST DEFENSE AGAINST SECURITY RISKS

Whether verbal, digital or physical, or involving people, products or processes, information is key to almost everything we do. GEA is deeply committed to protecting the sensitive information we handle every day. This both protects our business partners' interests and helps secure our company's success. Our Global Security Program is a comprehensive roadmap that will elevate us to a new level in the field of information security by the end of 2023.

The Global Security Program

As digitalization and globalization continue to pick up speed, safeguarding sensitive information such as company data is becoming increasingly important. Security risks and the efforts of businesses to protect proprietary information are intensifying worldwide. This development has been accelerated by the Covid-19 pandemic and its impact in terms of maintaining smooth business operations and working from home.

Due to growing security risks as well as the increasing number of cyberattacks, more and more government institutions, agencies and companies require their suppliers to have certifications specific to their industry, market or organization – often in addition to international certifications such as ISO 27001. Such certifications ensure that the security risks for companies are minimized and attacks can be successfully averted.

The Global Security Program was established to meet this requirement and protect our company. This program applies a cross-divisional approach to (information) security. It was launched in 2020 and comprises numerous measures that are scheduled to be completed or initiated by the end of 2023.

GEA's Global Security Program comprises a total of around 80 projects. By the end of 2021, 15 of these projects had already been completed. A further 40 are currently underway.

In one such project, GEA is improving its global Information Security Management System (ISMS), which helps the Executive Board, management and all employees to protect sensitive information. The security measures within the ISMS primarily serve a preventive purpose by averting security risks. We have also defined measures that enable us to identify successful attacks at an early stage and respond promptly.



Sources:

¹Federal Office for Information Security (BSI)

²Cybercrime Magazine

³Forbes

Successful certifications in 2021

1. ISO/IEC 27001:2013 in Düsseldorf

GEA's ISMS is based on the globally recognized ISO/IEC 27001:2013 standard. It also takes into account industry-specific requirements and is continuously updated by the Chief Information Security Officer (CISO) and approved by our Executive Board. One of the most significant initiatives completed as part of the Global Security Program in 2021 was the group certification of GEA, with sub-certification of two business units – GEA Group Aktiengesellschaft, the corporate headquarters in Düsseldorf and GEA Group Services GmbH – under ISO 27001:2013. The very extensive on-site audits were conducted by technical inspection agency TÜV Rheinland. In total, we were required to implement more than 114 individual

measures. Further GEA sites will undergo certification in 2022. Ultimately, our long-term goal is to make GEA as secure as possible worldwide.

2. Cyber Essentials certification in the UK

In 2021, the information security processes of GEA Mechanical Equipment UK Limited in Milton Keynes, UK, were also verified through Cyber Essentials certification, which is required by the British government and overseen by the National Cyber Security Centre (NCSC). This certification demonstrates to customers that a company is able to adequately protect its own data and that of others. UK Cyber Essentials certifica-

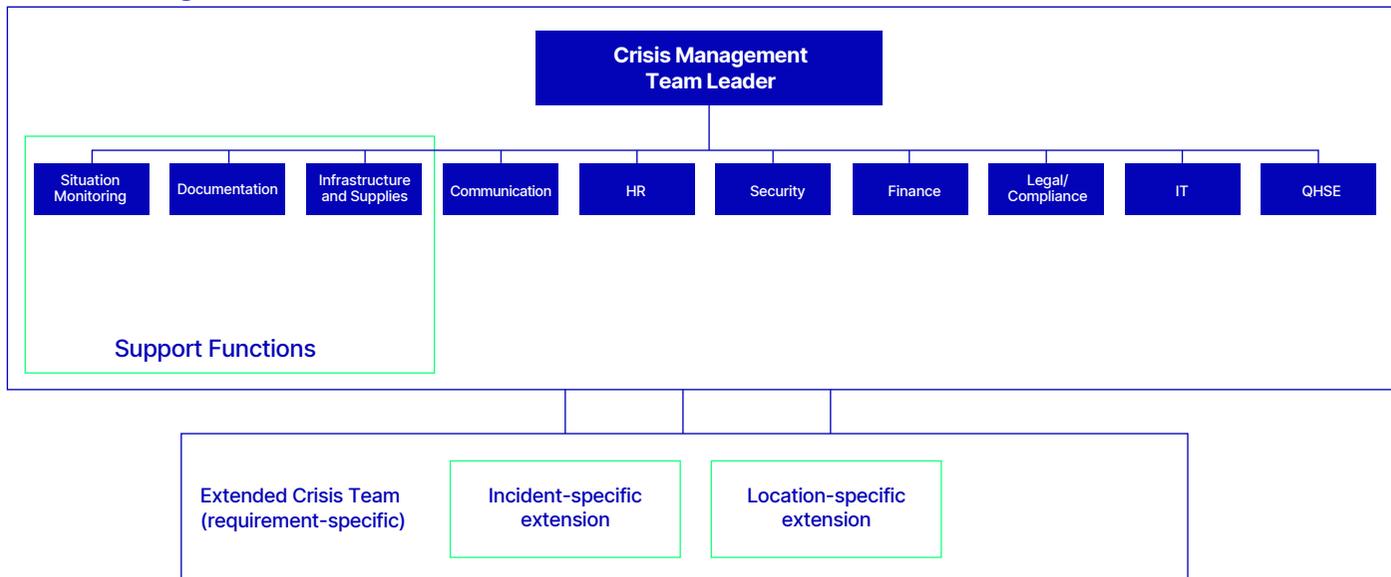
tion is relevant across industries, but especially to the shipping industry, which has strong ties to the UK Navy.

Crisis Management team

A GEA Crisis Management team led by the Chief Information Security Officer was established in 2021. The team members come from a range of business areas, including Communications, HR, Security, Finance, Legal/Compliance, IT and QHSE. The Crisis Management team is tasked with the systematic and efficient handling of corporate crises that could result from various legal, security, IT, occupational safety or other incidents.



Crisis Management Team





Information and Cyber Security team

In the year under review, we set up the Information and Cyber Security team. This team is currently made up of 15 employees covering an extensive range of security issues. These include information security governance, information security compliance management, information security and data protection audit management, identity and access management, security incident management, physical security, product security and operational technology (OT) security. To prepare the team members for their new role, they received intensive training in 2021 and visited different GEA sites and customers to gain an insight into the tasks ahead.

Raising awareness on an individual level

However, information security attacks do not always come from outside. Cyber criminals sometimes attempt to initiate their attacks via individual employees. To raise employee awareness of potential security risks, there is regular communication on the many aspects of and dangers associated

with information security as well as preventive measures. In 2021, attention was drawn to the subject through a global poster campaign. We also began releasing animated videos on the in-house social network showing various everyday threat scenarios, including, for example, remote access, social engineering, e-mail security, visitor regulations, clean desk and clean screen policies. The easy-to-grasp videos include relevant tips and guidelines as well as how and where to report any concerns or security incidents. All of the videos plus further advice on information security are available via an information security portal on our intranet. Other content includes a fun quiz to test knowledge and train users at the same time, a "password checker" to verify the security of the user's own password and a "digital classification wheel" to help users classify documents correctly. General training materials and answers to frequently asked questions can also be found.

A lock screen installed on all GEA computers ensures that our employees are reminded of the importance of information security on a daily basis.



"Our global ISMS is continuously being improved to prevent, detect and respond to increasing security threats and to adapt our systems accordingly. From senior management down, each individual employee contributes to optimally protecting the information of our customers and partners as well as that of our company in line with their respective roles and responsibilities."

Iskro Mollov, Chief Information Security Officer

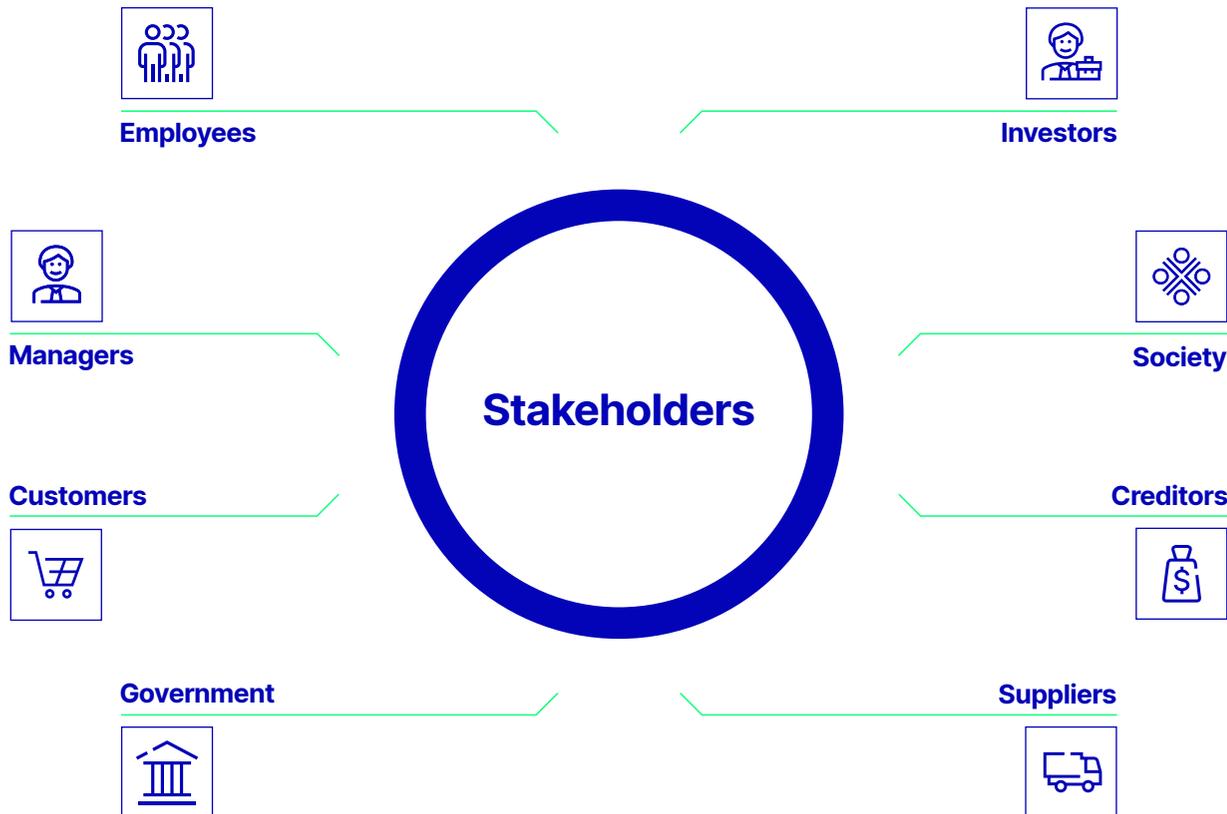
Compliance and Governance

It is our duty to act responsibly

GEA is committed to responsible and sustainable corporate governance in order to avoid potential harm to the company, its employees, business partners, shareholders and other stakeholders. In light of this, fairness, integrity and compliance have top priority throughout the group. The special importance of integrity is further underscored by the fact that integrity is a core corporate value for GEA and globally. By acting ethically and considering the concerns of all stakeholders when dealing with employees, business partners and the public, GEA also protects its good reputation as a consistently reliable business partner over the long term.

Putting our claims into practice hinges on our ability to identify serious violations of the law or internal policies at an early stage. This is why we set great store by an open corporate culture and encourage all employees and external third parties to reach out to existing contacts in the company in confidence if they become aware of compliance risks. Use is also made of the various reporting channels, which helps us eliminate compliance risks or violations.

In 2021, no significant fines were imposed on GEA for non-compliance with laws or regulations governing economic, environmental and social matters.





Compliance Management

Compliance is defined as a group-wide principle established to ensure adherence to the rule of law as well as internal corporate policies. All GEA employees have a duty to ensure that no compliance violations are committed in their respective areas of responsibility. A detailed description of GEA's compliance management system (CMS) can be found in the "Corporate Governance Statement" in the 2021 Annual Report and on the group's website at www.gea.com

To establish new compliance targets and review existing ones, we launched a three-year plan in 2019 to address issues in need of attention. This plan was initially static, but was converted into a rolling three-year plan in the year under review. Specifically, "rolling" means that each time one year comes to an end, the existing planning is extended by a further year. In this way, issues that remain unresolved in the year in question are rolled over to one of the following years and the subsequent planning adjusted accordingly. The planning is also adjusted and developed during each year.

A wide range of information gathered in the course of the year flows into the three-year plan. For example, this includes the results of risk assessments and internal audits, legislative initiatives and feedback from the company, including divisions and regions, as well as from third parties. Planning is carried out at group level by the Compliance team. The content of the planning and the progress of implementation are regularly reported to the Executive Board, Supervisory Board and Audit Committee.

Compliance management system updated

To prevent serious consequences arising from possible compliance violations, GEA counters potential risks through its compliance management system (CMS), which is adapted on an ongoing basis in line with changing requirements. The CMS is used to analyze, inform and clarify as well as to control and define processes for and monitor the applicable compliance rules. The CMS is set up in such a way that measures are developed centrally by a Compliance team and then rolled out across the company's divisions. The Compliance team also monitors implementation of the measures in the relevant business units.

The appropriateness and implementation of the CMS for the sub-areas of anti-corruption and antitrust law were audited in accordance with Standard PS 980 of the Institute of Public Auditors in Germany (IDW) and certified in 2019. In 2021, an additional audit was conducted by an external auditor. Our aim was to achieve the third and highest certification level by means of an effectiveness audit.

To this end, audits, including interviews and random sampling, were carried out in ten business units selected by the audit firm. Based on the results, an analysis was carried out to establish whether the globally specified compliance measures had been effectively implemented and executed. We expect to receive certification in the first quarter of 2022.

Compliance Handbook

The Group has a Code of Conduct and related compliance policies. These include an Integrity Policy, a Third Party Policy and a Competition Policy, which govern anti-corruption and anti-money laundering, conflicts of interest as well as antitrust and competition law at GEA. The Code of Conduct and the policies are available to all employees worldwide in 18 languages.

Other compliance-related topics, such as quality, health, safety & environment (QHSE), tax compliance and export control, are dealt with by the relevant departments and are covered by guidelines issued by those departments.

Integrity system and alternative reporting channels

GEA offers its employees various channels to report violations. One pillar of the reporting system is a certified whistleblower system, which is available in nine languages. It allows employees and external third parties to report compliance violations either anonymously or under their own name. In cooperation with an external law firm, the expansion of the whistleblower system to include reporting by telephone was prepared in the year under review. This will be available in the near future. Employees are proactively informed about these reporting channels both on the intranet and, for example, as part of compliance training.

The number of whistleblower reports increased in 2021. This is attributable to the extensive development of the CMS since 2017. The rising number of reports should be viewed as a very positive sign, since a CMS also aims to equip employees to recognize and report violations. No material compliance risks were reported in 2021 and, accordingly, no such cases were recorded.



Additionally, many reports are received directly by the Compliance team as well as by the Executive Board, divisional management and business unit management. GEA's whistleblower system can also be used to report potential human rights violations.

Preventive processes

Processes designed to prevent compliance violations play a major role in our compliance management system. That is why 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. Every sales agent must be reviewed and approved by the Compliance team.

Numerous other matters, such as contracts carrying potential antitrust risks, invitations and gifts above a specified value, conflicts of interest as well as sponsorship and donations, are also subject to strict internal approval and reporting requirements. GEA has introduced various IT tools to meet the approval and reporting obligations and to document the relevant issues in an audit-compliant format.

Training and consulting

In 2020, more than 9,000 employees across the group were identified as being exposed to compliance risks. These include all managers, sales and procurement staff as well as all other employees with decision-making authority and direct contact with customers or suppliers. They are regularly trained on compliance issues as part of a training plan. The training plans require compliance-relevant employees to receive training each year, alternately in person and in the form of e-learning.

Training on compliance topics in 2021

- Compliance training courses involve extensive training on topics such as anti-corruption and anti-money laundering, antitrust law and conflicts of interest. In the year under review, a total of 9,271 employees received compliance training in the form of e-learning and 8,459 employees attended classroom-based training sessions.
- In the area of data protection, 14,174 employees participated in e-learning and 1,576 employees attended classroom-based courses during the year.

In addition to these training courses and e-learning sessions, other measures were used to raise employee awareness around compliant conduct in 2021. Firstly, in a video series entitled “Stephan Petri asks,” GEA Chief Compliance Officer Dr. Stephan Petri discusses important compliance topics with senior executives to explain these issues to employees. These “compliance talks” are available on the intranet. We

also launched the “Laurel Smith” comic strip, featuring a fictional new GEA employee who comes up against a variety of compliance and data protection issues. Employees can easily identify with the character and the storyline, reflect on compliance issues from their everyday working lives and then comment on them.

Compliance audits

Internal Audit examines compliance aspects as part of its standard and special audits.

Of these, a total of 23 audits were completed by the beginning of December 2021 with the publication of a final report. Group Internal Audit similarly conducted audits of the risk management system throughout the group in the year under review. The general task of Group Internal Audit, as the third line in the three lines model of corporate governance, is to analyze and assess the activities of GEA Group AG and its companies. It performs this role with regard to:

- Compliance (including compliance with laws and binding internal regulations)
- Security (in particular the effectiveness of internal controls)
- Appropriateness (of the organizational and operational structure with respect to the fulfillment of tasks to achieve corporate goals)
- Economic efficiency (cost-effectiveness and profitability)

Where necessary, suitable measures to eliminate weaknesses and/or reduce risks are agreed with the respective audited unit and their timely implementation tracked (follow-up management).

A group-wide review of all existing sales agent contracts with regard to the compliance rules applicable at GEA was likewise completed in 2021. This review ran for more than two years. Sales agents are not employees, but external individuals working for GEA on a commission basis. A third-party tool was used to examine and assess all contracts with regard to risk criteria over a period of two years. If the outcome of the assessment was positive, a new contract with updated compliance requirements was drafted.

Around 468 of the previously more than 766 sales agents remained under contract.

Since 2020, compliance risk analyses have been carried out annually in the business units as part of a compliance risk assessment. For these analyses, personal interviews were conducted with randomly selected individual business units. The statements provided were analyzed and documented and the compliance risks assessed using an IT tool. Self-assessments were carried out in all business units where interviews were not conducted. The aim is to identify whether the compliance measures taken are fit for purpose and risk-appropriate, or whether they need to be adjusted or whether further measures are required. Accordingly, additional compliance measures were rolled out in numerous business units based on the results of the audit. In the year under review, all of our approximately 200 operational business units were audited. Interviews were held at 34.



200

In the year under review, all of our approximately 200 operational business units were audited. Interviews were held at 34.

Procedures for dealing with compliance violations

Violations of group-wide compliance rules are met with sanctions appropriate to the degree of fault and severity. Sanctions range from reprimand and warning letters to termination of employment. In particularly serious cases, GEA reserves the right to sue the individuals concerned for damages and/or to report the violation to the responsible authorities.

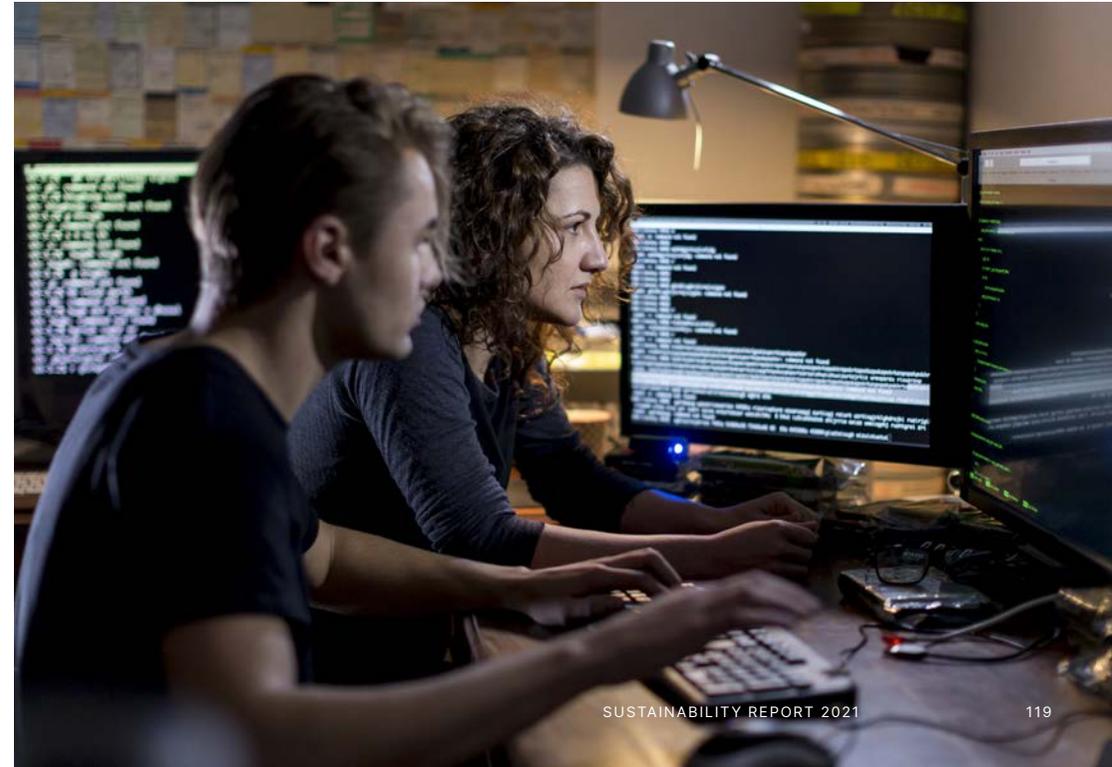
As a basic principle, we expect all employees to report any indications of compliance violations. Managers must ensure that serious misconduct, notably in the areas of corruption, competition law and data protection, is reported to the Compliance team.

20 compliance investigations were undertaken in 2021. In no case were corruption or antitrust violations confirmed. However, in some cases, violations of compliance policies were identified and sanctioned with appropriate measures by Compliance Committees convened in individual cases. In the period under review, no sanctions were imposed on GEA for violations of anti-corruption or money laundering regulations, antitrust law or data protection.

Protection of personal data

For an innovative, global enterprise like GEA, information and its use are of significant importance in accomplishing corporate goals. It is equally important to protect the privacy of everyone whose personal data we process. 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.

GEA's data protection practices were successfully audited in accordance with the IDW PS 980 audit standard. An independent auditor began an appropriateness audit of the data protection management system in 2020, which was successfully completed in 2021. Another important strategic issue in the year under review was the strategic cooperation with the Procurement, HR, IT, Business Process Management and Information Security departments, which will also be continued in 2022.





Our data protection activities are underpinned by the EU General Data Protection Regulation (GDPR) and the national laws based on it, as well as foreign legal standards. Violations of the GDPR can result in fines of up to four percent of annual group revenue and exclusion from public contracts. Data privacy violations can also cause lasting damage to a company's reputation. This is why GEA 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, for example, include 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 the 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. In addition, the corresponding data management system covers all organizational aspects, i.e. roles, tasks and responsibilities involved in processing personal data.

In the year under review, the "Service Now" platform for digital workflows, which covers incident management and other processes, was integrated into the data management system for the first time. When employees submit an incident report using Service Now, a corresponding data protection review is automatically initiated. If a data protection violation is identified, a review is carried out to determine whether the violation is reportable.

In the year under review, GEA recorded a significant increase in the number of reports and requests for

advice. In some cases, there were several a day. This is a welcome development, as it shows that both employee awareness of the issue worldwide and the quality of monitoring have increased.

Compliance with data protection requirements and applicable data protection laws is monitored regularly. These reviews are performed by the company's data protection officers and other business units with audit rights, or by external auditors. Third-party suppliers are audited by means of supplier self-declarations, audits and certifications. By December 31,

2021, more than 3,000 further relationships with suppliers and subcontractors had been reviewed with regard to data protection compliance. The contracts of more than 350 suppliers and subcontractors were amended to ensure compliance with the GDPR.

In addition, GEA 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 as well as to the Supervisory Board and the Audit Committee.

Information security, business continuity and crisis management

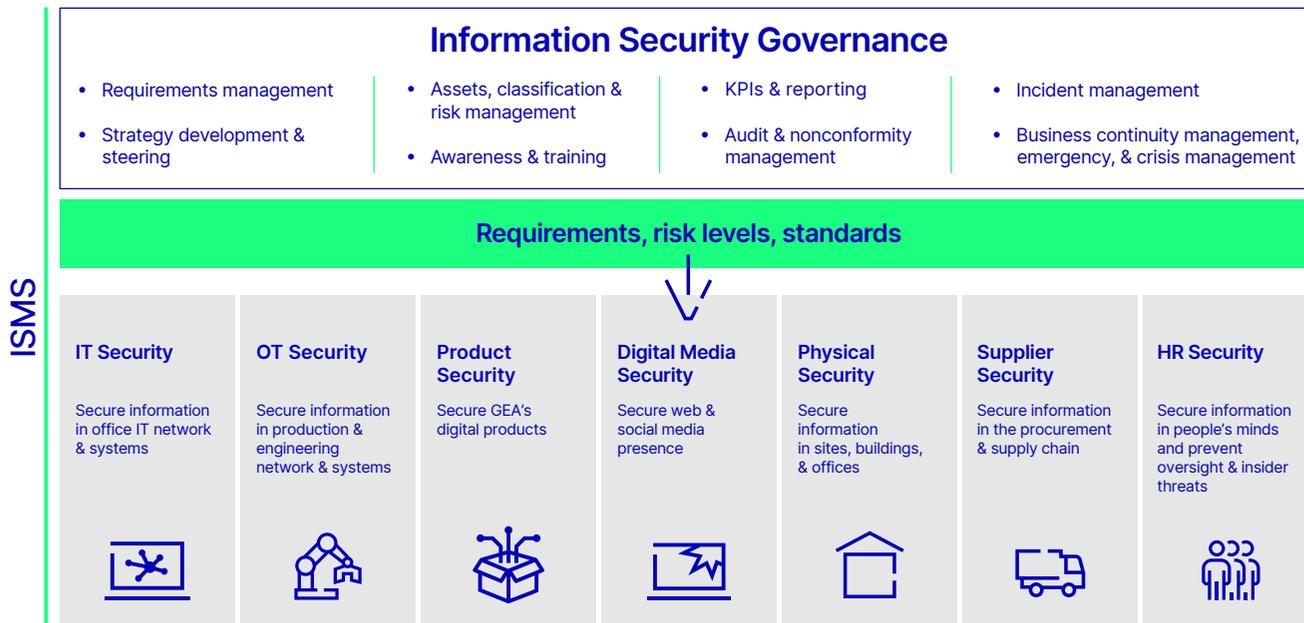
Over the coming years, our company's success will hinge on information security. This is particularly true given the increasing interconnectedness of our systems and the great importance of information for our business. At GEA, information security is one of our main strategic priorities. Value creation processes are designed and optimized to ensure that information is handled securely at all times. Targeted measures were introduced at GEA in 2020 to strengthen the company's general information and cyber security.

Our aim is to protect commercially sensitive information – both our own information and that of our customers and partners. To achieve this, ensuring the confidentiality, integrity and availability of this information is essential. Confidentiality means preventing or minimizing unauthorized access to information. Integrity guarantees the reliability and accuracy of information. Availability means authorized individuals having timely and uninterrupted access to data, objects and resources.

The protection of information is governed by GEA's Information Security Policy as well as underlying policies, processes and other implementation documents.

GEA's Information Security Management System (ISMS) effectively addresses growing security threats by protecting sensitive information of all types from theft, loss, unauthorized disclosure, unlawful access, misuse, alteration and destruction.

There are two lines of defense available within the ISMS to protect against significant security risks. The first line consists of seven priority areas. It combats risks and threats where they occur:



Our employees also play a key role in implementing the ISMS. Mandatory information security training sessions are held to ensure that they are actively involved and familiar with the measures. In addition, greater awareness and sensitivity around the issue of information security is created through a global communications campaign. Additionally, the content of the ISMS policies is addressed in a series of explanatory videos, covering topics such as e-mail fraud and correct visitor procedures. Aside from focusing on prevention, the videos provide information on what to do in the event of an incident to rectify any issues as quickly as possible and prevent damage to the company.

The second line of defense is the Chief Information Security Officer. The CISO is responsible for information security management as well as business continuity and crisis management. He reports regularly to the Executive Board and the Supervisory Board's Audit Committee.

Due to growing security risks as well as the increasing number of cyberattacks, more and more government institutions, agencies and companies require their suppliers to have certifications specific to their industry, market or organization – often in addition to international certifications such as ISO 27001. Such certifications ensure that the security risks for companies are minimized and attacks can be successfully averted. In 2021, the information security processes of GEA Mechanical Equipment UK Limited in Milton Keynes, UK, were also verified through



Cyber Essentials certification, which is required by the British government and overseen by the National Cyber Security Centre (NCSC). This certification demonstrates to customers that a company is able to adequately protect its own data and that of others. UK Cyber Essentials certification is relevant across industries, but especially to the shipping industry, which has strong ties to the UK Navy.

In the event of an incident, the Executive Board, the Chief Compliance Officer or the CISO can request an information security investigation. Below the level of the global ISMS, all managing directors are responsible for ensuring that their respective company has an appropriate ISMS. In 2021, GEA had no complaints related to a breach of protection or loss of customer data.

APPENDIX



[Appendix](#)

Reporting Profile

With the Sustainability Report 2021, GEA informs its investors, customers, employees as well as independent institutions such as non-governmental organizations (NGOs) and all other interested parties about the implementation of sustainability in the corporate strategy with regard to ecology and social responsibility. The economic development is described in detail in the Annual Report 2021. The sustainability reporting is based on the international standards of the Global Reporting standards (GRI). The Sustainability Report 2021 has been prepared in accordance with the GRI Standards „Option Core“.

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 subsidiar-

ies, associates and joint ventures which meet this definition is provided in Section 12.4 Investments in the Notes to the Consolidated Financial Statements (Annual Report) for the fiscal year 2020. In addition to this Sustainability Report, we have published the non-financial Group statement prepared in accordance with sections 315b, 315c in conjunction with sections 289c to 289e of the Handelsgesetzbuch (HGB – German Commercial Code) as part of the Group management report.

The Sustainability Report also serves as a progress report for the UN Global Compact of the United Nations. Further information on the topics presented in the Sustainability Report is available on the internet at Internet at www.gea.com. The previous Sustainability Report was published in March 2021 and is still available on the internet.

GRI 102-44

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

Stakeholder groups assessment of topic materiality

	Investors	Customers	Industry	NGO's/ civil society	Sustainability experts (scientists, consultants)	Employees
CO ₂ Emissions & Decarbonization	•	•	•	•	•	•
Energy Consumption	•		•		•	•
Waste Management	•	•	•	•	•	
Water Consumption	•	•		•	•	
Wastewater Management				•		
Green Logistics & Transportation	•	•	•	•		•
Sustainable Innovation & Products		•	•		•	
Circular Economy		•		•		
Product Stewardship		•	•			
Sustainable Procurement	•	•	•	•	•	•
Human Rights				•		•
Diversity, Inclusion, Equality	•					•
Occupational Health & Safety		•				•
Talent Acquisition & Retention						•
Training & Talent Development						•
Business Ethics & Corporate Behavior	•	•		•		
Data Protection & Information Security	•	•	•			•

[Appendix](#)

Facts and figures

Sustainability at GEA

Management System

	Number of certificates 2021	Number of certificates 2020	Number of certificates 2019
DIN EN ISO 9001:2015	89	92	89
DIN EN ISO 14001:2015	39	39	38
DIN EN ISO 45001:2018	38	35	30
DIN EN ISO 50001:2018	15	14	16
Total number of certificates	181	180	173

ISO 9001 defines the minimum requirements for a quality management system that an organization must meet in order to provide products and services that meet customer expectations and regulatory requirements. At the same time, the management system should be subject to a continuous improvement process.

The international environmental management standard **ISO 14001** defines the requirements for an environmental management system and is part of the family of standards in environmental management.

ISO 45001 is a standard published by the International Organization for Standardization (ISO) in March 2018 and describes requirements for an occupational health and safety (OH&S) management system (AMS) and guidance for implementation.

ISO 50001 regulates the establishment of an operational energy management system for the purpose of sustainably increasing energy efficiency.

Employees¹

Employees by contract type and gender

	Employees total		thereof permanent		thereof temporary	
	Number	in %	Number	in %	Number	in %
Male	14,695	81.0	13,960	76.9	735	4.1
Female	3,448	19.0	3,275	18.1	173	1.0
Total		100.0	17,235	95.0	908	5.0

Employees by contract type and region

	Employees total		thereof permanent		thereof temporary	
	Number	in %	Number	in %	Number	in %
DACH	6,177	98.0	6,053	98.0	124	2.0
East Europe	749	94.3	706	94.3	43	5.7
Westeurope, Middle East & Africa	2,912	99.0	2,883	99.0	30	1.0
North and Central Europe	3,108	97.2	3,020	97.2	87	2.8
Asi Pacific	3,040	79.5	2,418	79.5	622	20.5
North America	1,591	99.9	1,590	99.9	1	0.1
Latin America	565	99.8	564	99.8	1	0.2
Total	18,143	95.0	17,235	95.0	908	5.0

Employees by employment type and gender

	Total		thereof men		thereof women	
	Number	in %	Number	in %	Number	in %
Full time	17,458	96.2	14,604	83.7	2,854	16.3
Part time	685	3.8	229	33.4	456	66.6
Total	18,143	100.0	14,695	81.0	3,448	19.0

1) Full-time equivalents excluding apprentices and dormant employment contracts

Total workforce¹

	12/31/21	in %	12/31/20	in %	Change absolute
GEA Employees	18,143	94.2	18,232	94.6	-89
external employees	1,109	5.8	1,036	5.4	73
thereof contingent workers	1,004	90.5	938	90.5	66
thereof independent contractors	105	9.5	98	9.5	7
Total	19,252	100.0	19,268	100.1	-16

1) Figures based on full-time equivalents.

Total employee capacities excluding apprentices and dormant employment contracts; excluding non-consolidated entities

Members of the executive bodies and employees by gender

December 31, 2021		
in %	thereof men	thereof women
Supervisory Board	50.0	50.0
Executive Board	100.0	0.0
Top Management (Reporting line* 1 to 3)	83.1	16.9
Middle Management (Reporting line* 4 and 5)	85.4	14.6
Lower/Junior Management (Reporting line* 6 and 7)	90.9	9.1
Management total	85.4	14.6
Employees total	81.0	19.0

*Reporting line to Executive Board

Apprenticeship in Germany

	GEA 12/31/21	GEA 12/31/20
Apprentices	363	381
Apprenticeship rate (in %)	5.9	6.1

Total number and rate of new hires by region, age group and gender

December 31, 2021	Age <30			Age 30 – 50			Age > 50			GEA total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
DACH												
Number of new hires	92	62	154	202	94	296	54	14	68	348	170	518
Rate of new hires	15.7%	28.4%	19.2%	8.6%	14.2%	9.9%	2.4%	2.8%	2.5%	6.7%	12.3%	7.9%
East Europe												
Number of new hires	36	7	43	72	21	93	10	0	10	118	29	147
Rate of new hires	75.5%	70.3%	74.6%	17.5%	18.7%	17.8%	6.7%	3.1%	6.3%	19.5%	20.7%	19.7%
Westeurope, Middle East & Africa												
Number of new hires	80	26	106	128	40	169	7	1	7	215	67	282
Rate of new hires	29.8%	40.5%	31.9%	8.4%	10.9%	8.9%	0.9%	0.4%	0.8%	8.6%	11.3%	9.1%
North and Central Europe												
Number of new hires	58	16	73	165	50	214	68	32	100	291	97	388
Rate of new hires	26.7%	28.3%	27.0%	13.6%	16.0%	14.1%	5.8%	16.2%	7.2%	11.1%	17.3%	12.2%
Asia Pacific												
Number of new hires	73	37	111	258	60	318	26	3	29	358	100	458
Rate of new hires	39.3%	63.0%	45.0%	13.3%	14.2%	13.4%	7.5%	4.9%	7.1%	14.4%	18.7%	15.1%
North America												
Number of new hires	43	9	52	85	19	104	22	7	28	150	35	185
Rate of new hires	33.8%	23.0%	31.3%	14.7%	16.6%	15.0%	3.3%	6.2%	3.7%	11.0%	13.2%	11.4%
Latin America												
Number of new hires	23	6	29	50	16	66	7	0	7	79	23	102
Rate of new hires	64.0%	27.1%	49.4%	16.2%	19.1%	16.8%	7.0%	1.3%	6.4%	18.1%	18.9%	18.3%
Total												
Number of new hires	406	163	569	960	301	1,261	194	57	250	1,559	521	2,080
Rate of new hires	27.7%	34.9%	29.5%	11.5%	14.4%	12.1%	3.6%	5.4%	3.9%	10.3%	14.5%	11.1%

Total number and rate of employee departures by region, age group and gender

December 31, 2021	Age <30			Age 30 – 50			Age > 50			GEA total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
DACH												
Number of departures	32	19	52	116	51	167	137	29	166	285	99	384
Departure rate (in %)	5.5%	8.9%	6.4%	5.0%	7.6%	5.6%	6.0%	5.7%	6.0%	5.5%	7.1%	5.8%
East Europe												
Number of departures	10	2	12	41	17	58	7	1	7	58	19	77
Departure rate (in %)	20.4%	19.8%	20.3%	10.0%	14.7%	11.0%	4.6%	4.0%	4.6%	9.5%	13.9%	10.3%
Westeurope, Middle East & Africa												
Number of departures	22	5	27	134	26	160	70	15	85	226	46	272
Departure rate (in %)	8.4%	7.5%	8.2%	8.8%	7.0%	8.4%	9.8%	9.4%	9.7%	9.0%	7.7%	8.8%
North and Central Europe												
Number of departures	20	12	32	136	33	169	110	14	124	267	59	326
Departure rate (in %)	9.4%	21.9%	12.0%	11.2%	10.7%	11.1%	9.3%	7.1%	9.0%	10.2%	10.6%	10.3%
Asia Pacific												
Number of departures	29	13	42	265	47	311	39	6	45	333	65	398
Departure rate (in %)	15.8%	21.7%	17.2%	13.6%	11.0%	13.1%	10.9%	10.9%	10.9%	13.4%	12.1%	13.2%
North America												
Number of departures	27	5	32	85	14	99	78	14	92	190	33	223
Departure rate (in %)	21.1%	13.4%	19.3%	14.7%	12.1%	14.3%	12.0%	12.2%	12.0%	14.0%	12.3%	13.7%
Latin America												
Number of departures	6	5	11	47	17	63	12	1	13	65	23	88
Departure rate (in %)	17.7%	21.8%	19.3%	15.1%	19.5%	16.0%	13.2%	9.9%	12.8%	14.9%	19.0%	15.8%
Total												
Number of departures	147	62	209	824	204	1,027	453	79	532	1,424	344	1,768
Departure rate (in %)	10.1%	13.2%	10.8%	9.9%	9.7%	9.8%	8.4%	7.5%	8.3%	9.4%	9.5%	9.4%

GEA Group total

December 31, 2021	Number	in %
Voluntary employee departures	1,171	6.2
unvoluntary employee departures	383	2.0
Retirement	214	1.1
Total	1,768	9.4

Occupational health and safety

Work safety numbers¹

Per million hours worked	2021	2020 ²	2019
Lost Time Injuries ³	205	221	230
Accidents with sequence of death	0	1	0
Lost Time ⁴	5,111	4,653	5,169
Lost Time Injury Frequency Rate ⁵	5.15	5.44	5.63
Lost Time Injury Severity Rate ⁶	128	114.56	128.63
Proactive Incident Rate ⁷	264	92.05	126.96
Total Recordable Injury Frequency Rate ⁸	29,16	32,23	33,39
Sites without occupational accidents with downtime, in percentage of all sites	76	73	76

1) Accidents and incidents are to be reported for all: GEA Employees, Temporary Employees, Students/Interns, Trainees.

Data is recorded manually and decentrally

2) The 2020 numbers have been adjusted as two accidents have been additionally reported for 2020.

3) The number of work-related injuries with ≥ 1 day of lost time

4) Lost Days (full calendar days, without the day of the accident). GEA is counting Lost Days up to 182 days in accordance with the European Statistics on Accidents at Work (ESAW) since 2018.

5) The number of lost time injuries x 1,000,000 divided by the number of working hours in reporting period

6) The number of lost days x 1,000,000 divided by the of working hours in reporting period

7) The number of other incidents (e.g. unsafe situations, unsafe acts, near misses) x 1,000,000 divided by the number of working hours in reporting period

8) The sum of lost time injuries without lost time x 1,000,000 divided by the number of hours in reporting period

Environmental protection

Greenhouse gas emissions¹

in t CO ₂ e	2021	2020	2019 ²	Change compared to previous year in %	Change compared to previous year in %
Scope 1: Direct greenhouse gas emissions	35,077	30,938	35,550	13.4	-1.3
Scope 2: Indirect greenhouse gas emissions ³	15,726	27,664	31,998	-43.2	-50.9
Total Scope 1 and 2 greenhouse gas emissions⁴	50,803	58,602	67,548	-13.3	-24.8
Scope 3 Greenhouse gas emissions					
Scope 3.1: Purchased products and services ⁵	1,174,183	1,143,658	1,241,575	2.7	-5.4
Scope 3.2: Capital goods ⁵	16,732	16,297	17,692	2.7	-5.4
Scope 3.3: Fuel and energy-related emissions (not in Scope 1 and Scope 2) ⁶	16,580	12,369	13,473	34.0	23.1
Scope 3.4: Upstream transportation and distribution ⁵	110,539	107,666	116,884	2.7	-5.4
Scope 3.5: Waste	895	850	1,089	5.3	-17.8
Scope 3.6: Business travel ⁶	5,864	3,602	18,412	62.8	-68.1
Scope 3.7: Employee commuting	7,121	7,246	10,034	-1.7	-29.0
Scope 3.11: Use of sold products ⁷	26,511,385	21,295,726	24,768,194	24.5	7.0
Scope 3: Total upstream greenhouse gas emissions	1,331,914	1,291,688	1,419,159	3.1	-6.1
Scope 3: Total downstream greenhouse gas emissions	26,511,385	21,295,726	24,768,194	24.5	7.0
Scope 3: Total greenhouse gas emissions	27,843,299	22,587,414	26,187,353	23.3	6.3

1) Greenhouse gas emissions were calculated using the UK DEFRA 2019 to 2021 emission factors, where applicable

2) Adjusted due to changes in allocation and calculation as well as acquisitions and divestments of companies

3) Market-based emissions according to GHG Protocol Scope 2 guidance. Where no contract-specific emission factors were available, the GHG Protocol/IEA Ver. 16 (11/2021) - IEA 2020 emission factors were used.

Scope 2 emissions calculated using the location-based method: 31,504 t CO₂e in 2021

4) Market-based emissions according to GHG Protocol Scope 2 guidance. Where no contract-specific emission factors were available, the GHG Protocol/IEA Ver. 16 (11/2021) - IEA 2020 emission factors were used.

Scope 1 and 2 emissions calculated using the location-based method: 66,581 t CO₂e in 2021

5) Emissions were calculated using a recognized input-output model, which is not subject to the limited assurance engagement of KPMG AG Wirtschaftsprüfungsgesellschaft. Based on a global impact analysis of sectoral and international supply chains, direct and indirect effects of corporate activities along the supply chain were determined, including the CO₂ emissions listed (other climate-impacting gases neglected).

For 2020 and 2021, the calculated values from 2019 were extrapolated based on the respective purchasing volume.

6) Global air travel; rental cars for Europe and USA; travel by German rail estimated based on 2020.

7) Emissions calculated through direct consumption data with a coverage rate for 2019, 2020, and 2021 of >80%

Direct greenhouse gas emissions (Scope 1)¹

in t CO ₂ e	2021	2020	2019 ²
Asia Pacific (excl. China)	836	358	964
China	528	482	492
DACH & Eastern Europe	18,813	16,740	18,858
Northern & Central Europe	2,011	1,907	1,562
Latin America	8	7	10
North America	5,382	5,274	6,231
Westeurope, Middle East & Africa	7,499	6,171	7,432
Scope 1 total	35,077	30,938	35,550

1) Greenhouse gas emissions were calculated using the UK DEFRA 2019 to 2021 emission factors, where applicable.

2) Adjusted due to changes in allocation and calculation as well as acquisitions and divestments of companies.

3) Market-based emissions according to GHG Protocol Scope 2 guidance. Where no contract-specific emission factors were available, the GHG Protocol/IEA Ver. 16 (11/2021) - IEA 2020 emission factors were used. Scope 2 emissions calculated using the location-based method: 31,504 t CO₂e in 2021.

Indirect greenhouse gas emissions (Scope 2)¹

in t CO ₂ e, marketbased	2021	2020	2019 ²
Asia Pacific (excl. China)	1,913	1,219	2,013
China	4,762	4,753	5,702
DACH & Eastern Europe	1,459	11,167	12,558
Northern & Central Europe	2,444	2,021	3,050
Latin America	117	74	140
North America	4,292	4,742	5,774
Westeurope, Middle East & Africa	739	3,688	2,762
Scope 2 total³	15,726	27,664	31,998

Energy consumption

in MWh	2021	2020	2019	Change compared to previous year in %
Total energy consumption (Scope 1 and 2)	254,233	230,339	236,176	10.4
thereof electricity	87,317	87,579	90,088	-0.3
of which electricity from renewable energies	48,477 ¹	214 ²	-	99.9
thereof natural gas	124,357	105,131	103,293	18.3
thereof heating oil	2,648	2,656	3,318	-0.3
thereof others ^{3,4}	39,911	34,974	39,477	14.1

1) 2021: Germany, Italy, Belgium, and Austria

2) Since 2020: Austria

3) Fossil fuels such as Diesel, gasoline, kerosene

4) Changes in calculation led to a re-valuation for New Zealand in 2020

Water

in m ³	2021	2020 ¹	2019	Change compared to previous year in %
Water withdrawal total ²	357,849	334,782	13,928	6.9
thereof municipal water	300,402	302,386	308,966	-0.7
thereof groundwater	57,446	32,396	38,514	77.3
Water discharge total ³	284,436	270,345	264,309	5.2
Water consumption total	73,412	64,437	44,657	13.9
Ratio of water consumption to water withdrawal (in %)	20.5	19.2	14.5	1.3
Number of reporting sites	89	82	77	-

1) Due to changes in allocation and calculation as well as acquisitions and divestments of companies the basis of reporting sites was corrected for 2020

2) In 2021, two leakages (total water withdrawal (9700 + 8200 = 17,900 m³) were detected in France and Italy

3) Water discharge is released into the municipal wastewater network

Waste

in t	2021	2020 ¹	2019	Change compared to previous year in %
Waste generation total²	13,037	12,997	13,928	0.3
thereof hazardous waste	832	854	1,285	-2.6
thereof non-hazardous waste	12,205	12,143	12,643	0.5
Waste directed to disposal, non-hazardous ²	1,386	1,312	1,439	5.6
thereof landfill	566	591	674	-4.3
thereof incineration with energy recovery	806	710	759	13.5
thereof incineration with energy recovery	14	10	6	32.4
thereof other disposal operations	-	-	-	-
Waste directed to disposal, hazardous ²	832	854	1,285	-2.6
thereof landfill	-	-	-	-
thereof incineration with energy recovery	-	-	-	-
thereof incineration with energy recovery	-	-	-	-
thereof other disposal operations ^{2,3}	832	854	1,285	-2.6
Waste diverted from disposal, non-hazardous	10,819	10,831	11,204	-0.1
thereof preparation for re-use	-	-	-	-
thereof recycling	10,819	10,831	11,204	-0.1
thereof other recovery operations	-	-	-	-
Waste recovery rate (in %) ⁴	95.56	95.37	95.2	0.2
Number of reporting sites	75	71	68	-

1) Due to changes in allocation and calculation as well as acquisitions and divestments of companies the basis of reporting sites was corrected for 2020

2) Disposal off-site

3) Treatment of halogen-free machining emulsions and solutions and aqueous rinsing liquids

4) Waste recovery rate = (Recycling plus incineration of non-hazardous waste directed to disposal with energy recovery plus other recovery operations of non-hazardous waste diverted from disposal) / Waste generation total

Composition of waste

in t	2021			2020 ¹⁾			2019		
	Waste generation total	Waste diverted from disposal ²⁾	Waste forwarded for disposal	Waste generation total	Waste diverted from disposal ²⁾	Waste forwarded for disposal	Waste generation total	Waste diverted from disposal ²⁾	Waste forwarded for disposal
Household waste	1,386	-	1,386	1,312	-	1,312	1,439	-	1,439
Packing material: Paper, Cardboard	692	692	-	677	677	-	652	652	-
Paper and Cardboard	175	175	-	169	169	-	159	159	-
Packaging material: Plastics	238	238	-	167	167	-	166	166	-
Packaging material: Wood	1,709	1,709	-	1,677	1,677	-	2,227	2,227	-
Metal	8,005	8,005	-	8,141	8,141	-	8,000	8,000	-
Aqueous purging liquids containing hazardous substances	419	419	-	430	430	-	846	846	-
Halogen-free processing emulsions and solutions	413	413	-	425	425	-	439	439	-
Total	13,037	11,652	1,386	12,997	11,685	1,312	13,928	12,489	1,439

1) Due to changes in allocation and calculation as well as acquisitions and divestments of companies the basis of reporting sites was corrected for 2020.

2) sum of Waste diverted from disposal for recycling plus hazardous waste directed to disposal through other disposal operations.

Key indicators for waste

	2021	2020 ¹⁾	2019
Ratio hazardous waste to disposal / total waste generation (in %)	6.4	6.57	9.22
Ration waste recovery rate / total waste generation (in %)	95.6	95.30	95.10
Total waste generation in tons per EUR 1 million in revenue	2,77	2,80	2,85
Total waste generation in tons per full-time employee	0,72	0,71	0,75

1) Due to changes in allocation and calculation as well as acquisitions and divestments of companies the basis of reporting sites was corrected for 2020.

Supply Chain

Share of local procurement in total volume (in %)¹

	2021	2020
Asia Pacific (excl. China)	93	91
DACH & Eastern Europe	84	82
Latin America	94	96
North America	95	95
Northern and Central Europe	78	77
Western Europe, Middle East & Africa	92	89
Global	87	85

¹) excluding intra-group procurement (intralogistics)

[Appendix](#)

TCFD-Index



GEA follows the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) in reporting how it addresses climate-related opportunities and risks. Since 2022, GEA has endorsed the TCFD, which was established by the Financial Stability Board in 2015 to develop a uniform framework for reporting climate-related risks and opportunities. It focuses on the disclosure of financial risks posed to companies by climate change. In our reporting to CDP, we report annually on climate-related data, associated strategies and

corresponding transformation pathways. We also share information on cross-cutting climate-related issues in our annual and sustainability reports. Our current approach to climate change is described below in line with the TCFD structure and the four categories of governance, strategy, risk management, and metrics & targets.

Governance

Climate-related information per category

Our governance structures ensure close involvement of the Executive Board and the highest management level in climate-related issues. The Chief Sustainability Officer has overall responsibility for sustainability and hence also for the climate strategy, reporting directly to the Chairman of the Executive Board of the GEA Group.

The entire Group Executive Board and the divisional and regional management boards, as well as the Chief Human Resources Officer, are part of the Global Executive Committee (GEC). This committee deals with strategic issues, including topics relating to climate change, on a monthly basis. In 2021 alone, our climate strategy was on the GEC's agenda various times and was presented to the Supervisory Board of GEA Group AG. So far, the focus has been on developing and implementing the "Net-zero 2040" target adopted by the GEC in June 2021.

Going forward, climate-related opportunities and risks will be regularly monitored and strategically addressed by the Executive Board and top management in the same way.

Detailed information

2021 CDP Climate Change response:
chapter Governance (C1).

2021 Sustainability Report:
chapter Climate Strategy

Strategy

Climate-related information per category

In our analysis of climate-related opportunities and risks, we distinguish between a short-term (0 to 5 years), medium-term (5 to 11 years), and long-term (11 to 21 years) timeframe. We have identified potentially material physical as well as transitory climate change impacts across the TCFD opportunity and risk categories and have disclosed them in our CDP reporting.

Since late 2021, an interdisciplinary working group has been striving to improve how we capture, assess, and manage climate-related opportunities and risks. In particular, we are focusing on analyzing two scenarios to identify potential medium-term to long-term opportunities and risks along the entire value chain.

Our "Net-zero 2040" target aims to achieve net-zero emissions along the value chain by 2040. The strategy focuses both on making our own contribution to limiting global warming and on leveraging new business opportunities and mitigating transition risks.

Detailed information

2021 CDP Climate Change response:
chapter Risk and opportunities (C2),
Business Strategy (C3).

2021 Annual Report:
Chapter 1.7.5 –
Nonfinancial group statement

2021 Sustainability Report:
chapter Climate Strategy



To examine the resilience of our business and to comply with the increasing demands of the financial market, we plan to extend the analysis and disclosure on climate-related information according to the TCFD recommendations in 2022. With an analysis of the entire value chain in different climate scenarios, the effects of climate-related opportunities and risks on the business processes are better understood. The findings of this analysis shall be incorporated into our business strategy and our enterprise risk management.

Opportunity and risk management

Climate-related information per category

At present, our process for identifying and assessing opportunities and risks covers selected climate-related opportunities and risks. These are identified either in the Global Opportunity and Risk Management department or through focused analyses. For example, with the support of an underwriter, we analyze potential climate-related physical risks on an annual basis for our key production sites. Current market opportunities and risks posed by shifting customer demands are regularly identified and assessed at operating level. In accordance with the quarterly risk reporting process, any opportunities and risks identified are discussed in the interdisciplinary coordination committees with the active involvement of local management. Then, depending on their financial materiality, they are communicated to the next higher level of the Group.

Going forward, the analysis and assessment of climate opportunities and risks, particularly for medium-term to long-term periods, will be even better integrated into the company-wide opportunity and risk management process. This will also allow the results of the scenario analysis to be suitably incorporated into the GEA process landscape.

Detailed information

2021 CDP Climate Change response:
chapter Risks and Opportunities (C2).

2021 Annual Report:
Chapter 1.7.6 –
Report on risks and chances

Metrics and targets

Climate-related information per category

In 2021, GEA was responsible for the following greenhouse gas emissions:

Scope 1: 35,077 metric tons of CO₂ equivalents

Scope 2: 15,726 metric tons of CO₂ equivalents (market-based method)

Scope 3: 27,848,299 metric tons of CO₂ equivalents

We have set interim targets to complement our long-term goal of net-zero emissions by 2040 along the entire value chain. We aim to reduce our greenhouse gas emissions from our own operations (Scopes 1 and 2) by 60 percent and from upstream and downstream activities, such as purchasing and product use by customers (Scope 3), by 18 percent by 2030 compared with the baseline year 2019. We defined our climate targets based on the ambitious goal of limiting global warming to a maximum of 1.5 degree Celsius and had them validated by the Science Based Targets initiative.

Our transformation plan focuses on energy efficiency, fuel switches and the use of renewable energies in our own operations. Key action areas for successful attainment of our Scope 3 emission reduction targets include incorporating climate impacts into supplier management and continuously improving the energy efficiency of our products.

Financial impacts are the key metric for assessing climate-related opportunities and risks. As part of our CDP reporting, we have assigned potential financial impacts to relevant opportunities and risks.

Detailed information

2021 CDP Climate Change response:
chapter Risk and opportunities (C2),
Business Strategy (C3),
Targets and Performance,
Emission Methodology (C5),
Emissions Data (C6),
Emissions Breakdown (C7).

2021 Annual Report:
Chapter 1.7.5 –
Nonfinancial group statement

2021 Sustainability Report:
chapter Climate Strategy

[Appendix](#)

Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) are political objectives of the United Nations. They serve to secure a global economically, ecologically and socially sustainable development and entered into force on January 1, 2016, with a term of 15 years until 2030. The 17 goals of the Agenda 2030 are directed at states, civil society, business, science and every individual. For more information on the SDGs visit <https://sdgs.un.org/goals>.

No Poverty

Page



End poverty in all its forms everywhere

75 – 78, 106

Zero Hunger



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

45, 46

Good Health and Well-being



Ensure healthy lives and promote well-being for all at all ages

46, 47, 60ff, 108, 109

Quality Education



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

93, 94, 102 – 104

Gender Equality

Page



Achieve gender equality and empower all women and girls

97, 98, 100, 105, 106

Clean Water and Sanitation



Ensure availability and sustainable management of water and sanitation for all

36 – 38, 51, 54

Affordable and Clean Energy



Ensure access to affordable, reliable, sustainable and modern energy for all

58, 59, 62, 63

Decent Work and Economic Growth



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

17, 62 – 65, 68, 74, 76, 78, 99, 106, 108, 126, 127, 131, 133

Industry, Innovation and Infrastructure

Page



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

19, 20, 39 – 41, 56 ff.

Reduced Inequalities



Reduce inequality within and among countries

75, 77, 78, 92, 98

Responsible Consumption and Production



Ensure sustainable consumption and production patterns

46, 48, 50, 53, 54

Climate Action



Take urgent action to combat climate change and its impacts

27ff., 61 – 63, 45, 49, 51

Life Below Water

Page



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

25, 63, 70, 129, 130

Life on Land



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

25, 52, 63, 129, 130

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

21, 115 ff.

Partnerships for the Goals



Strengthen the means of implementation and revitalize the global partnership for sustainable development

18, 75 ff.

Appendix

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 to develop standards for sustainability reporting. GRI and SASB Standards have different objectives and are based on different assumptions with respect to materiality. The two organizations have published a joint guide to share the experience of using both sets of sets of standards. The two standards complement rather than replace each other. GRI supports a broad and comprehensive disclosure of the impacts of organizations and SASB focuses on a subset of the financially material issues. The combined application of both standards can provide a holistic performance by bringing sustainability and financial information closer together. According to the SASB Standards, GEA is in the "Resource Transformation Sector" – with the applicable industry standard being "Industrial Machinery & Goods". For more information on the SASB Standards, please visit <https://www.sasb.org/>.

Linking SASB and GRI Standards

Topic	SASB Accounting Metric	Unit of Measure	Code	Note	GRI Standard(s)	Page
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	RT-IG-130a.1	GEA discloses total energy consumption, thereof electricity and of which electricity from renewable energies. Furthermore, we disclose information on direct and indirect and other indirect emissions (Scope 1 – 3).	GRI 305-1 bis 4	63, 129, 130
Employee Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Rate	RT-IG-320a.1	In addition to the number of accidents including lost time respectively sequence of death, GEA also discloses a Lost Time Injury Frequency Rate, Lost Time Injury Severity Rate, near misses in the form of a Proactive Injury Rate and a Total Recordable Injury Frequency Rate.	GRI 403-1 bis 7, 9	41, 67 – 69, 108, 128
Fuel Economy & Emissions in Use-phase	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. We are therefore working on extensions to climate reporting and are carrying out internal projects to quantify greenhouse gas emissions along the entire value chain (Scope 1 and 2 as well as Scope 3, upstream/downstream). In addition, in accordance with established frameworks such as the Avoided Emissions Framework, we rely on the concept of „Avoided Emissions. These result from the effect of a product on greenhouse gas emissions compared to the baseline situation without this product.	GRI 305	62, 63, 129, 130
	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			
Materials Sourcing	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	73, 74, 76, 78, 133
Remanufacturing Design & Services	Revenue from remanufactured products and remanufacturing services	Reporting currency	RT-IG-440b.1	In individual cases, we already offer to take back our products to refurbish them for further years of operation. From 2026, the offer of reuse will also apply to selected service parts.	Generally on the subject see chapter Sustainable Solutions	28, 39-41

[Appendix](#)

GRI Content Index

GEA's Sustainability Report has been prepared in accordance with the GRI Standards, applying the "Core" option. The interactive index indicates which indicators we address in the report and, by clicking on the page reference, leads directly to the report pages that contain this information.

General information

1. Organizational profile

	Disclosure		Page Note
GRI 102: General Disclosures	102-1	Name of the organization	Annual Report
	102-2	Activities, brands, products, and services	Annual Report
	102-3	Location of headquarters	Annual Report
	102-4	Location of operations	7, Annual Report
	102-5	Ownership and legal form	Annual Report
	102-6	Markets served	Annual Report

	102-7	Scale of the organization	Annual Report
	102-8	Information on employees and other workers	8-12, 87 ff.
	102-9	Supply chain	72 ff.
	102-10	Significant changes to the organization and its supply chain	Annual Report
	102-11	Precautionary Principle or approach	Annual Report
	102-12	External initiatives	18, Annual Report
	102-13	Membership of associations	Annual Report

2. Strategy

	Disclosure		Page Note
GRI 102: General Disclosures	102-14	Statement from senior decision-maker	3, 4
	102-15	Key impacts, risks, and opportunities	20, 22, 25, 80, 125, 134, 135, Annual Report

3. Ethics and integrity

	Disclosure		Page Note
GRI 102: General Disclosures	102-16	Values, principles, standards, and norms of behavior	21, 117, 118

4. Governance

	Disclosure		Page Note
GRI 102: General Disclosures	102-18	Governance structure	Annual Report
	102-30	Effectiveness of risk management processes	Annual Report

5. Stakeholder engagement

	Disclosure		Page Note
GRI 102: General Disclosures	102-40	List of stakeholder groups	22
	102-41	Collective bargaining agreements	101
	102-42	Identifying and selecting stakeholders	22
	102-43	Approach to stakeholder engagement	22
	102-44	Key topics and concerns raised	22

6. Reporting practice

	Disclosure		Page Note
GRI 102: General Disclosures	102-45	Entities included in the consolidated financial statements	Annual Report
	102-46	Defining report content and topic Boundaries	22, 124
	102-47	List of material topics	22
	102-48	Restatements of information	124
	102-49	Changes in reporting	124
	102-50	Reporting period	124
	102-51	Date of most recent report	124
	102-52	Reporting cycle	20
	102-53	Contact point for questions regarding the report	147
	102-54	Claims of reporting in accordance with the GRI Standards	141
	102-55	GRI content index	141
	102-56	External assurance	Audited in accordance with CSR-RUG

Economy

201 Economic Performance

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	Annual Report
	103-2	The management approach and its components	Annual Report
	103-3	Evaluation of the management approach	Annual Report
	201-1	Direct economic value generated and distributed	Annual Report

202 Market Presence

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92, Annual Report
	103-2	The management approach and its components	92, Annual Report
	103-3	Evaluation of the management approach	92, Annual Report
	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	106

204 Procurement Practices

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	74
	103-2	The management approach and its components	74
	103-3	Evaluation of the management approach	74
	204-1	Proportion of spending on local suppliers	74, 76, 133

Economy

205 Anti-corruption

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	116 ff.
	103-2	The management approach and its components	21, 75, 77, 116 ff.
	103-3	Evaluation of the management approach	116 ff.
	205-1	Operations assessed for risks related to corruption	118

206 Anti-competitive Behavior

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	116
	103-2	The management approach and its components	116
	103-3	Evaluation of the management approach	116
	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	117, 119

207 Tax

	Disclosure		Page Note
	207-1	Approach to tax	Tax is a key element of responsible corporate governance, through which organizations contribute to the economies of the countries in which they operate. We pursue a clear and transparent tax strategy, according to which profits are taxed in the countries in which they are generated (see also „Statement on Corporate Governance“ in the Annual Report 2021). The most important stakeholders - especially customers and investors - do not consider the issue of taxes at GEA as material. According to the German Commercial Code (Handelsgesetzbuch, HGB), immateriality results from the fact that the tax issue has no impact on non-financial matters and/ or there is no business relevance.

Environment

301 Materials

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	73, 74, 76, 78
	103-2	The management approach and its components	74
	103-3	Evaluation of the management approach	74
	301-1	Materials used by weight or volume	A breakdown of the total weight into renewable and non-renewable materials is not yet possible for the Group as a whole. In the future, we want to continuously expand the use of renewable materials and integrate their use into our calculation methods.

302 Energy

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	62
	103-2	The management approach and its components	62
	103-3	Evaluation of the management approach	62
	302-1	Energy consumption within the organization	63, 131

303 Water and Effluents

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	62
	103-2	The management approach and its components	62
	103-3	Evaluation of the management approach	62
	301-1	Interactions with water as a shared resource	64, 131
	303-2	Management of water discharge-related impacts	64, 131
	303-3	Water withdrawal	64, 131

305 Emissions

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	62
	103-2	The management approach and its components	62
	103-3	Evaluation of the management approach	62
	305-1	Direct (Scope 1) GHG emissions	63, 129, 130
	305-2	Energy indirect (Scope 2) GHG emissions	63, 129, 130
	305-3	Other indirect (Scope 3) GHG emissions	63, 129, 130
	305-4	GHG emissions intensity	63, 129, 130

306 Waste

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	62
	103-2	The management approach and its components	62
	103-3	Evaluation of the management approach	62
	306-1	Waste generation and significant waste-related impacts	64, 65, 131, 132
	306-2	Management of significant waste-related impacts	62, 64, 65
	306-3	Waste generated	131, 132

307 Environmental Compliance

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	115, 116
	103-2	The management approach and its components	116
	103-3	Evaluation of the management approach	116
	307-1	Non-compliance with environmental laws and regulations	115

308 Supplier Environmental Assessment

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	73-76
	103-2	The management approach and its components	74, 75
	103-3	Evaluation of the management approach	74
	308-1	New suppliers that were screened using environmental criteria	77

Sozial

401 Employment

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92
	103-2	The management approach and its components	92
	103-3	Evaluation of the management approach	92
	401-1	New employee hires and employee turnover	92, 127, 128

403 Occupational Health and Safety

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	66, 67
	103-2	The management approach and its components	67
	103-3	Evaluation of the management approach	67
	403-1	Occupational health and safety management system	67
	403-2	Hazard identification, risk assessment, and incident investigation	Is described in the Safety Core Rules „Stop and Intervene“, which are available for internal use only
	403-3	Occupational health services	67
	403-4	Worker participation, consultation, and communication on occupational health and safety	68
	403-5	Worker training on occupational health and safety	41, 68
	403-6	Promotion of worker health	108
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	41, 67
403-9	Work-related injuries	69, 128 The types of work-related injuries are not reported	

404 Training and Education

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92, 102-104
	103-2	The management approach and its components	92
	103-3	Evaluation of the management approach	92
	404-1	Average hours of training per year per employee	Currently not recorded

405 Diversity and Equal Opportunity

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92, 97 ff.
	103-2	The management approach and its components	92
	103-3	Evaluation of the management approach	92, 98
	405-1	Diversity of governance bodies and employees	126, 127

406 Non-discrimination

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92, 97
	103-2	The management approach and its components	92
	103-3	Evaluation of the management approach	92, 97, 98
	406-1	Incidents of discrimination and corrective actions taken	No incidents were reported

407 Freedom of Association and Collective Bargaining

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	92, 101
	103-2	The management approach and its components	92
	103-3	Evaluation of the management approach	92
	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	75, 77, 78

408 Child Labor

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	74 – 78
	103-2	The management approach and its components	74, 75, 77
	103-3	Evaluation of the management approach	74, 75, 77
	408-1	Operations and suppliers at significant risk for incidents of child labour	75, 77, 78

409 Forced or Compulsory Labor

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	74 – 78
	103-2	The management approach and its components	74, 75, 77
	103-3	Evaluation of the management approach	74, 75, 77
	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	75, 77, 78

410 Security Practices

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	21, 77, 118
	103-2	The management approach and its components	77, 118
	103-3	Evaluation of the management approach	77, 118
	410-1	Security personnel trained in human rights policies or procedures	Not recorded

411 Rights of Indigenous Peoples

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	21, 77, 118
	103-2	The management approach and its components	77
	103-3	Evaluation of the management approach	77
	411-1	Incidents of violations involving rights of indigenous peoples	No incidents were reported

412 Human Rights Assessment

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	74 – 77
	103-2	The management approach and its components	74 – 77
	103-3	Evaluation of the management approach	74 – 77
	412-1	Operations that have been subject to human rights reviews or impact assessments	77

413 Local Communities

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	76, 82
	103-2	The management approach and its components	82
	103-3	Evaluation of the management approach	82
	413-1	Operations with local community engagement, impact assessments, and development programs	GEA did not undertake any business activities that had a negative impact on local communities. We have the ambition to reach a mutually beneficial outcome in dialogue with local communities

416 Customer Health and Safety

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	41
	103-2	The management approach and its components	41
	103-3	Evaluation of the management approach	41
	416-1	Assessment of the health and safety impacts of product and service categories	During the year under review, no incidents with health consequences occurred

418 Customer Privacy

	Disclosure		Page Note
Management Approach	103-1	Explanation of the material topic and its Boundary	112, 116, 119, 120
	103-2	The management approach and its components	121
	103-3	Evaluation of the management approach	121
	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	122

[Appendix](#)

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Pictures GEA Group Aktiengesellschaft cover, page 3, 7, 13, 14, 28, 39, 41 left, 42, 56, 57, 59, 63 bottom, 65 left, 65 top right, 65 middle right, 66, 69, 71 middle, 72, 83, 84, 86, 87, 90, 91, 93, 94 left, 95 right, 97 bottom, 99, 102, 107 left, 109 top, 117, 120

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.