

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

GEA is one of the largest suppliers of process technology to the food industry and to a wide range of other industries. The international technology group focuses on machinery, plants, process technology and components. GEA provides sustainable engineering solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio. In 22, GEA generated consolidated revenues of around EUR 5.2 billion. GEA is one of the largest suppliers of systems and components to the food, beverage, and pharmaceutical industries worldwide. As of Dec. 31, 2022, the group employed 18,236 full-time employees worldwide. GEA is a market and technology leader in its business areas. The company is listed on the German MDAX stock index (G1A, WKN 660 200), the STOXX® Europe 600 Index, as well as the DAX 50 ESG Index, the MSCI Global Sustainability Indexes (AAA) and since 2022 on the Dow Jones Sustainability Europe Index. GEA plants, processes, components, and services enhance the efficiency and sustainability of production processes around the globe, contributing significantly to the reduction of CO2 emissions, plastic usage, and food waste. In doing so, GEA makes a key contribution toward a sustainable future, in line with the company's purpose: 'Engineering for a better world.'

GEA Group Aktiengesellschaft is home to central management functions of the group. Profit and loss transfer agreements exist with key domestic subsidiaries. In addition, GEA Group Aktiengesellschaft performs central financial and liquidity management. Furthermore, it provides its subsidiaries especially with services from the Global Corporate Center and the Shared Service Center based on service agreements.

Since the course of business, the economic position, and the opportunities as well as risks associated with the future development of GEA Group Aktiengesellschaft do not differ from the course of business, the economic position, and the opportunities and risks associated with the future

development of the group, the management report of GEA Group Aktiengesellschaft has been combined with that of the group in accordance with section 315 (5) of the Handelsgesetzbuch (HGB – German Commercial Code). In contrast to the consolidated IFRS financial statements, the annual financial statements of GEA Group Aktiengesellschaft are based on the HGB, supplemented by the Aktiengesetz (AktG – German Stock Corporation Act). All the financial statements relate to the 2022 financial year (Jan. 1 to Dec. 31, 2022). Since 2016, GEA's Annual Reports have included an annual sustainability report, however since 2020 GEA has published a separate sustainability Report. The sustainability report follows the international standards of the Global Reporting Initiative (GRI).

GEA is a specialist in its respective core technologies and a leader of its sales markets worldwide. GEA consistently promotes an innovation-led culture to preserve its technological edge. The company considers profitability more important than volume and practices systematic portfolio management and cost control. Active risk management, stability through diversification, and a focus on the markets of the future are binding principles for all GEA business units. GEA's enduring success is based on major global megatrends:

- Continuous growth in the global population
- Growing middle class
- Growing demand for high-quality foods and beverages (food safety)
- Increasing demand for production methods that are efficient and conserve valuable resources.
- Demand for meat and dairy alternatives (new food)

The group is divided into divisions with up to six business units, the units comprise similar technologies and each command leading positions in the market. Each division is headed by a management team of three members: a divisional CEO, a divisional CFO and a Chief Service Officer. The five divisions include: Separation and Flow Technologies, Liquid & Powder Technologies, Food & Healthcare Technologies, Farm Technologies, and Heating and Refrigeration Technologies.

- Separation & Flow Technologies is home to all activities concerned with the manufacture of process-related components, notably separators, decanters, valves, pumps and homogenizers.
- Liquid & Powder Technologies is the development of process solutions for the dairy, brewing, food, and chemical industries. Its technological focus is on liquid processing, concentration, industrial drying, powder processing/handling & emission control.
- Food & Healthcare Technologies includes solutions for food processing and packaging, baking industry, extrusion and milling and process technology for the pharmaceutical industry.
- Farm Technologies includes automatic milking and feeding systems, manure management systems and barn equipment.
- Heating & Refrigeration Technologies develops, manufactures and installs industrial heating and cooling solutions for climate-friendly production processes.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

Januar 1, 2022

End date

Dezember 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Algeria
Argentina
Australia
Austria
Belarus
Belgium
Brazil
Bulgaria
Canada
Chile
China
China, Macao Special Administrative Region

Colombia
Croatia
Czechia
Denmark
Egypt
Estonia
Finland
France
Germany
Greece
Hong Kong SAR, China
Hungary
India
Indonesia
Italy
Japan
Latvia
Lithuania
Malaysia
Mexico
Morocco
Netherlands
New Zealand
Norway
Peru
Philippines
Poland
Portugal
Romania
Russian Federation

Saudi Arabia
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan, China
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	DE0006602006

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	The CEO is directly responsible for all climate-related issues in all three scopes. Thus, the CEO is provided with climate-related topics on KPI achievements on a monthly basis and twice a year in an update meeting with the entire Executive Board. In monthly meetings, the CEO is provided with updates referring to KPIs regarding energy consumption, CO2 emissions and related water and waste targets. Furthermore, the CEO is informed about the progress on climate-related projects contributing to GEA's mid-term target of -60% Scope 1 and 2 and -18% in Scope 3 by 2030. The CEO leads the monthly meetings which include the discussion of all climate-related issues and KPIs before being published. The CEO also provides final approvals and adjustments to GEA's climate strategy as well as resources allocated to climate-related issues and environmental performance. For example, in 2022, GEA has upgraded the electricity utility agreements to solely renewable electricity. Thus, since 2022 GEA is sourcing 100% renewable electricity (please see annual report 2022, pages 99, 109). The CEO is informed monthly about the progress of the transformation and approves the changes to the agreements and the purchase of renewable electricity. The CEO leads detailed strategic discussions and is provided with an outlook regarding further proceedings or adjustments to the process incl. final approval. The ultimate executive mandate encompasses worldwide activities on the decarbonization in all three scopes, i.e., the

	CEO is the final approver of all related measures, initiatives, and investments on sustainability. GEA further progressed and improved its performance on climate-related issues for instance by joining the World Economic Forum Alliance of CEO Climate Leaders and other organizations.
Board-level committee	The CEO leads the top management team which is called Global Executive Committee (GEC). The members of the GEC consist of all members of the Executive Board (CEO, CFO and COO), the CEO' of all five divisions, the CEO' representing GEA's sales organization divided into regions and countries, as well as the Chief Human Resources Officer. The Chief Sustainability Officer has newly been appointed as a member of the GEC to ensure that all business decisions are also based on sustainable criteria. The GEC as GEA's management and decision-making body is responsible for the operational business, that means running the multinational company with business operations around the globe. The GEC is the appropriate decision-making body to 1) align a strong effective governance on sustainability matters and take sustainable business decisions, 2) adjust the strategy and resources on e.g., climate and 3) evaluate KPIs/targets captured via a digital tool accessible to all members at any time. All members of the GEC, including the Chief Sustainability Officer, report directly to the CEO. The members of the GEC meet monthly as well as ad-hoc, when needed, where all strategic and operational issues are addressed, including climate-related issues such as achieving the set targets to limit the global warming to 1.5 degree Celsius or dealing with impacts of climate change regarding the organization's performance.
Chief Sustainability Officer (CSO)	Our Chief Sustainability Officer has newly been appointed as a member of the Global Executive Committee. This decision further elevates the strategic significance of sustainability for the company and its commitment to drive it holistically across GEA's divisions, business units and global functions. The Chief Sustainability Officer will be supported in her GEC mandate by a significant expansion of the sustainability team. New positions will be added to the Sustainability team, including five Sustainability Heads – one for each of GEA's divisions. All roles are dedicated to sustainability but with different focus areas – including risk management, global marketing focusing on sustainability, operations, finance, community engagement, product portfolio and global projects on the transformation of GEA towards being a more sustainable and climate-sensitive company overall.
Other, please specify Sustainability department	The Sustainability Department, which was established in 2021, is headed by the Chief Sustainability Officer, who directly reports to the CEO. GEA now clusters all sustainability-related activities incl. climate-related issues, in the Sustainability Department with a company-wide remit. This department acts as an interface with each of our business units and functions that shape the strategic backbone of all our sustainability-relevant activities. In this way, a professional approach to the increasingly complex requirements of sustainability management is ensured. The Sustainability Department developed, communicated, and supported all the company's sustainability targets and will measure their attainment.

Board-level committee	With the new Sustainability team structure, GEA is enhancing its efforts when it comes to meeting its ambitious sustainability targets as well as existing and planned regulations, while driving the company towards next level sustainability. This begins with a dedicated focus on sustainability of the Supervisory Board. Two committees have been re-named to reflect this focus: the Presiding and Sustainability Committee and the Innovation and Product Sustainability Committee. This means, when the Executive Board and Supervisory Board are required to make decisions on investments, the necessary documents are also expected to contain information on the sustainability-related impacts or sustainability effects of the intended measure. Corresponding requirements are anchored in the approval and representation policy and in the model document for resolutions to be adopted by the Executive Board.
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C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy 	<p>In 2021, GEA's climate strategy is discussed, documented, and finally approved by all members of the Executive Board (EB), all members of the Global Executive Committee (GEC), as well as the Supervisory Board. It was announced on June 17th, 2021, and is publicly available on GEA's webpage. The sustainability report 2022 comprehensively explains the targets approved by the SBTi and describes a roadmap on how to achieve the ambitious science-based targets. On top of that, it informs GEA's stakeholders measurably, traceably, and transparently about the progress made in the reporting year.</p> <p>To transparently track its target achievements, GEA has implemented a monthly governance reporting to the Chief Sustainability Officer showing the progress, achievements, and challenges of more than 700 measures across the entire organization. A consistent project management is applied equally to all climate-related targets as a way of promoting transparency on the degree of target attainment and the associated responsibilities. This allows GEA to identify and analyze</p>

	<p>Overseeing and guiding the development of a transition plan</p> <p>Monitoring the implementation of a transition plan</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing and guiding public policy engagement</p> <p>Overseeing value chain engagement</p> <p>Reviewing and guiding the risk management process</p>	<p>any problems in the project process at an early stage. In addition, each sustainability target, including, but not limited to, climate-related issues, is broken down into several interim targets with defined timelines. The employees responsible for each target deliver monthly internal reports on the attainment status to the Chief Sustainability Officer. The Chief Sustainability Officer, as member of the GEC, reports monthly to the CEO and ad hoc, but at least twice a year, to the GEC on the progress, achievements, and challenges including capital expenditures and budgets. Moreover, GEA's Executive Board provides the Supervisory Board with regular updates. The progress made in achieving the targets is published in the annual Sustainability Report.</p> <p>In 2022, GEA set up a Sustainability Committee. The Executive Board tasked this cross-functional body with addressing sustainability matters relevant to GEA and actively involving the operating business units in implementing sustainability measures. This applies in particular to strategic and operational decisions regarding implementation of the measures at cross-divisional and cross-functional level. The Committee acts as a central body for all sustainability-related issues in every business area. Consequently, it forms a link between the global functions, the divisions, and the Executive Board. This ensures a coordinated approach at all levels. We likewise have the capacity to accelerate implementation or – in the event of delays – apply measures at short notice, which are also coordinated across all levels. The Sustainability Committee is chaired by the Chief Sustainability Officer. The Committee includes permanent representatives from all relevant functions as well as from each division.</p>
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C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
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Row 1	Yes	As all sustainability aspects including climate-related issues are in the responsibility of the CEO, monthly update-meetings about ongoing projects to decarbonize GEA's own operations (Scope 1 and 2) as well as the product portfolio (Scope 3) including dedicated trainings take place.
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C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Providing climate-related employee incentives
 Integrating climate-related issues into the strategy
 Setting climate-related corporate targets
 Monitoring progress against climate-related corporate targets
 Managing public policy engagement that may impact the climate
 Managing value chain engagement on climate-related issues
 Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Other, please specify
 Chairman of the Supervisory Board

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The CEO is, at the highest level, responsible for all sustainability matters at GEA. His responsibility shall ensure that all sustainability aspects incl. climate-related matters are, always, embedded in GEA's strategic and operational business activities. Thus, in 2021, he included all relevant sustainability aspects including climate-related issues in GEA's new business strategy called "Mission26". The business strategy was launched at the capital markets day on the September 29th, 2021. As a result of implementing TCFD standards into GEA's enterprise risk management system in 2022, GEA confirmed its substantial opportunities (instead of risks) related to climate change.

Thus, Mission26 states that climate-related matters are one key lever in contributing to achieve the financial targets in 2026. Mission26 incorporates GEA's climate strategy incl. the set targets to allow GEA to entirely transform the business model to achieve the climate-related targets. GEA's climate-related opportunities include energy and water efficient engineering in the nutrition and pharmaceutical industries and its activities in the New Food sector answering the question how to feed the world in 2050. Therefore, all related activities such as budgeting processes, public policy engagement as well as GEA's value chain management are allocated to the CEO's accountability. For instance, to accelerate innovation in sustainability, in 2022 the CEO decided that 2023 shall be the "Year of innovation in sustainability" including the launch of GEA's new "Add Better" label empowering our customers with resource efficient solutions as well as additional employee incentives.

The progress is reported to the CEO monthly by the relevant functions, e.g., the Chief Sustainability Officer reports the strategic progress 1-on-1 to him as well as in the Global Executive Committee. To do so, GEA has implemented a monthly governance reporting to the Chief Sustainability Officer about the progress, achievements, and challenges of more than 700 measures across the entire organization. A consistent project management is applied equally to all climate-related targets as a way of promoting transparency about the degree of target attainment and the associated responsibilities. The CEO reports to the supervisory board, which is informed monthly about the progress.

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Managing climate-related acquisitions, mergers, and divestitures

Providing climate-related employee incentives
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Sustainable finance is becoming more and more important for companies. Like others, GEA considers environmental, social and governance factors in its investment decisions. We are the first company in Germany to combine a share buyback with a sustainability initiative. An ESG component was incorporated into the second tranche of the share buyback program, which was carried out with the bank BNP Paribas. This enabled us to finance a drinking water project in Tanzania. To ensure that our finance activities make a meaningful contribution to sustainability over the long term, sustainability criteria were added to our internal loan agreement ahead of schedule in 2022; this represents GEA's first sustainable financing agreement. These indicators pave the way for the guarantees and warranties that we issue in our operating business to make sure that sustainability criteria are standardized in local projects.

To further raise employee awareness, take stakeholder expectations into account and encourage sustainable project decisions, GEA is introducing an internal CO2 price. Effective immediately, GEA applies a virtual shadow price per emitted ton of CO2 to flow into the cost calculation for investments. The calculated valuation will be reviewed annually and adjusted if necessary. This signals that investment decisions will from now on take environmental costs into account. As a stress test for investments, the introduction of the internal CO2 price will support further efficiency improvements and drive the identification of low-carbon opportunities.

These are only two examples of climate-related responsibilities of our CFO. As sustainability is of strategic significance for the company and GEA's commitment to drive it holistically across GEA's divisions, business units and global functions, the CFO is responsible for sustainable finance topics. The CFO is informed by the CSO, together with the finance department, monthly or, if needed, more frequently about all relevant climate-related issues, initiatives, and decisions taken/to be taken. A cross-functional team consisting of dedicated sustainability experts in the controlling and accounting departments as well as a dedicated subject matter expert regarding sustainable finance anchored in the sustainability department enables our company to financially monitor climate-related issues such as sustainability budgets and investments.

Position or committee

Chief Operating Officer (COO)

Climate-related responsibilities of this position

- Managing annual budgets for climate mitigation activities
- Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
- Developing a climate transition plan
- Implementing a climate transition plan
- Integrating climate-related issues into the strategy
- Conducting climate-related scenario analysis
- Setting climate-related corporate targets
- Monitoring progress against climate-related corporate targets
- Managing public policy engagement that may impact the climate
- Managing value chain engagement on climate-related issues
- Assessing climate-related risks and opportunities
- Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

90 of GEA's most important suppliers accepted the company's invitation to attend the third GEA Supplier Summit on September 14th, 2022. Sustainability was placed at the top of the agenda.

GEA has very ambitious sustainability targets – economically but also environmentally and socially. Yet we are fully aware that we can only achieve climate-related targets with the support of our suppliers. That is why, in 2022, we formulated sustainability criteria for suppliers. Compliance with these criteria benefits not only GEA but also our suppliers. Therefore, it made perfect sense to present our project at a GEA Supplier Summit and discuss it with our suppliers.

The COO is responsible to decarbonize all relevant upstream Scope 3 emission categories as well as all relevant GEA factories across the globe (Scope 1 and 2). The COO is informed by the CSO together with the relevant functions directly reporting to the COO (such as Global Procurement or Global Production) monthly or, if needed, more frequently about all relevant climate-related issues, initiatives, and decisions taken/to be taken. A cross-functional team consisting of dedicated sustainability experts in the real estate, procurement, and production departments as well as a dedicated subject matter expert regarding sustainable operations reporting to the CSO enables our company to operationally drive and monitor climate-related issues such as upstream value chain engagement and developing climate transition plans to decarbonize our greenhouse gas emission footprint.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Managing climate-related acquisitions, mergers, and divestitures

Providing climate-related employee incentives

Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

All sustainability-related activities are consolidated in a single department with a company-wide remit headed by the Chief Sustainability Officer (CSO). This department acts as an interface with each of our business units and functions that shape the strategic backbone of all our sustainability-relevant activities. In this way, we ensure a professional approach to the increasingly complex requirements of sustainability management. The CSO reports directly to our CEO and develops, communicates, and supports all of the company's sustainability targets and will measure their attainment. Lately, the CSO has newly been appointed to a member of the Global Executive Committee (GEC, please see below). This decision further elevates the strategic significance of sustainability for the company and its commitment to drive it holistically across GEA's divisions, business units and global functions. More specifically, the CSO is accountable for GEA's ambitious climate strategy incl. all above listed activities & initiatives since sustainability is more than just a guideline for our day-to-day work. It 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. Consequently, sustainability is likewise a crucial part of our “Mission 26” group strategy, which defines it 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. In other words, sustainability is one driver to achieve GEA’s financial targets for 2026. The first “Mission 26” measures presented in 2021 were implemented in 2022 by the CSO, and the initial sub-targets have already been met.

The CSO informs the CEO and the GEC monthly or, if needed, more frequently about all relevant climate-related issues, initiatives and decisions (to be) taken. To practically ensure a strong daily alignment, the CSO’s office is located next to the CEO’s office as well as CFO/COO’s office. To consequently monitor the progress regarding climate-related issues and to further professionalize governance, GEA set up a Sustainability Committee in 2022 headed by the CSO. The cross-functional body is tasked with addressing sustainability matters relevant to GEA and actively involving the operating business units in implementing sustainability measures. This applies in particular to strategic and operational decisions reg. implementation of the measures at cross-divisional and cross-functional level. The Committee acts as a central body for all sustainability-related issues in every business area. This ensures a coordinated approach at all levels. We likewise have the capacity to accelerate implementation or – in the event of delays – apply measures at short notice, which are also coordinated across all levels.

Position or committee

Other C-Suite Officer, please specify
Global Executive Committee

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis

Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Since 2020, the Executive Board has been complemented by a Global Executive Committee (GEC), which, in addition to the members of the Executive Board, includes the Division CEO', Regional CEO', Chief Sustainability Officer (CSO) and the CHRO. The members of the GEC are involved in all strategic and operational issues and report to the CEO. Meetings take place monthly or, if needed, more frequently. Lately, the CSO has newly been appointed to a member of the Global Executive Committee to further elevates the strategic significance of sustainability for the company and its commitment to drive it holistically across GEA's divisions, business units and global functions. The GEC is informed by the CSO in their monthly meetings about all relevant climate-related issues, initiatives, and decisions taken/to be taken to ensure that all decisions to be taken by the GEC are also based on relevant sustainability criteria.

To consequently monitor the progress regarding climate-related issues and to further professionalize governance, GEA set up a Sustainability Committee in 2022 headed by the CSO. The Division CEO' and the CHRO are permanent members of the Committee. The cross-functional body is tasked with addressing sustainability matters relevant to GEA and actively involving the operating business units in implementing sustainability measures. This applies in particular to strategic and operational decisions regarding implementation of the measures at cross-divisional and cross-functional level. The Committee acts as a central body for all sustainability-related issues in every business area. This ensures a coordinated approach at all levels. We likewise have the capacity to accelerate implementation or – in the event of delays – apply

measures at short notice, which are also coordinated across all levels.

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Implementing a climate transition plan

Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Corporate Sustainability/CSR reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

In 2022, GEA set up a Sustainability Committee. The cross-functional body is tasked with addressing sustainability matters relevant to GEA and actively involving the operating business units in implementing sustainability measures. This applies in particular to strategic and operational decisions regarding implementation of the measures at cross-divisional and cross-functional level. The Committee acts as a central body for all sustainability-related issues in every business area. Consequently, it forms a link between the global functions, the divisions, and the Executive Board. This ensures a coordinated approach at all levels. We likewise have the capacity to accelerate implementation or – in the event of delays – apply measures at short notice, which are also coordinated across all levels. The Sustainability Committee is chaired by our CSO who a

member of the Global Executive Committee is and reports directly to the CEO. The Committee includes permanent representatives from the Sustainability, QHSE, Finance, Indirect and Direct Procurement, Production, Investor Relations, and IT departments as well as the CEO from each division. Where necessary, other specialist departments are consulted. The Committee holds regular quarterly meetings, as well as convening to address specific matters, and essentially fulfils the following core tasks: reviewing and, if necessary, approving any changes to sustainability management (processes, structure, content), including amendments to the list of sustainability indicators. In addition, it is responsible for finalizing initiatives and specific instructions for the relevant global functions, departments, and senior management to achieve the sustainability targets, which are then forwarded to the Executive Board and extended management circle for approval. At the same time, the Committee prioritizes the projected sustainability initiatives, sets the relevant budgets, and continuously evaluates their progress.

To further professionalize the organizational governance, GEA will significantly expand the sustainability team. In total, 12 new positions will be added to the CSOs team, including five new Sustainability Heads – one for each of GEA's divisions. All new roles are dedicated to sustainability, whilst having different focus areas – including risk management, global marketing focusing on sustainability, operations, finance, community engagement, product portfolio and global projects on the transformation of GEA towards being a more sustainable company overall. Strong daily alignment will ensure that climate-related issues will be addressed reasonably.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The Executive Board's current remuneration scheme has been introduced and approved by the shareholders in the Annual General Meeting in 2021. The variable part of the compensation composes of short-term (STI, 40% of the variable compensation) and long-term (LTI, 60% of the variable compensation) components. Both STI and LTI have a stronger link to sustainability including ESG components (see p. 268 & 273 of the annual report 2022). Since 2022, the LTI is based on relative total shareholder return compared to the DAX 50 ESG (60% of the LTI) and strategic targets incl. ESG targets (40% of the LTI). The performance criteria for the 2022-tranche of LTI addresses the reduction of GHG emissions performance in Scope 1 and 2. The STI is composed of financial targets plus criteria-

		based modifiers that consider the performance of the Executive Board or individual members. Additionally, all C-suite managers and approx. further 160 managers are incentivized on the reduction of all three Scopes.
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C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure

Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

The long-term incentive (LTI) is designed as a Performance Share Plan whose pay-out is influenced by the relative total shareholder return (relative TSR) and strategic targets (including ESG targets) as well as the development of the company's share price. Consequently, remuneration is clearly aligned with long-term, sustainable corporate performance and the interests of GEA's shareholders.

Executive Board members (CEO, CFO and COO) are granted a certain number of virtual performance shares at the beginning of each fiscal year on a preliminary basis. This number is calculated by dividing the contractual target value of the LTI by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the start of the performance period rounded to the nearest whole number. The final number of virtual performance shares is determined at the end of the four-year performance period by multiplying the overall target achievement from relative TSR and strategic targets by the preliminary granted number of virtual performance shares.

Relative TSR is weighted at 60 %, while the strategic targets (including ESG targets) are weighted at 40 %. The final pay-out amount is ultimately determined by multiplying the final number of performance shares by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the end of the performance period, considering the dividend per share paid during the performance period (dividend equivalent). The resulting value may amount to 0 % up to a maximum of 200 % of the target value (cap).

Reduction of Scope 1 and 2 greenhouse gas emissions

This target concerns the achievement of defined targets for reducing Scope 1 and 2 greenhouse gas emissions:

- Target attainment is assessed based on the linear annual reduction target for Scope 1 and 2 – amounting to a total reduction of 60 percent by 2030 (from base year 2019)
- Target achievement of 100 percent is achieved if the linear annual reduction target is met

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The strategic goals that are decisive for the calibration of the LTI are the reduction of greenhouse gas emissions and organic sales growth. The strategic goals thus support GEA's own target established as part of its climate strategy to reduce its own greenhouse gas emissions along its entire value chain to net zero by 2040. In addition to its net zero target for 2040, GEA has also presented interim targets in line with STBi for all emission areas. These interim targets for Scope 1 and 2 form the basis for assessing target achievement. GEA's climate strategy is the first building block of a comprehensive ESG strategy, which is the basis of GEA's new corporate strategy "Mission 26". These goals also include achieving average organic revenue growth of 4.0 to 6.0 percent per year until 2026. As a result, two ambitious goals that will have a lasting impact on GEA's future and the environment are part of both the Executive Board's LTI and the Performance Share Plan.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure

Performance indicator(s)

Achievement of climate transition plan KPI

Progress towards a climate-related target

Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

The long-term incentive (LTI) is designed as a Performance Share Plan whose pay-out is influenced by the relative total shareholder return (relative TSR) and strategic targets (including ESG targets) as well as the development of the company's share price. Consequently, remuneration is clearly aligned with long-term, sustainable corporate performance and the interests of GEA's shareholders.

Executive Board members (CEO, CFO and COO) are granted a certain number of virtual performance shares at the beginning of each fiscal year on a preliminary basis. This number is calculated by dividing the contractual target value of the LTI by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the start of the performance period rounded to the nearest whole number. The final number of virtual performance shares is determined at the end of the four-year performance period by multiplying the overall target achievement from relative TSR and strategic targets by the preliminary granted number of virtual performance shares.

Relative TSR is weighted at 60 %, while the strategic targets (including ESG targets) are weighted at 40 %. The final pay-out amount is ultimately determined by multiplying the final number of performance shares by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the end of the performance period, considering the dividend per share paid during the performance period (dividend equivalent). The resulting value may amount to 0 % up to a maximum of 200 % of the target value (cap).

Reduction of Scope 1 and 2 greenhouse gas emissions

This target concerns the achievement of defined targets for reducing Scope 1 and 2 greenhouse gas emissions

- Target attainment is assessed based on the linear annual reduction target for Scope 1 and 2 – amounting to a total reduction of 60 percent by 2030 (from base year 2019)
- Target achievement of 100 percent is achieved if the linear annual reduction target is met

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The strategic goals that are decisive for the calibration of the LTI are the reduction of greenhouse gas emissions and organic sales growth. The strategic goals thus support GEA's own target established as part of its climate strategy to reduce its own greenhouse gas emissions along its entire value chain to net zero by 2040. In addition to its net zero target for 2040, GEA has also presented interim targets in line with STBi for all emission areas. These interim targets for Scope 1 and 2 form the basis for assessing target achievement. GEA's climate strategy is the first building block of a comprehensive ESG strategy, which is the basis of GEA's new corporate strategy "Mission 26". These goals also include achieving average organic revenue growth of 4.0 to 6.0 percent per year until 2026. As a result, two ambitious goals that will have a lasting impact on GEA's future and the environment are part of both the Executive Board's LTI and the Performance Share Plan.

Entitled to incentive

Chief Operating Officer (COO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure

Performance indicator(s)

Achievement of climate transition plan KPI

Progress towards a climate-related target
Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

The long-term incentive (LTI) is designed as a Performance Share Plan whose pay-out is influenced by the relative total shareholder return (relative TSR) and strategic targets (including ESG targets) as well as the development of the company's share price. Consequently, remuneration is clearly aligned with long-term, sustainable corporate performance and the interests of GEA's shareholders.

Executive Board members (CEO, CFO and COO) are granted a certain number of virtual performance shares at the beginning of each fiscal year on a preliminary basis. This number is calculated by dividing the contractual target value of the LTI by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the start of the performance period rounded to the nearest whole number. The final number of virtual performance shares is determined at the end of the four-year performance period by multiplying the overall target achievement from relative TSR and strategic targets by the preliminary granted number of virtual performance shares.

Relative TSR is weighted at 60 %, while the strategic targets (including ESG targets) are weighted at 40 %. The final pay-out amount is ultimately determined by multiplying the final number of performance shares by the arithmetic mean of the closing prices of GEA shares over the last three months prior to the end of the performance period, taking into account the dividend per share paid during the performance period (dividend equivalent). The resulting value may amount to 0 % up to a maximum of 200 % of the target value (cap).

Reduction of Scope 1 and 2 greenhouse gas emissions

This target concerns the achievement of defined targets for reducing Scope 1 and 2 greenhouse gas emissions

- Target attainment is assessed based on the linear annual reduction target for Scope 1 and 2 – amounting to a total reduction of 60 percent by 2030 (from base year 2019)
- Target achievement of 100 percent is achieved if the linear annual reduction target is met

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The strategic goals that are decisive for the calibration of the LTI are, first, the reduction of greenhouse gas emissions and, second, organic sales growth. The strategic goals thus support GEA's own target established as part of its climate strategy to reduce its own greenhouse gas emissions along its entire value chain to net zero by 2040. In addition to its net zero target for 2040, GEA has also presented interim targets in line with STBi for all emission areas.

These interim targets for Scope 1 and 2 form the basis for assessing target achievement. GEA's climate strategy is the first building block of a comprehensive ESG strategy, which is the basis of GEA's new corporate strategy "Mission 26". These goals also include achieving average organic revenue growth of 4.0 to 6.0 percent per year until 2026. As a result, two ambitious goals that will have a lasting impact on GEA's future and the environment are part of both the Executive Board's LTI and the Performance Share Plan.

Entitled to incentive

Chief Sustainability Officer (CSO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure

Profit share

Performance indicator(s)

Achievement of climate transition plan KPI

Progress towards a climate-related target

Achievement of a climate-related target

Implementation of an emissions reduction initiative

Reduction in absolute emissions

Energy efficiency improvement

Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption
Increased engagement with suppliers on climate-related issues
Increased engagement with customers on climate-related issues
Increased supplier compliance with a climate-related requirement
Increased value chain visibility (traceability, mapping, transparency)
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)
Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The Chief Sustainability Officer is a member of the Global Executive Committee (GEC). Since 2020, the Executive Board has been complemented by the GEC, which includes the members of the Executive Board, Division CEOs, Regional CEOs, Chief Sustainability Officer (CSO) and the CHRO. As the members of the GEC are involved in all strategic and operational issues and report to the CEO, their short-term and long-term incentive includes climate-related targets too.

Long-term incentive plan:

As GEA's climate strategy is embedded in the global business strategy "Mission 26", we have implemented a special profit-sharing program for all members of the GEC: A newly implemented long-term incentive plan that has a term of 4 years and is measured both by the performance of the share price and the following two strategic goals in terms of Scope 1 and Scope 3. More specifically, the members of the GEC are incentivized - in absolute annual emissions -

- (1) to decarbonize relevant factories (Scope 1) as well as
- (2) to accelerate the decrease of greenhouse gas emissions in the value chain (upstream and downstream).

Short-term incentive plan:

The plan consists of two targets, each weighted 50%, which are defined annually until 2026:

- EBITDA Margin

- Organic Sales Growth (one of the drivers behind the organic sales growth target is to increase the share of new products (not older than 5 years) and here especially new products with a focus on environmental sustainability (i.e. climate-friendly) should be the major contributor)

The bonus pay-out results from a fixed target bonus multiplied with the degree to which the predefined target values were achieved in fiscal year 2022. The fixed target bonus amount depends on the country and results from classification in one of three country groups. The overall target achievement here is max. 200%, min. 100%. If one of the targets has a target achievement of less than 100%, the total achievement is 0%.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The Chief Sustainability Officer (CSO) holds overall responsibility and accountability for sustainability at GEA and thus also for the company's climate strategy. For factual reasons, if the CSO is not adequately, reasonably, and reliably performing, our company's climate commitments and transition plan are at risk. All climate related KPIs are directly linked to CSOs individual performance. However, as climate action requires the commitment of the entire workforce, i.e., all hands are incentivized (see above and below) to successfully contribute individually to GEA's overall transition plan.

Entitled to incentive

Other C-Suite Officer

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Since 2020, the Executive Board has been complemented by a Global Executive Committee (GEC), which, in addition to the members of the Executive Board, includes the Division CEO', Regional CEO', Chief Sustainability Officer (CSO) and the CHRO. As the members of the GEC are involved in all strategic and operational issues and report to the CEO their short-term and long-term incentive includes climate-related targets too.

Long-term incentive plan:

As GEA's climate strategy is embedded in its global business strategy "Mission 26" we have implemented a special profit-sharing program for all members of the GEC. A newly implemented long-term incentive plan that has a term of 4 years and is measured both by the performance of the share price and the following two strategic goals in terms of Scope 1 and Scope 3. More specifically, the members of the GEC are incentivized - in absolute annual emissions -

- (1) to decarbonize relevant factories (Scope 1) as well as
- (2) to accelerate the decrease of greenhouse gas emissions in the value chain (upstream and downstream).

Short-term incentive plan:

The plan consists of two targets, each weighted 50%, which are defined annually until 2026:

- EBITDA Margin
- Organic Sales Growth (one of the drivers behind the organic sales growth target is to increase the share of new products (not older than 5 years) and here especially new products with a focus on environmentally sustainability (i.e. climate-friendly) should be the major contributor).

The bonus pay-out results from a fixed target bonus multiplied by the degree to which the predefined target values were achieved in fiscal year 2022. The fixed target bonus amount depends on the country and results from classification in one of three country groups. The overall target achievement here is max. 200%, min. 100%. If one of the targets has a target achievement of less than 100%, the total achievement is 0%.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

In the first place, we ensured that the incentive targets are synchronized with the incentive targets of the members of Executive Board.

Secondly, to operationalize the decarbonization, the Chief Sustainability Officer has broken down GEA's overall strategic climate-related targets

into operational divisional und functional targets. For instance, product innovation regarding Scope 3.11 (GEA's absolute hotspot as >95% of GHG emissions occur in the use phase of our products at customers end) is located at divisional level as the divisions are responsible for product innovation. Consequently, the Division CEO'CEO's who are members of the GEC are now incentivized to foster innovation in sustainability. The Regional CEO' (= GEA's sales organization split into regions and countries worldwide; Regional CEO's are all members of the GEC) are now incentivized to influence our customer universe to buy more sustainable products from us which positively impacts our Scope 3.11 emissions. Same approach applies to the decarbonization of our production facilities. The majority of factories are manufacturing in the responsibility of the divisions. To decrease Scope 1, we are now incentivizing the Division CEO'CEO's to invest in the refurbishment of brownfield factories and/or new greenfield carbon-neutral plants. In other words, by doing so, we incentivize the people in charge at GEA to secure the target achievement of our climate commitments. Thirdly, due to the newly established Sustainability Committee we ensure a coordinated approach at all levels. We likewise have the capacity to accelerate implementation or – in the event of delays – apply measures at short notice, which are also coordinated across all levels.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Achievement of climate transition plan KPI
 Progress towards a climate-related target
 Achievement of a climate-related target
 Implementation of an emissions reduction initiative
 Reduction in absolute emissions
 Energy efficiency improvement
 Reduction in total energy consumption

Increased investment in low-carbon R&D

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The next management level below the Global Executive Committee, approx. 160 top executives, are forming the so called "top leadership team" (TLT).

The short-term incentive plan refers to targets set under GEA's corporate business strategy "Mission 26" and consists of two targets, each weighted 50%, which are defined annually:

In 2022, the targets are:

- EBITDA Margin

- Organic Sales Growth (one of the drivers behind the organic sales growth target is to increase the share of new products (not older than 5 years) and here especially new products with a focus on environmental sustainability (i.e. climate-friendly) should be the major contributor)

For 2023, an additional target is dedicated to product innovation in sustainability. As GEA's emission hotspot (>95% of all Scope 3 emissions) occur in the use phase of our products at customers end, we are now accelerating research & development activities to accelerate our product innovation regarding resource-efficient products to empower our customers to speed up their decarbonization journey. Lately GEA launched its Add Better label which visualizes sustainable solutions towards our customers. The more sustainable solutions GEA launches successfully the higher the incentive (2023: 100% = 15 new sustainable products, 200% = 25 new sustainable products, pro rata in case below 100%).

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

In the first place, we ensured that the incentive targets are synchronized with the incentive targets of the Global Executive Committee, which is incentivized on the reduction of Scope 3 emissions. Secondly, to operationalize the decarbonization, the Chief Sustainability Officer has broken down GEA's overall strategic climate-related targets into operational divisional und functional targets. As GEA's emission hotspot is Scope 3, more specifically Scope 3.11 and 3.1 as well as 3.4, we need more hands operationally working on the reduction of emissions on product level. In other words, to drive our company's climate commitments we need new products which are performing resource-efficiently. This can be done by dedicated research & development teams, but also climate-friendly purchasing activities as well as climate-friendly logistics. Our top

executives are in all relevant departments, functions, and regions. Hence, their contribution and role model heritage are a key lever to achieve set climate targets.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Progress towards a climate-related target

Reduction in absolute emissions

Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Since 2022, GEA incentivizes its total workforce in achieving Mission 26 targets, including climate -related commitments to accompany GEA's corporate business strategy until 2026. This is an additional bonus scheme for all employees worldwide independent of other bonus plans. The plan consists of two targets, each weighted 50%, which are defined annually until 2026:

- EBITDA Margin

- Organic Sales Growth (one of the drivers behind the organic sales growth target is to increase the share of new products (not older than 5 years) and here especially new products with a focus on environmental sustainability (i.e. climate-friendly) should be the major contributor)

The bonus pay-out results from a fixed target bonus multiplied by the degree to which the predefined target values were achieved in fiscal year 2022. The fixed target bonus amount depends on the country and results from classification in one of three country groups. The overall target

achievement here is max. 200%, min. 100%. If one of the targets has a target achievement of less than 100%, the total achievement is 0%.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Mission 26 including GEA's climate commitments is an "all hands" strategy. Consequently, our climate targets can only be achieved by GEA's entire workforce as climate action is a transformation. GEA is fully committed to transform its business models and own company heritage to be net zero by 2040. The incentive shall acknowledge and accelerate the transformational character of Mission 26 and award and/or boost the change of mindset of each individual at GEA.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	
Medium-term	5	11	The medium-term has been extended from 5-10 to 5-11 years in accordance with GEA's new medium term target to 2030.
Long-term	11	21	GEA defines climate related risks as long-term. The long-term definition has been adjusted from 10-30 to 11-21 years in accordance with GEA's new long-term target to 2040.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Definition of "substantive financial or strategic impact" at GEA:

GEA defines a 'substantive impact' on the business at the corporate level in terms of risk/opportunity, as a risk/opportunity that has a significant risk value of 70 million Euro (on the basis of their average earnings contribution, EBIT) or greater, and with a probability of occurrence of 'likely' (50-75%) or 'almost certain' (>75%), please see page 143 of the annual financial report 2022 as well as GEA's TCFD report on page 161ff. of the Sustainability Report 2022. Therefore, a specific climate-related risk/opportunity is considered as having a "substantive impact", if the resulting deviation (positive/negative) from planned expenditure or reduction in profits equals or exceeds 70 million (EBIT effect). This would have a relatively significant effect on GEA at the corporate level (consolidated).

How a "substantive impact" is derived at GEA:

Since 2022, climate-related risks and opportunities are fully integrated into GEA's risk management system as GEA expanded the process for identifying and assessing potential long-term climate risks and opportunities in the reporting period by implementing qualitative and quantitative scenario analyses. A working group was established by GEA to further improve the identification, assessment, definition, and implementation of measures to reduce climate risks and increase climate opportunities. Coordinated by GEA's Chief Sustainability Officer and the Risk & Internal Control Management & Data Governance department, the working group also involved Purchasing, Production and Sales from the operating and central business areas. For GEA's business, which is predominantly characterized by multi-year projects and system solutions, and the processes aligned with them, GEA uses an integrated approach to identifying, assessing, managing, communicating, and reducing order risks as well as other operational and strategic opportunities and risks within the group. The aim of our group-wide opportunity and risk management system is to identify the key opportunities and risks in these core operating business areas at an early stage, adequately assess the financial impact, identify the measures to leverage opportunities and minimize risks as well as inform the relevant decision makers accordingly. The organizational principles, framework conditions and responsibilities of our opportunity and risk management system are set out in a policy and are based on the international COSO II model. Derived from the concept of the opportunity and risk management cycle, the process is an integral component of GEA's value-based corporate governance.

Feedback loop for managing opportunities and risks in the group:

All operating and central business areas as well as GEA subsidiaries with majority shareholdings are required to review the status of the opportunity and risk situation every quarter (changes, additions, removal of opportunities and risks). The opportunities and risks identified are continuously

monitored by “opportunity and risk owners”. In addition, measures are defined and implemented to leverage opportunities and manage risks. The opportunity and risk owner will be supported by the opportunity and risk coordinator. They ensure that the tasks arising from the opportunity and risk management processes are performed and that the management bodies responsible are provided with the relevant opportunity and risk information in a timely manner. Risk Assessment and Advisory Committees (RAAC) were introduced to provide targeted information to the management bodies at the level of the various group hierarchies. On the one hand, these interdisciplinary bodies act as a multiplier to establish a sustainable opportunity and risk culture in the operating and central business areas. On the other hand, they ensure that complete and regular, up-to-date reporting is harmonized and optimized.

Overall, in 2022 no risks/opportunities with "substantive impact" to GEA Group or GEA Group Aktiengesellschaft were identified that, alone or in combination with other risks, could endanger the company's continued existence as a going concern, please see page 140 of the annual financial statement 2022.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

GEA conducts active risk and opportunity management that identifies and avoids risks to the continued existence of GEA as a going concern early on, monitors and manages assumed risks, and ensures that opportunities are identified and utilized in good time.

All group companies are integrated into GEA's risk management system. GEA's climate-related risks and opportunities are identified and assessed within GEA's integrated risk management system, that includes all possible types/sources of risks and opportunities.

Quarterly risk reports and size-related ad hoc risk reports are created with the aim to ensure that decision-makers at all levels are informed promptly about material existing risks and potential risks affecting future development. The risk reports include risks to GEA's direct operations, downstream operations, the supply chain, as well as upstream operations including the market and GEA customers.

GEA's risk management system is based on the management hierarchy, risks are reported to the next higher management level using predefined thresholds. The Risk Management Organization includes the Region and Country organization/companies, the Divisions, a Global Leadership team, Executive Board, Risk Board, Internal Audit, and Supervisory Board (Audit Committee). Risk boards are assigned to the business areas and group management levels. The fundamental principles and procedures underpinning an effective risk management system are set out in risk guidelines that apply to the entire group. This guideline also documents mandatory risk reporting and management requirements. Compliance with these requirements is monitored by the Internal Audit function.

Risks are also managed with risk management instruments such as the Risk Assessment and Advisory Committees (RAACs) which are supplemented by a reporting system encompassing risk reports, consolidated financial projections, monthly consolidated financial statements, and meetings of the Global Executive Committee at least twice a year. These instruments and processes continually and routinely identify and analyze short-term, medium-term, and long-term risks which include relevant climate-related risks.

To identify risks that could have a substantive impact on GEA, all issues are assessed for their financial materiality and probability of occurrence. This is done on a gross basis, i.e., excluding any risk-mitigating measures. In addition, the timing (less than or more than one year) of each risk is individually assessed. The assessment of risks is based on a 12-month period. In 2019, GEA revised its risk strategy, adding a new concept for measuring risk-bearing capacity. The risk and opportunity matrix was redefined by switching from a 3-level matrix to classifying

probability of occurrence and financial impact to a 4-level system. In the future, the parameters of the risk and opportunity matrix and reporting thresholds will be reviewed on an annual basis and, where necessary, adjusted.

The fundamental principles and procedures underpinning an effective risk management system are set out in risk guidelines that apply to the entire group. This guideline also documents mandatory risk reporting and management requirements. Compliance with these requirements is monitored regularly by the Internal Audit Function.

In order to fully identify and assess GEA's exposure to climate-related risks and opportunities we have performed a qualitative and quantitative scenario analysis to identify and assess potential risks and opportunities from climate change along GEA's entire value chain for 2030 and 2050. Risks and opportunities from transitory changes were analyzed based on the Net Zero Emissions by 2050 Scenario (NZE) and the Stated Policies Scenario (STEPS) of the International Energy Agency (IEA). The RCP4.5 Intergovernmental Panel on Climate Change (IPCC) temperature pathway scenario was used as the dominant scenario to examine the potential physical impacts of climate change at 2.7°C global warming. For comparison purposes, we used the IPCC's RCP2.6 scenario, which reveals the physical risks in a world with successful global warming mitigation consistent with the goals of the Paris Agreement. On top of that, we also took the RCP 8.5 into consideration.

GEA will be affected by the impact of climate change in the form of physical (including thunderstorms and rising sea levels) and transitory (including political and legal) risks. Equally, however, we will benefit from new market opportunities in connection with the decarbonization of the global economy. Identified physical risks are managed by the individual site manager as well as our Global Production team by incorporating the results of the risk assessment in specific site plans, e.g., by assessing the existing protection measures at regular intervals and, if necessary, by exploring protection measures such as flood protection dams or storm-proof buildings in order to minimize the impact in such a scenario. Furthermore, they cooperate with local communities and authorities. Climate-relevant criteria, such as carbon neutral production, energy efficiency, use of renewables, and the implementation of an individual water strategy in regions with water scarcity, have also been integrated in the process of product development as well as in the designing and purchasing of real estate, plant, and manufacturing facilities and serve as a decision-making basis in selecting new company sites. Regarding identified transitional risks and opportunities, the individual department and the P&L responsables incorporate the results of the assessment in their strategies, such as the purchasing strategy and related incentives for the buyer. In case of identified market opportunities GEA works strategically expanding and developing their business models as well as incorporating in their market forecasts.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Environmental regulations have been strengthened worldwide. In the USA and Europe, new regulations were introduced within the last 6 years regarding stricter environmental requirements for NOx and SOx emissions, to reduce/limit these emissions. This has explicitly impacted GEA with regards to the Glass & Cement industry, which involves high energy consuming and GHG emitting production. These regulations created a risk for Emission Control becoming unable to launch existing products that were not in compliance and result in a loss of market share/profit. If GEA could not meet this regulation- revenue for this product would have dropped up to 20% in 2022 as well as have resulted into a loss of market share for Emission Control Plants. A meeting occurred between GEA Emission control and a key customer aiming to develop new processes regarding the new stricter requirements for NOx and SOx & some solutions were presented. The RAAC determined that GEA would lose key customers if there was no improvement of the procedure. GEA emission control decided to develop new process to fulfil the requirements. The required resources (human & budget) were assigned. A pilot project called BisCat was created using ceramic candles for testing. After successful testing period this product was published in GEA Emission Control Portfolio. Risk reports, consolidated financial projections, monthly consolidated financial statements, and regular meetings of the Global Leadership Team enabled them to identify, analyze and communicate the risks that current regulations could pose. To overcome this risk, GEA created an opportunity to develop a new process called SCR (Selective Catalytic Reduction) that reduces the NOx emissions to the requested limit. R&D utilized further resources to develop the new SCR Process. This new process was delivered to several plants to DeNOx (NOx Control) which involves GEA's clean gas selective catalytic reactor (SCR). This technology has been sold to customers located in the USA and Europe to properly equip them for these regulations, which had been at risk. GEA adapted to this regulation and created a new product that allowed GEA to increase market share and become a leader in this process. Therefore, the strength of environmental regulations has become a driver for GEA, because as regulations strengthen more efficient/clean emission control plants are required. This process is continually developing to be a step ahead of future legislation/regulations.</p>

Emerging regulation	Relevant, always included	<p>Emerging regulations are included in GEA's Corporate Risk Management Process through the Country Risk Assessment and Advisory Committees (RAACs) which identifies emerging regulations and escalates them to the Global Executive Committee (GEC). The RAACs are supplemented by a reporting system encompassing evaluated risk reports, consolidated financial projections, monthly consolidated financial statements & meetings of the GEC at least twice a year enable them to identify, analyze and communicate the risks that emerging regulations could pose on business processes. GEA understands that environmental regulations will continue to develop and emerge as climate related issues increase. This can include increased operation costs and compliance costs due to change of regulations resulting from climate change. This is both a risk and opportunity for GEA. In order to meeting emerging regulations, such as the European Green Deal, all new production sites will be producing carbon-neutral. For instance, in Koszalin/Poland GEA commissioned a new factory. Once fully loaded in 2025, GEA will produce carbon-neutral by producing our own energy by integrating PV panels on the roof, storing power in batteries which can also be used to power fleet vehicles. Likewise, a combined heat and power (CHP) system based on bio natural gas (bio methane) is used to generate electricity and heat which can be used to heat and cool the site. LED lighting and above industry standard levels for building and ceiling insulation are utilized throughout the facility. The windows feature low-emissivity glass which improves natural lighting conditions and reduces heating and cooling costs. Outside, parking includes stations for charging elect. vehicles while green spaces will be protected from erosion with shrubs and trees, also compensating for any trees removed during construction. To ensure the new site reaches its zero-carbon goal, GEA Koszalin offsets any additional CO2 emissions with high quality certificates, investing in wind, solar, biomass and waste gas recovery projects around the world. Our next carbon neutral facility is already planned: Since 2022, we are investing EUR 70 million in a pharmaceutical technology center, which we intend to open in Elsdorf near Cologne/Germany in 2024. This will likewise set benchmarks for environmental and climate protection.</p>
Technology	Relevant, always included	<p>Technology plays a significant role for GEA in terms of opportunity, as well as risk, with regards to climate change. GEA specializes in machinery, plants, as well as process technology and components. The technologies and processes used by GEA's customer industries are typically energy-intensive, meaning that energy savings and the reduction of emissions in customer production processes are essential, as they are at risk of rising energy costs and policy requirements.</p> <p>GEA turns the risk into an opportunity by developing technologies that improve energy efficiency. For instance, GEA's industrial heat pumps which capture, convert and reuse waste energy generated by the facilities' production process and convert it into a renewable energy source heat. GEA heat pumps allow customers to save up to 35% of energy on their plants and can help manufacturers reduce their carbon footprint by 50%. One of our customers, the city Malmö/Sweden is</p>

		<p>able to reduce emissions by 50,000 metric tons per year.</p> <p>Efficiency and climate related issues such as, CO2 emission, water consumption, waste in all life phases of our products are prioritized. GEA's R&D activities implement GEA's claim of "Engineering for a better world" by creating efficient products and solutions. GEA contributes to the responsible development of processes, sustainable management, and environmental protection. Since 2022, GEA increased the focus on innovation in environmentally sustainable solutions. Our new label Add Better empowers our customers with resource-efficient solutions.</p> <p>Technological risks are included in GEA's Corporate Risk Management Process through the Country Risk Assessment and Advisory Committees (RAACs) which identifies risks associated with technology, through methods such as customer feedback, and escalates them to the Global Executive Committee (GEC). The RAACs are supplemented by a reporting system with risk reports, consolidated financial projections, monthly consolidated financial statements, and meetings of the GEC (consisting of all members of the Executive Board and GEA's divisional and regional CEO's as well as our Chief Human Resources Officer and our Chief Sustainability Officer) at least twice a year. When a risk and/or opportunity is identified, it is then communicated to R&D to find a solution for customers and meet their demands for products with e.g. low energy consumption.</p>
Legal	Relevant, always included	<p>Legal risks are relevant for GEA because if GEA is not compliant, then it runs the risk of having its operations temporarily and/or permanently shut down. Therefore, yearly legal compliance audits are conducted at selected GEA sites to identify legal risks and opportunities, including climate related legal risks. The findings by these audits are followed up by QHSE country and regional managers to ensure risks are identified/managed accordingly. Identification of legal risks is also conducted by the local RAACs and GEA's legal department.</p> <p>To follow all legal requirements in all GEA locations is the highest commitment of GEA Group. To ensure compliance GEA updated the global "Code of Conduct Policy" and launched its "Environmental Management Policy". The policies are adopted by GEA's Executive Board and were published to all stakeholders. They are, inter alia, designed to help GEA navigate the increasingly complex corporate and legal environment. They demonstrate our values and contain rules for implementation. Failure to comply with the Code of Conduct Policy and the Environmental Management Policy can do a great deal of harm to the environment. Therefore, GEA does not tolerate any violation of these global policies. Violations can</p>

		<p>lead to consequences pursuant to company rules and the law.</p> <p>Production workshops are continuously audited to ensure their legal compliance, to ensure compliance with local, national, and regional environmental regulations, as well as occupational health and safety laws. If a finding is detected, in which GEA is not in compliance, GEA must follow any recommendations or actions required to be complying and close the finding. These regulations include proper handling and storage of chemicals, proper waste management, and water pollution control. These audits are conducted internally, as well as by external consultants. GEA has set internal KPIs to close all open findings.</p> <p>The risk of not being in legal compliance can include monetary fines and the risk of restricted activities up to total shut-down of the production facilities.</p> <p>Additionally all climate-related KPIs are approved by certified public accountant (KPMG) once a year and those are released to be published in the non-financial statement in the annual report following the GRI standards and in the annual meeting with all GEA stakeholders.</p>
Market	Relevant, always included	<p>GEA is a key supplier of food processing technology. Our customers rely on products that meet their demands as well as regulations regarding energy efficiency and GHG reduction. These areas are key markets for GEA's continued success and profitability and GEA is committed to increase its market-share in these sectors by providing more efficient and sustainable products. Also in 2022, transitional/market risks were included in GEA's Corporate Risk Management process and identified at a very early stage by GEA's Market Intelligence which identifies trends in the marketplace. This risk was reported in a risk report and sent to the RAAC's and related Risk Board from the relative business area, and further escalated to upper management/Executive Board due to the financial implications and likelihood. In 2022, GEA fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. The scenario analysis covers all parts of GEA's value chain and does therefore encompass all risk categories as specified in the recommendations of the TCFD and reflected in the applied scenario models of the IEA. This specifically includes market risks & opportunities. The sustainable success of GEA in the market is based on mega-trends, which includes the increasing demand for resource-efficiency. GEA anticipates increased customer interest in improving resource efficiency. To manage the risk of losing customers to 'greener' products in the market, GEA uses this shift as an opportunity to utilize GEA's market position</p>

		<p>and take an integrated approach. More specifically, GEA set up its new business unit called "New Food" covering foods based on alternative proteins such as plant-based protein, cell-based protein and insect protein as world's population cannot expand existing agricultural production capacity without grave environmental and social consequences. Furthermore, we launched our "Add Better" label, which calls attention to GEA solutions that are significantly better than their predecessor product when it comes to efficiency and environmental impact and empowers our customers with resource-efficient solutions.</p>
Reputation	Relevant, always included	<p>Environmental issues can impair a company such as GEA's reputation and threaten a company's relationship with investors, regulators, customers, and the public. For example, GEA could harm its reputation as a sustainable engineering company by providing malfunctioning emission control equipment, that could result in unfavourable press coverage and harm GEA's reputation.</p> <p>Additionally, sustainability criteria have become ever more important for both institutional and private investors in their investment decisions. As a capital goods manufacturer this is extremely relevant for GEA as GEA must rely on its reputation of providing energy efficient products/machines/solutions and following its mantra and strategy of 'engineering for a better world.' GEA has also identified the risk of losing customers to competitors that have a better sustainability reputation and offer better energy savings. As customers and investors became increasingly interested in sustainability, GEA must continue to build and develop its reputation, as well as not harm its reputation as a sustainable company that provides efficient solutions, or GEA could face the risk of loss of investor/customer interest.</p> <p>GEA is using its unique market position to create solutions that reduce customers' CO2 footprint. With initiatives, such as the launch of our "Add Better" label (explained under 'Market'), GEA empowers its customers address issues that they and their consumers care about with regards to low environmental impact. While at the same time GEA can live up to its responsibility and potential by enabling our customers transition to a lower-carbon economy and 'engineer for a better world.'</p> <p>GEA turned this risk into an opportunity to improve its environmental performance which is reflected in GEA's CDP A-list scoring since 2021. This has also satisfied investors, reflected through an increase in ESG related investor calls. Since 2022, GEA is listed in the Dow Jones Sustainability Europe Index. GEA is also listed in the DAX 50 ESG index owing to its exemplary position when it comes to ESG criteria – the environment, social topics, and governance.</p>

Acute physical	Relevant, always included	<p>The severity of extreme weather events is only expected to increase due to climate change. The timing and intensity of these events are becoming increasingly greater and unpredictable. In the USA in the past years, GEA production sites along the east coast and north were directly impacted by extreme weather events, including hurricanes and extreme cold fronts, which caused production to be interrupted for several days. The increased risk of these events has caused GEA to consider physical climate change risks in a yearly risk assessment conducted by the FM Global/GEA Insurance department. GEA Insurance conducts this yearly risk assessment for all major GEA production sites, and this risk assessment includes identifying climate change related risks of which include acute and chronic physical risks. In 2022, GEA fully integrated fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. The scenario analysis covers all parts of GEA's value chain and does encompass all relevant natural hazard categories as described in the recommendations of the TCFD and modelled in the IPCC's RCP scenarios. This specifically includes acute physical climate risks such as wildfires, tropical cyclones and other storms as well as floods and heatwaves. Two acute physical risks regarding flooding and tropical cyclones are identified for one site in Germany (Büchen) and one site in China (Suzhou). The site managers incorporate the results of the risk assessment in specific site plans, e.g., by assessing the existing protection measures at regular intervals and, if necessary, by exploring constructing added protection measures such as flood protection dams or storm-proof buildings in order to minimize the impact in such a scenario. Furthermore, they cooperate with local communities and authorities. Furthermore, GEA is still implementing 30 recommendations from GEA's insurer on how to deal with natural hazards. These recommendations are being implemented by the individual site. For the most part, this involves updating and developing emergency plans. In this way, GEA ensures that employees and assets are prepared in the event of a hazard. The insurer follows up on implementing the recommendations by way of on-site inspections, generally advising all sites as to how response plans could be developed whenever the risk assessment indicates this is necessary.</p>
Chronic physical	Relevant, always included	<p>Changes in precipitation patterns and extreme variability in weather patterns are becoming more prevalent. E.g., in Germany there is a regulation that employers are required to keep the workplace temperature under a specific temperature limit. This creates a risk of work interruption and/or high investment costs in temporary cooling systems, as well as high energy consumption and energy costs. In 2022, GEA fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. The scenario analysis covers all parts of GEA's value chain and does encompass all relevant natural hazard categories as described in the recommendations of the TCFD and modelled in the IPCC's RCP scenarios. This specifically includes chronic physical climate risks such as chronic droughts and sea level rise. One chronic physical risk about rising sea level is identified for one site in China (Suzhou). The site</p>

		<p>managers incorporate the results of the risk assessment in specific site plans, e.g., by assessing the existing protection measures at regular intervals and, if necessary, by exploring constructing added protection measures such as flood protection dams or storm-proof buildings to minimize the impact in such a scenario. Furthermore, they cooperate with local communities and authorities. On top of that, on a yearly basis, the FM Global/GEA Corporate Insurance assesses all possible risks that can impact GEA's major sites, this incl. identifying chronic physical climate-related risks as well. GEA insurance then estimates the probability of the climate related risk of occurring and assigns funds to a reserve to be used if it occurs. The insurer issues recommendations that are included in the risk reports, informing all necessary management levels depending on the size/probability and financial implications. Opportunities and risks arising from significant operating decisions are assessed and hence actively managed by the relevant departments and decision-makers at all group levels and in all functional units in a decision-making process that takes materiality criteria into account. In general, the insurer advises all sites on the development of emergency response plans whenever the risk assessment calls for such a step. Risk assessments and tools are available at the site level. However, this is also a business opportunity for GEA (explained under 'Market').</p>
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C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Legal
Exposure to litigation

Primary potential financial impact

Increased direct costs

Company-specific description

Several properties in GEA's portfolio entail risks relating to historic environmental contamination and mining damage, primarily as a result of past business activities. It is GEA's legal obligation to ensure that these sites are managed according to the legal requirements. More specifically, the mining district "Rambeck" may be affected by additional legal requirements caused by EU Water Framework Directive (EU-WFD) implementation and drought with low water levels in summer and autumn in the river system. These risks are countered through appropriate measures and supervision by internal and external specialists. Provisions for dealing with this contamination and mining damage are recognized in the balance sheet to the extent required.

However, this is a significant risk for GEA due to the potential legal requirement of additional long term water treatment.

The risk team has assigned this risk as a medium (moderate) risk (20-70 million EUR EBIT impact) with about likely as not likelihood (possible) (25-50%).

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

20.000.000

Potential financial impact figure – maximum (currency)

70.000.000

Explanation of financial impact figure

The financial impact figure encompasses the risks posed to GEA's financial position and the results of operations. The risk team has assigned this risk as a medium risk, with a probability of possible (approx. 40%) and the financial impact as moderate (20-70 million EUR EBIT impact). The estimated range of 20 to 70 million Euro includes the legal costs and environmental management and water treatment costs if official requirements for additional water treatment occur. This range of potential financial impact was calculated by GEA's Enterprise Risk Management Organization and depends on the treatment measures (passive or active water treatment) which might be necessary. That means, in case of an obligation to build a passive water treatment the financial impact would amount to approx. 20 million EUR EBIT impact. In case of an obligation to build an active water treatment the financial impact would amount up to 70 million EUR EBIT impact.

Cost of response to risk

400.000

Description of response and explanation of cost calculation

The given facts require GEA to permanently monitor and environmentally assess the related properties in its portfolio by internal and external specialists. More specifically, this includes the performance of water analyses (undertaken twice a year), the measurement of the water level (permanently installed transducer), the operation of a weather station and the collection of rain data (both permanent online data transfer). The data will be assessed at the end of each month by a specialized team. Furthermore, GEA is running a system for continuously monitoring wells, monitoring the greening of former waste rock dumps, monitoring the stability of re-cultivated waste rock dumps with inclinometers, operating systems for the orderly discharge of surface water from re-cultivated waste rock dumps. The relevant properties are monthly inspected by specialists. However, in case of exceeding certain thresholds, e.g. in the event of heavy rain, the control team gets an alert and must immediately check, e.g. moats and embankments according to given instructions. The instructions are part of our DIN 14001 certification. On top of that, GEA requests expert opinions on flooding/heavy rain safety (due to flooding catastrophe in Germany in 2021) and the creation of a concept of measures by a working group together with the mining and water authorities to reduce material pollution. All activities such as the monitoring, the environmental assessment as well as the conceptual studies by internal and external experts are aligned with the EU-Water framework directive (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for

Community action in the field of water policy) and the related action plan 2022-2027. The facts described above are embedded in GEA's risk management system and reported annually in the annual report (page 153 in the annual report 2022). All measures mentioned above were implemented years ago and are ongoing with no date-to-end.

The cost calculation is an estimate for upcoming expert opinions caused by new regulation and analytics (one-time operational expenses) based on the ongoing conversation with the relevant authorities.

Comment

The environmental situation is a mixture of geogenic influence from the naturally occurring ore veins and anthropogenic influence from the mining activities in the past. Mining activities date back to the Middle Ages, the environmental footprint has been significantly reduced through active remediation and rehabilitation/reforestation. Long-term post mining activities such as the operation of surface water systems and the monitoring of the re-cultivated areas by experts ensure the sustainability of the remediation measures. One of the former waste rock dumps has been declared FFH/Natura 2000 (Council Directive 92/43/EEC of 21 May 1992) protected area.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

Primary potential financial impact

Increased direct costs

Company-specific description

GEA as a manufacturer of equipment and solutions in the nutrition and pharmaceutical industries purchases a lot of steel to produce the products. In 2022 the purchased products containing steel accounted for 624 tons of CO₂e or ca. 50% of GEA's Scope 3.1 CO₂ emissions. The

procurement costs for steel could increase due to alternative steelmaking methods for “green steel”, e.g., with hydrogen-based furnaces or electric arc furnaces.

In 2022, GEA fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. In the first step, GEA conducted a qualitative analysis of the scenarios RCP 2.6, 4.5 as well as 8.5. This aimed to answer the question of what types of climate risks and opportunities could lead to significant impacts along our entire value chain in 2030 and 2050. For transitory impacts, we assessed the potential impact on the value chain of key scenario assumptions and influencing factors, such as CO2 and energy costs, technology plans, and market development. Purchasing volumes and countries of origin, energy consumption profiles and cost structures of our production sites as well as key target markets were taken into account. In a second step, we performed an in-depth analysis of the opportunities and risks identified to assess and quantify the potential financial impact. For transitory risks, the first in-depth analysis focused on steel purchasing and the associated changes in production costs in relation to different steel production routes (primary and secondary) for all scenarios. Based on GEA’s cost and purchasing structure for steel, the potential financial implications were derived, allowing for the sector-related climate scenarios.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1.000.000

Potential financial impact figure – maximum (currency)

5.000.000

Explanation of financial impact figure

The potential additional annual costs for the GEA Group (not cumulative) compared with base year 2022

in 2030 (mid-term): EUR 5–10 million

in 2050 (long-term): EUR 1–5 million

Despite declining costs for coal in conventional steelmaking, the overall cost of steel production is rising due to the impact of the price of CO₂ and the introduction of new low-carbon technologies, such as carbon capture and storage (CCS), especially by 2030. For GEA, this could be reflected in temporarily higher procurement costs. Due to the market maturity of alternative steelmaking technologies after 2030, this effect declines in the period up to 2050.

Potential financial impacts were derived based on GEA's cost and purchasing structure for steel in combination with the climate scenario, which considers the development of CO₂ costs and changes in steel production routes for different regions and time horizons. This assumed constant demand for steel. Strategic measures by GEA that would, for example, increase the share of climate-neutral steel were not considered.

Cost of response to risk

5.000.000

Description of response and explanation of cost calculation

GEA's procurement organization continuously monitors the development of steel prices and takes climate change-related changes into account. The steel market is currently subject to strong volatility for geopolitical and competitive reasons, so the scenario effects must be rated as not material. GEA is looking at sourcing green steel in the context of its "net zero 2040" strategy to reduce supply chain emissions and avoid transitory risks.

In order to enable GEA to a transition to a low-carbon product portfolio, GEA intends deliberately to purchase green steel in the future, i.e. we will accept higher steel procurement prices for the benefit of this transition. GEA assesses decarbonization potentials along the upstream value chain, in particular regarding steel, in various areas such as functional design, material specification, sourcing management, and supplier

engagement. In this context, an important decarbonization potential also lies in the sourcing of green steel. In addition to the financial aspect of higher prices, the limited availability of materials due to capacity constraints, along with the maturity level of technological solutions, presents a significant challenge. It is therefore imperative to focus on developing existing suppliers, establishing partnerships with relevant raw material providers, and securing necessary capacities in the upcoming years. GEA also considers to strategically instruct the procurement department to purchase a certain amount of goods and service, such as green steel, to enable the transition to low emission technology.

For transitory impacts, we assessed the potential impact on the value chain of key scenario assumptions and influencing factors, such as CO2 and energy costs, technology plans, and market development. Purchasing volumes and countries of origin, energy consumption profiles and cost structures of our production sites as well as key target markets were taken into account. In a second step, we performed an in-depth analysis of the opportunities and risks identified in order to assess and quantify the potential financial impact. The first in-depth analysis focused on steel purchasing and the associated changes in production costs in relation to different steel production routes (primary and secondary) for all scenarios (2030 and 2050). Based on GEA's cost and purchasing structure for steel, the potential financial implications were derived, allowing for the sector-related climate scenarios.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Rising air and ocean temperatures could increase the frequency and severity of tropical cyclones. This could result in further potential damage. Tropical cyclones occur in tropical and subtropical areas between the latitudes of 5° and 30°. Location-specific results were derived from a mean one-minute maximum wind speed of a once-in-a-century event. Potential financial impacts pertain to event-related losses. Assuming that this event occurs in 2050, it could result in a potential revenue loss of EUR 25–50 million. Taking into account hazard-related frequency change, we identified China, India, Germany, and the USA as the countries relevant to us that could potentially be most affected by physical risks such as tropical cyclones, rising sea levels and flooding. Recent trends and variability in tropical cyclone frequency and intensity are examined for tropical cyclones that affected China, with particular focus on those that affected China's key economic zones, such as the Yangtze River Delta. Given the possible substantial damage during typhoon season, the locations potentially most affected include Suzhou, China. Suzhou in China is a multi-purpose production plant, hence relevant for the production of various products of different business units. The site is located in the Yangtze River Delta in the proximity of Shanghai. This region is one of the most vulnerable regions to the risk of compound flooding from heavy rainfall and extreme storm surges/tropical cyclones due to this large population and high property density. Rainstorms and tropical cyclones caused by typhoons from June to October often cause substantial losses. Tropical cyclones often produce strong onshore winds and low barometric pressure, which cause extreme storm surges and, at the same time, generate heavy rainfall in the coastal region. However, the peak water level during a tropical cyclone is not only the result of the combination of a storm surge and the astronomical tide. Additionally, the combination of the absolute sea level rise due to global warming and the land subsidence due to urbanization has caused a relative sea level rise (IPCC 2021).

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

25.000.000

Potential financial impact figure – maximum (currency)

50.000.000

Explanation of financial impact figure

In 2022, GEA fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. In the first step, GEA conducted a qualitative analysis of scenarios RCP 4.5, 2.6 and 8.5. This aimed to answer the question of what types of climate risks and opportunities could lead to significant impacts along our entire value chain in 2030 and 2050. Taking into account hazard-related frequency change, we identified China, India, Germany, and the USA as the countries relevant to us that could potentially be most affected by physical risks such as tropical cyclones, rising sea levels and flooding. The analysis revealed that the focus of quantifying climate-related impacts should be on our production sites, as this is where the greatest potential losses are expected to occur. In a second step, we performed an in-depth analysis of the risks identified in order to assess and quantify the potential financial impact. Subsequently, the risks from the in-depth analysis were compared with GEA management's assessment. Potential financial impacts pertain to event-related losses. Assuming that this event occurs in 2050, it could result in a potential revenue loss of EUR 25–50 million.

Cost of response to risk

0

Description of response and explanation of cost calculation

The risks from the in-depth analysis were compared with GEA management's assessment. GEA has forwarded the results of the analysis to the representatives of the locations affected by physical risks. It has been confirmed by the management of the site, that the production plant is constructed to prevent any damages from potential tropical cyclones. This has been a mandatory legal requirement according to the local authorities as they are dealing with the increase of tropical cyclones due to climate change. These legal requirements have been met when the building was constructed in the past. However, based on this, the current risk minimization measures were again evaluated and will be evaluated annually in order to assess whether next steps are necessary to even better reduce the risks. This could include, for example, the installation of additional protective walls or a more closely knit exchange of information with the relevant authorities on protection and risk minimization plans already in place. For the time being, in 2022, the management of the site confirmed that no further steps need to be taken.

Therefore, in 2022, there where no need to be taken and hence no costs were identified in response to the risk. Thus, the answer of the risk is from today's perspective "0".

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

In addition to the increase in average global temperatures and the resulting melting glacial ice sheets, the thermal expansion of the oceans leads to rising sea levels. This risk, in conjunction with potential flooding, may pose a threat especially to coastal areas. The location-specific results are composed of a steady rise in sea levels on the one hand and coastal flooding on the other. The geo-specific variable considered represents the mean annual water depth in coastal areas. Potential financial impacts pertain to event-related losses. Assuming that this event occurs in 2050, it could result in a potential revenue loss of EUR 10–25 million. Taking into account hazard-related frequency change, we identified China, India, Germany, and the USA as the countries relevant to us that could potentially be most affected by physical risks such as tropical cyclones, rising sea levels and flooding. The locations potentially most affected include e.g. Suzhou, China. Suzhou in China is a multi-purpose production plant, hence relevant for the production of various products of different business units. The site is located in the Yangtze River Delta (proximity of Shanghai) which plays an extraordinary role in China, taking the occurrence of floods and droughts as well as the availability of historical climate records into consideration. Due to its climate conditions, the Yangtze Delta has been increasingly populated for

5000 years. It has a subtropical monsoon climate. The mean annual precipitation is 1235 mm, of which 40% fall during summer months and only 11% during winter. The region is climatologically sensitive because it is located along the demarcation line between subtropical and temperate climate that separates disparate air masses. Thus, it always experiences floods that mostly result from excessive rainfall during summer, especially in June and July, when slowly drifting cold fronts meet the moist and stable subtropical air mass. Geomorphologically, a nearly level plain with an elevation of 2–7 m above sea level covers 95% of the region, making this region prone to flooding and sea level changes.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

10.000.000

Potential financial impact figure – maximum (currency)

25.000.000

Explanation of financial impact figure

In 2022, GEA fully integrated climate-related risks and opportunities according to TCFD standard into its opportunity and risk management system. In the first step, GEA conducted a qualitative analysis of scenarios RCP 4.5, 2.6 and 8.5. This aimed to answer the question of what types of climate risks and opportunities could lead to significant impacts along our entire value chain in 2030 and 2050. Taking into account

hazard-related frequency change, we identified China, India, Germany, and the USA as the countries relevant to us that could potentially be most affected by physical risks such as tropical cyclones, rising sea levels and flooding. The analysis revealed that the focus of quantifying climate-related impacts should be on our production sites, as this is where the greatest potential losses are expected to occur. In a second step, we performed an in-depth analysis of the risks identified in order to assess and quantify the potential financial impact. Subsequently, the risks from the in-depth analysis were compared with GEA management's assessment. Potential financial impacts pertain to event-related losses. Assuming that this event occurs in 2050, it could result in a potential revenue loss of EUR 15–25 million.

Cost of response to risk

0

Description of response and explanation of cost calculation

The risks from the in-depth analysis were compared with GEA management's assessment. GEA has forwarded the results of the analysis to the representatives of the locations affected by physical risks. It has been confirmed by the management of the site, that the production plant is constructed to prevent any damages from potential flooding. This has been a mandatory legal requirement according to the local authorities as they are dealing with the increase of flooding due to climate change. These legal requirements have been met when the building was constructed in the past. However, based on this, the current risk minimization measures were again evaluated in order to assess whether next steps are necessary to even better reduce the risks. This could include, for example, the installation of additional protective walls or a more closely knit exchange of information with the relevant authorities on protection and risk minimization plans already in place. For the time being, in 2022, the management of the site confirmed that no further steps need to be taken. GEA assesses the existing protection measures at regular intervals and, if necessary, explores constructing added protection measures in cooperation with the local authorities in order to minimize the impact in such a scenario. Therefore, in 2022, there where no need to be taken and hence no costs were identified in response to the risk. Thus, the answer of the risk is from today's perspective "0".

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Upstream

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Reduced direct costs

Company-specific description

Ten production sites located in China, India, Russian and Poland are capable of manufacturing several product lines (multi-purpose sites) which places certain demands on the supply chain and creates opportunities for the respective local suppliers. Additionally, the dynamic business development in burgeoning economies and emerging markets has required more and more local procurement.

Continued in 2022, whenever possible, GEA is further applying the 'Local for Local' principle, making use of GEA's dedicated local procurement organization. Aside from short response times, this has resulted in a reduction in transportation distance as well as fewer shipments which has reduced the adverse ecological and economic impacts. GEA is committed to fabricate its equipment where the products are launched to reduce not only transportation costs, but also mitigate environmental emissions/impact. GEA is working to produce the requested products within the

country where the customer is located. By minimizing transportation cost, the supply chain will become more efficient and reduce both the financial costs and the environmental impacts.

Furthermore, in 2022 local procurement contributed to 83% of the total volume world-wide. GEA also launched an initiative aimed at moving spare parts inventories closer to the customers, which would entail a reduction in transportation costs. This initiative is instrumental in minimizing GEA's carbon footprint. In addition, GEA is working side by side with shipping and forwarding agent companies that support the company in its efforts to scale down transport emissions. GEA further pursued its objective of setting up a centrally managed logistics organization for the purpose of harnessing efficiency-related and ecological benefits.

Several locations have been clustered to increase the efficiency, including in Europe and in China. Owing to the 'local for local' principle, transport and logistics account for only a small proportion of the company's total purchasing volume. Since 2021, GEA further intensified its efforts to establish a centrally managed supply-chain organization in order to realize efficiency-related and ecological benefits. Around half of the transport services engaged by GEA are already covered by global framework agreements.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

28.000.000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Our COO publicly reported in March 2023 cost savings in financial year 2022 of 28m€ resulting from

- reducing operational costs by increase of efficiency in operations
- reducing transportation costs due to local procurement and reduction in air/freight shipping
- combining procurement, production, and supply chain to one local area as well as
- countering price erosion and cost increases in 2022 and product cost optimization.

Cost increases and project related savings are not considered in those savings. Internal value leakage has been accounted for. A cost saving breakdown into the four types of action is not possible due to the overlapping nature of most initiatives.

Example:

GEA identified sub-optimal spare & service part logistics in Germany, where repair-related parts were produced in Oelde and the safety stock was stored in a warehouse in Cologne independently from end customer location.

This led to inefficient transportation/logistics associated with higher costs and higher CO2 footprint.

We solved this issue by changing the storage destination in the service order from Cologne to Oelde. Finally, a bookable repair stock was established in Oelde.

By this initiative, “reduce transport for self-produced and self-used parts”, we calculated a CO2 reduction of 1,704 t and a cost saving of 73 k€ for 2022.

Cost to realize opportunity

1.000.000

Strategy to realize opportunity and explanation of cost calculation

In accordance with our “Local for Local” principle, transport and logistics account for a portion of our procurement volume. As announced in our “Mission 26” strategy, we must continue to reduce our transport volumes in order to make our carbon footprint even smaller. Additionally, since October 2021, the carbon footprint of every air shipment can be tracked and this will be included in reporting from 2022 onwards. GEA makes its supply chain more efficient in procurement and distribution measures with the aim to achieve positive ecological impacts by reducing transport GHG emissions and as well as reducing adverse economic impacts from high transport costs. Therefore, GEA continuously optimizes

the utility of its local procurement organizations using the 'local for local' program. GEA is managing this opportunity through its own dedicated local procurement organization. The region of the respective supplier is identified on the basis of its sales office. GEA further pursued its objective of setting up a centrally managed logistics organization for the purpose of harnessing efficiency related and ecological benefits. GEA also launched an initiative aimed at moving spare parts inventories and products closer to customers and working with customers that support GEA's efforts to scale down transport emissions. In order to apply this approach, GEA shifted and merged production sites. In 2022, GEA commissioned our first climate neutral factory in Koszalin, Poland, implementing the highest environmental standards. This sets benchmarks for environmental and climate protection. In Koszalin, we will bundle several production activities previously done in different locations. Our components will be produced carbon-neutral as the factory generates its own electricity with a photovoltaic unit, uses a combined heat and power system for power, heating and cooling, has LED lighting, energy-efficient building insulation and low-emission glazing. As a result of the local for local program, local procurement contributed to 83% of the total volume. Air and sea freight was largely reduced due to this program, thereby reducing GEA's transport emissions (high proportion results from air freight).

The costs to realize this opportunity is registered as 1,000,000 as the Local for Local program is in place and includes buildings, machines, and further developing the multipurpose sites.

Comment

The purpose of the program is to reduce transportation costs and CO2 emissions. This initiative will be instrumental in reducing GEA's carbon footprint.

Due to GEA's multitude of suppliers, GEA does not experience any dependency issues to any supplier.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

GEA's Heating & Refrigeration Technologies division combines extensive production process knowledge and integrated heating and cooling expertise. It provides sustainable, energy-saving solutions for customers in the food, beverage and other key industries. All offerings are supported by comprehensive digital and service platforms. GEA plays an important role in the decarbonization of production processes, cities and other market activities. Via a sustainable engineering solutions platform, which includes a comprehensive portfolio of heat pumps, GEA delivers precise temperatures critical to each customer's operation. These proven technologies provide integrated, high-efficiency solutions that significantly reduce CO₂ emissions and energy costs. The general global rise in demand for heat, technological progress and a regulatory framework to promote heat pumps as a climate-friendly way of generating heat are leading to a significant increase in the share of heat pumps in the supply of heat in process and district heating.

In 2022, GEA generated roughly 70 % of its sales with the food and beverage industry which are very greenhouse gas emission intense industries and need support on their transition to a carbon-neutral production of food and beverages. We are one of the leaders for food-processing technology and are the only one having at the same time utility expertise inhouse. This provides GEA with a unique selling point as we can offer our customers processing and utility expertise out of one hand. We are continuously working on increasing our market share in the industrial heat pump business with the help of our unique selling point.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

125.000.000

Potential financial impact figure – maximum (currency)

175.000.000

Explanation of financial impact figure

The range of potential additional annual revenue for the GEA Group (not cumulative) compared with base year 2022 (approximated based on market expectations (study-based) and current GEA market share):

in 2030: EUR 50–75 million

in 2050: EUR 125–175 million

If GEA continues to enjoy the same market share in the growth of the market for heat pumps in the light industry, further revenue growth could be achieved by 2030 or 2050.

In the first step, GEA conducted a qualitative analysis of a 1.5°C and a 2.7°C scenario. This aimed to answer the question what types of climate risks and opportunities could lead to significant impacts along our entire value chain in 2030 and 2050. For transitory impacts, we assessed the potential impact on the value chain of key scenario assumptions and influencing factors, such as CO2 and energy costs, technology plans, and market development. This took into account purchasing volumes and countries of origin, energy consumption profiles and cost structures of our production sites as well as key target markets. In a second step, we performed an in-depth analysis of the opportunities and risks identified in order to assess and quantify the potential financial impact. The analysis of transitory impacts focused on demand changes in the heat pump market, with future scenario-based growth rates applied to GEA's current revenue for both scenarios. Subsequently, both the risks and opportunities resulting from the in-depth analysis were compared with GEA management's assessment.

Cost to realize opportunity

10.000.000

Strategy to realize opportunity and explanation of cost calculation

GEA is actively expanding the heat pumps business in order to further increase market share and achieve revenue growth above and beyond the scenario results presented above. Industrial heating has different e.g., power, pressures, temperature and other technical requirements when compared to industrial refrigeration. The extension of our portfolio necessitates testing and validating the products under these specific conditions. Moreover, our customers depend on reliable COP data (Coefficient of Performance) as the foundation for their business models. Consequently, measuring the actual efficiency and performance will ensure that GEA meets their current and future requirements.

Hence, GEA invested and continues to invest into the extension of testing and validation equipment and capabilities.

If GEA continues to enjoy the same market share in the growth of the market for heat pumps in the light industry, further revenue growth could be achieved by 2030 or 2050.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

A secure food supply has long been taken for granted in many countries. But population growth, climate change and war are leading to a scarcity of resources globally. The corresponding figures are alarming. So, the question of how we will secure our future food supply is being raised ever more frequently. The growing middle class of a world population expected to reach the ten billion mark by 2050 is rapidly accelerating demand for food worldwide, especially meat and other protein-rich products. According to the Food and Agriculture Organization (FAO), production needs to increase by at least 70 percent to meet future food needs. Yet science tells us that we cannot expand existing agricultural production capacity without grave environmental and social consequences. At the same time, consumers' eating habits are changing. Many people want a healthier, more environmentally friendly diet that affords greater consideration to animal welfare. However, it is unlikely that demand can be met exclusively through eco-farming. In its "Mission 26" group strategy, GEA makes a clear commitment to protecting future generations through sustainable food industry solutions. New Food, one of the seven key levers for attaining our corporate targets, will be a crucial element in making our vision a reality. The term "New Food" covers foods based on alternative proteins such as plant-based protein, cell-based protein and insect protein. Nevertheless, the precise definition of New Food is continuously evolving today. GEA expects the global consumption of New Food products to triple by 2030. While this offers huge business potential, it is also an opportunity for us to contribute to more sustainable and ethical nutrition. We have set ourselves ambitious targets to enable us to tap into this New Food trend in a strategic and meaningful way. And we already have a competitive edge thanks to technological expertise and wide-ranging know-how. As a full-range supplier, all of the relevant technologies required by customers in this industry are already at our disposal. Our portfolio currently places us among the market leaders in the New Food industry. This makes us perfectly equipped to meet the burgeoning demand from customers in this surging market. New Food embraces the fundamental principle and goal of feeding more people using fewer resources.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

25.000.000

Potential financial impact figure – maximum (currency)

100.000.000

Explanation of financial impact figure

The range of potential additional annual revenue for the GEA Group (not cumulative) compared with base year 2022 (approximated based on market expectations (study-based) and current GEA market share):

in 2025: EUR 25–100 million

in 2035: EUR 350–750 million (based on BCG (2021): Food for Thought: The Protein Transformation)

If GEA continues to enjoy the same market share in the growth of the market for alternative protein products, further revenue growth could be achieved by 2025 or 2035.

In the first step, GEA conducted a qualitative analysis of a 1.5°C and a 2.7°C scenario. This aimed to answer the question of what types of climate risks and opportunities could lead to significant impacts along our entire value chain in 2030 and 2050. For transitory impacts, we assessed the potential impact on the value chain of key scenario assumptions and influencing factors, such as CO₂ and energy costs, technology plans, and market development. This took into account purchasing volumes and countries of origin, energy consumption profiles and cost structures of our production sites as well as key target markets. In a second step, we performed an in-depth analysis of the opportunities and risks identified in order to assess and quantify the potential financial impact. To investigate our potential market and product opportunities in the alternative proteins (new food) market with a sensitivity analysis, we considered various growth rates for the protein market from recognized studies depending on the regulatory environment, consumer behaviour and technological development. The growth rates resulting from these external insights were combined with GEA's 2022 revenue in alternative food and protein applications. Subsequently, both the risks and opportunities resulting from the in-depth analysis were compared with GEA management's assessment.

Cost to realize opportunity

50.000.000

Strategy to realize opportunity and explanation of cost calculation

As a technology partner to the industry, GEA aims to lead the way in the New Food market. At the Anuga FoodTec 2022 trade show, GEA showcased its new pilot line for cell cultivation and fermentation – a catalyzer for cellular agriculture's development from the laboratory to commercial production. The Anuga showcase bannered 'A Taste of Tomorrow' shines a light on GEA's model New Food initiative, through which GEA promotes innovations in the emerging cellular agriculture sector. For the first time, GEA presented a mobile test center (MTC) for New Food applications – a fully equipped, pilot-scale process line for cultivating different cell types and fermentation that can be individually configured. With the MTC, GEA has devised a new way of providing proof of concept for cellular agriculture. This makes it possible, for example, to develop fermentation processes that produce key nutritional components such as proteins and other functional ingredients on a large scale, or to use bacteria and other cells to biologically produce hormones and enzymes. There is no need for customers to invest in a full pilot plant in order to facilitate the process of scaling up from the lab to commercial manufacturing – they can simply use the MTC. This makes it possible to study the growth and behavior of cell cultures and microorganisms as well as fermentation processes, modify formulas, alter growth media and ingredients, plus tweak process parameters so as to increase yield and repeatability.

Besides this CAPEX invest, GEA steadily employs additional people to realize its opportunity specifically in the emerging cellular agriculture sector. The investment in personal expenses (PEX) is crucial as the growth of GEA's New Food business is predominantly driven by engineering knowledge rather than CAPEX invest such as equipment. As we see a trend to scale up and commercialize "New Food" in high cost countries outside Europe (due to stricter European regulations in the nutrition industry), we centralize the know-how in "engineering hubs" predominantly based in the US rather than to go "local for local" as long as the market is still evolving and has not yet been established locally.

The cost to realize this opportunity above is the sum of the already spend CAPEX invest in 2022 (opening of our New Food Application and Technology Center of Excellence (ATC) in Hildesheim), upcoming CAPEX investments and upcoming personal expenses to respond to the booming customer demand.

Comment

Focused primarily on the production of alternative protein foods and protein-rich components, the New Food boom is a response to consumer demand for more nutritious, sustainable and ethical foods. Together with Danish biotech company Novozymes, GEA is constructing a new plant for the production of plant-based proteins in the USA. The plant, which will go into operation in 2023, is one of the largest projects in our company's history. Novozymes develops fermented catalytic (i.e., industrially produced) enzymes that form the basis for many industrial applications. The new plant covers the manufacturing steps from harvesting to separation of the proteins.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

GEA's new product line CO₂ Abatement is based on carbon capturing by separating CO₂ from flue gas and avoiding the release of CO₂ into the atmosphere. GEA's carbon capturing technology is based on chemical scrubbing using aqueous amine solutions. The product is adjusted for the specific requirements for the targeted customers, e.g., equipped with a pre-treatment system for the flue gas to increase the lifetime of the amine solution and a waste heat recovery system to reduce the energy demand and operation cost.

In the context of the necessary reduction of climate-damaging Greenhouse gases to reduce global warming, the drastic reduction of CO₂ emissions is particularly emphasized. GEAs Business Team Environmental (former Emission Control) as engineering supplier and partner for industrial flue gas cleaning attend in particular to hard-to-abate industries, e.g., the cement industry, from which significant CO₂ emission reductions are demanded. As a long-term and sustainable approach, GEA focuses on the direct capture of CO₂ before it is released into the atmosphere.

GEA's approach is to prevent direct CO₂ release into the atmosphere by applying Carbon Capture technologies in post-combustion configuration. Here, the flue gas is depleted of carbon dioxide by chemical absorption. Subsequently, the separated CO₂ can be processed by

GEA and provided as a valuable material for various utilization pathways. GEA is thus helping to tackle the current challenges in terms of the avoidance of CO₂ emissions, while at the same time improving its market position through continuous optimization and portfolio expansion.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

28.000.000

Potential financial impact figure – maximum (currency)

126.000.000

Explanation of financial impact figure

The range of potential additional annual revenue for the GEA Group (not cumulative) compared with base year 2022 in 2026 is based on different market studies as well as defined target industries where GEA is already active and has customer relations, required product sizes, scope and expected market share. The assumption of the potential financial impact is based on different studies and databases, e.g. Frost & Sullivan; GCCSI CO₂ RE Database; CATF Database; IDTechEx with evaluation of the accessible market and our industries. The differences in min/max are due to uncertainties mainly regarding timing, regulatory frameworks, incentives, and volume of received contracts.

Cost to realize opportunity

10.000.000

Strategy to realize opportunity and explanation of cost calculation

GEA is active to support our customers in environ. projects to reduce emissions & recover available energy by waste heat reduction systems. CO2 Abatement is an add. product to the already existing portfolio and since early 2023 we are now empowering customers to achieve their targeted CO2 values. The market is driven by government-imposed regulations, economic challenges based on increasing emission costs, market demand for sustainable products & customer CO2 emission reduction goals. GEA will now target defined industries with already existing strong contacts (cement, iron & steel, glass, bioenergy, chemical). During discussions with customers of our target industries we find that there is a lack of experience and reservation against applying carbon capture solutions of various types in their production facilities without a proof of technology with their actual flue gas. Based on this finding, we decided in 2022 to base our Carbon Capturing Market Approach on a concept of piloting and demonstrating our technical solution by means of mobile Carbon Capture Pilot plants directly at our client's site. We favor a joint operation together with our clients to ensure a high level of transparency & a max. gain of knowledge and experience for all involved parties. We already built one mobile Carbon Capturing Pilot unit which is currently successfully operated at a Partner's Cement Manufacturing Plant. Our short-term strategy (until 2025) includes several additional pilots with continuous improvements which will be circulated amongst interested clients in our targeted industries and in different regions (Europe, NAM, SEA). The pilots plants serve in a first phase as proof of technology and gaining of knowledge. We will continue as we what to serve different regions (beside Europe this is NAM and SEA) and inlet condition vary from plant to plant and pilots will be used to evaluate specific operational needs and operation cost for individual customers. The results and outcomes of our pilot plant campaigns by mid of 2024 will build trust in our technical solutions & will form the basis for solid carbon capturing business cases. This will pave the way towards implementing large-scale GEA Carbon Capturing Projects.

The cost to realize the opportunity of 10 Mio. EUR is capital expenditures due to investments for several pilot plants, building up engineering pools and major expenses for facilitating proactive sales. Capex is calculated for a three year horizon from 2023.

Comment

In 2022, together with a customer, GEA started to design and build a pilot plant at customer's cement plant which is now successfully in operation.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1**Climate transition plan**

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

According to the German laws, it is generally prohibited to request votes on operational topics, such as GEA's transition plan to actively contribute limiting the global warming to 1.5-degree Celsius at the AGM. However, each year, GEA identifies and assesses company's most important sustainability issues such as climate-related issues. Alongside our own internal assessment, this process incorporates the expectations and interests of our most important stakeholders: our investors, customers, employees as well as NGOs. In 2022, GEA confirmed its annual materiality analysis and classified 17 topics, including greenhouse gas emissions and decarbonization, energy consumption, sustainable procurement as well as circular economy as relevant according to GRI materiality principles. On top of that, GEA's transition plan which aligns with a 1.5-degree Celsius world is validated by the Science Based Targets initiative in September 2021 confirming 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 and we measure ourselves against this benchmark each year.


In 2022, we continued to raise employee awareness through online learnings on climate-related topics as well as group-wide sustainability weeks. In Sept. 2022, we launched our Global Energy Saving Campaign - GEA's internal awareness raising program. It encourages our employees to place their energy saving ideas into an online tool (accessible for all >18,000 employees) which is facilitated by a dedicated team working on the implementation of feasible ideas. 141 great ideas were submitted by co-workers from 28 different sites. In 2022, GEA served several virtual and physical ESG roadshow meetings with investors already invested in GEA or new ones intending to invest in GEA shares, predominantly to inform on GEA's transition (actuals and plan). With reference to our suppliers, in 2022, we established a dedicated team working with them to a 1.5-degree Celsius world. In terms of our customers, our main focus is "product innovation". By providing resource efficient solutions, we help them to decrease their environmental footprint. Our launched green label "Add Better" enables them to easily identify our most resource-efficient products, which will in turn help them – and us – reduce greenhouse gas emissions (TÜV validated process).

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Sustainability report: page 25 (materiality analysis), 30 - 31 (energy saving campaign), 32-33, 40ff. (product innovation), 34 (SBTi validation), 36-38 (transition plan)

 GEA_Sustainability Report 2022.pdf

 Environmental Policy.pdf

C3.2**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a**(C3.2a) Provide details of your organization's use of climate-related scenario analysis.**

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		<ul style="list-style-type: none"> - Conducted a scenario analysis to identify and quantify transitional climate-related risks and opportunities - expression of the most ambitious path of decarbonization envisioned in the IEA scenarios, keeping the world under 1.5° of warming - increasing demand for low carbon products/ raw materials such as green steel or aluminium - strong decarbonization of the entire industrial sector - strong increase of renewable energy generation/ electrification, high increase in wind power

			capacities offshore and onshore - varying growth rates of carbon prices in different regions (e.g. increase to USD 250/ t by 2050 in the EU) - data available for suitable analysis horizons, namely 2030 and 2050 - exogenous demographic and GDP development
Transition scenarios IEA STEPS (previously IEA NPS)	Company-wide		- Conducted a scenario analysis to identify and quantify transitional climate-related risks and opportunities - alignment with the currently stated climate policies - significant decarbonization of the entire industrial sector - significant increase of renewable energy generation/ electrification, increase in wind power capacities offshore and onshore, both less than NZE 2050 - moderate growth rates of carbon prices in different regions - exogenous demographic and GDP development
Physical climate scenarios RCP 4.5	Company-wide		- Conducted a scenario analysis to identify and quantify physical climate-related risks - latest science in accordance with the IPCC - includes the SSP (Shared Socioeconomic Pathways) concept of the IPCC - alignment with the emission levels assumed in the IEA stated policies scenario - severe implications by extreme weather events and at the same time a very likely scenario
Physical climate scenarios RCP 2.6	Company-wide		- Conducted a scenario analysis to identify and quantify physical climate-related risks - latest science in accordance with the IPCC - includes the SSP (Shared Socioeconomic Pathways) concept of the IPCC - alignment with the emission levels assumed in the IEA stated policies scenario corresponding to the ambition level to limit the temperature increase to well below 2°C - scenario is associated with strong decarbonization, the impact of climate-related hazards such as floods or tropical cyclones would still increase
Physical climate scenarios RCP 8.5	Company-wide		- Analysis embraced all 28 chronic and acute climate risk factors listed in the Appendix of the Taxonomy Regulation and covered 24 production sites of GEA Group - 12 out of 28 climate risks are directly covered by the geo specific data based on the latest science

			(IPCC) - Available data also indicated projections about another 5 climate risks, but this remains a reasonable assumption - For the residual climate hazards, expert judgement and additional maps such as the topography map were used to determine the relevance of the climate risk - Risk categorization was based on GEA's risk management system taking reporting units into account, showing potential loss (combined asset damage and business interruptions) caused by a physical risk (in 2050) according to RCP 8.5 as projected in the IPCC report (AR5) - Based on the risk category system of GEA's ERM, total losses were allocated to different categories including not material, low, moderate, significant and major risk - Based on the gathered information, an assessment of the threat and its materiality has been made. If a major risk has been identified, the physical risk was classified as a threat, resulting in the necessity of an adaptation solution and a description of a fitting adaption solution, identified by material climate risk. Taking the adaptation solution into account, our final assessment was made due to materiality.
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C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

- What material climate-related risks and opportunities arise for GEA in different climate scenarios?
- How can GEA manage the identified risks and opportunities accordingly? How good is GEA's organizational resilience against the effects of climate change?
- How does GEA ensure that all aspects (physical and transitional) are adequately considered in the choice of climate scenarios?
- Do we have to adapt our business model, our strategy or our financial planning to mitigate transitional climate-related risks?

- Do we have to physically adapt our operations to prepare for physical climate-related risks?
- How can we seize the climate-related opportunities presented by the market?

Results of the climate-related scenario analysis with respect to the focal questions

The TCFD standard implementation in our enterprise risk management system in 2022 required the final approval of GEA's Executive Board (EB; consisting of CEO, CFO and COO) including all identified risks and opportunities. GEA will be affected by the impact of climate change in the form of physical (flooding, tropical cyclones and rising sea levels) and transitory (including political and legal) risks. Taking into account hazard-related frequency change, we identified China and Germany as the countries relevant to us that could potentially be most affected by physical risks such as tropical cyclones, rising sea levels and flooding. In order to mitigate the identified risks in terms of other future/new factories and operational sites, the EB advised the Chief Sustainability Officer to integrate the mandatory performance of a climate-related scenario assessment into GEA's relevant processes and procedures. Hence, GEA embedded the focal question of "physical adaption of our operations to prepare ourselves for physical climate-related risks", inter alia, into our global real estate process also covering building measures, such as the refurbishment of brownfield factories and the planning, design and execution of greenfield projects. That means, for instance, in case of a planning of a new factory, the project team is now, amongst other building-related sustainability topics, standardized and mandatorily requested to perform the climate change scenario RCP8.5 assessment BEFORE the identified land plot shall be approved by our decision takers to be purchased. The rationale is that GEA wants to avoid higher CAPEX investments in the future to make this factory resilient against climate-related risks. Example: In September 2022, GEA launched to invest € 70m in the construction of a new pharmaceutical technology center in Elsdorf/Germany. According to the new embedded building-related sustainability criteria, the identified potential land plots have been assessed according to the RCP8.5 scenario. All other focal questions are now – similarly to the example above – operationalized, i.e., embedded in our processes and procedures to make GEA both (more) resilient against climate change but also to adapt our business model to turn risks into opportunities (as explained in C2.4a).

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
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Products and services	Yes	<p>As one of the largest providers of process technology, we are aware of our responsibility for taking a leading role in solving the challenges of the future. GEA regards sustainability both as a necessity and as a business opportunity. Our products and services help promote responsible use of natural resources by helping to reduce the environmental impact of many industrial processes through improved energy efficiency and heat recovery, and thereby reducing emissions. Risks and opp. related to the growing demand from customers for energy efficient products with low carbon footprint have influenced our product-related strategy and product portfolio.</p> <p>GEA's innovative technologies have long played a decisive role in reducing GHG emissions in the various end customer industries it serves. With the ever-advancing resource efficiency of its production technology, GEA enables customers to reach their own sustainability goals. Nevertheless, in direct comparison to GEA's own GHG emissions, indirect emissions from suppliers and products sold make up more than 95% of GEA's overall GHG emissions. Product innovation will be the key lever to reach the 18% reduction target for Scope 3 in 2030 compared to 2019. With reference to Scope 3 emissions, GEA's climate strategy focuses on identifying climate impact hotspots in GEA's product portfolio and further boosting the energy efficiency of GEA products. GEA's portfolio will be thoroughly analyzed in the next years as a key element GEA's 'Mission 26' Program, GEA's corporate strategy Mission 26 has been presented at GEA's next Capital Markets Day in Sept. 2021. This level of transparency will enable GEA to prioritize the climate roadmap and further develop sustainable customer solutions. Furthermore, GEA launched its public reporting on all Scopes as well as the reporting on "avoided emissions". Scopes 1-3 are audited by GEA's auditor. The entire GHG balance sheet audited by KPMG has been published in the annual financial statement and the sustainability report 2022. We are currently working increasingly on offering solutions in products that replace fossil fuels with electrical energy as there is a huge market potential. Example: Add Cool (heat pump in the spray dryer). We are also working on carbon capture technology to store and consequently reduce CO2.</p>
Supply chain and/or value chain	Yes	<p>Since 2021, GEA improves its Scope 3 analysis and identified the CO2 emissions attributed to GEA's supply chain (upstream). This presents a key risk and component for GEA as it works to reduce its climate impact in Scope 3. For example, GEA identified 1,220,912 tons CO2 in 2022 resulting from 3.1 purchased goods and services. In order to decrease emissions caused by procurement, GEA established a new organization within GEA's global procurement organization called "sustainable</p>

		<p>procurement". The colleagues are in touch with the suppliers to emphasize the importance of GEA's climate strategy. In 2022, the strategy on sustainable procurement was launched at the annual "Supplier Summit" in Hamburg (see page 79f sustainability report 2022) to decrease upstream GHG emissions. In consequence, GEA implements a digital platform for sustainable procurement data management, performs a comprehensive due diligence on sustainability matters of the suppliers, implemented KPI on greenhouse gas emissions (besides price) into tender processes. As of 2025, climate data disclosure will become mandatory to all relevant suppliers.</p> <p>These actions started in 2021 and will be in place by 2026 as part of the 'Mission 26' program. This will influence GEA's climate strategy in which GEA aims to reduce its entire Scope 3 emissions by 18% by 2030 (2019 base year) and the time horizon of these programs will include the short, medium, and long term as GEA works towards becoming carbon neutral by 2040.</p> <p>In 2022, further measures were implemented:</p> <ol style="list-style-type: none"> 1. Code of Conduct for Suppliers and Subcontractors which includes climate-related requirements. All suppliers (new and existing) are required to sign the and comply with the Code of Conduct. 2. GEA's preferred suppliers are obliged to participate in an ESG-self assessment (EcoVadis rating) and share their result with GEA. In case of findings/shortcomings regarding ESG-related topics (e.g. water policy/water commitments) corrective actions are requested by GEA. 3. GEA conducts on-site supplier audits to confirm compliance with obligations (299 audits in 2022).
Investment in R&D	Yes	<p>Climate-related risks and opportunities have influenced our R&D investment strategy. The technologies and processes used by GEA's customers are typically energy-intensive, therefore energy savings and emissions reductions in customer production processes are essential, as they are at risk of rising energy costs and policy requirements. Among others, GEA's business success depends on solutions that are more efficient than previous generations. A capital goods manufacturer may only set itself apart from its peers and provide enhanced customer benefit by gaining technological leadership, which, in turn, requires innovation. In this respect, there is a connection between GEA's innovative strength and the positive effect of its products and services when it comes to mitigating climate change.</p> <p>The impact of potential risks of product performance would be significant and could lead to negative reputation and earnings. GEA is tackling such risks on all levels. The innovation process is followed up</p>

		<p>by uniform and detail product development process that applies to the entire group.</p> <p>GEA's technology strategy ensures that R&D activities across the group are better networked and aligned with customer needs and global industry trends. In 2022, GEA conducted an assessment of its entire product portfolio and identified that GEA's products are a key contributor of GEA's value chain emissions.</p> <p>Therefore, product innovation will be the key lever to reach the 18% reduction target for Scope 3 in 2030 compared to 2019. Regarding scope 3 emissions, GEA's climate strategy focuses on identifying climate impact hotspots in GEA's product portfolio & further boosting the energy efficiency of GEA products. GEA's comprehensive product portfolio will be thoroughly analyzed in the coming years to enable GEA to prioritize the climate roadmap and further develop sustainable customer solutions.</p> <p>In 2022, 51 new R&D projects were registered. R&D investment is expected to increase as GEA focuses on reducing the climate impact of its portfolio as 2023 is dedicated as the "Year of innovation in sustainability". This will take place on a continuous yearly basis and influence GEA's short-, medium- and long-term strategy as GEA works towards becoming climate neutral by 2040.</p>
Operations	Yes	<p>Sustainability criteria are becoming more important for both institutional and private investors in their investment decisions. As the effects of climate change continue to progress, the reputation of companies' environmental impact will become increasingly examined. If companies do not act sustainable, it could result in a loss of investor interest and public opinion (as reported in C2.2a: Reputation).</p> <p>Therefore, GEA has created an ambitious strategy and in terms of GEA's operations (Scope 1 and 2) is working to decrease its 60% GHG emissions in 2030 compared to 2019. To reduce its Scope 1&2 emissions, GEA is pursuing multiple initiatives. First, since 2022, the company purchases 100% renewable electricity only and continuously substitutes fossil fuels with renewables. To achieve this, GEA will make use of RE certificates, extend its own green power generation and look into long-term PPAs. Second, GEA will boost the energy efficiency of its global infrastructure with initiatives to modernize office buildings and production facilities, prioritizing the 28 most energy-intensive production sites covering 80% of total group wide energy consumption. As a first step, GEA implements energy management systems at their most energy intense sites. GEA will complete this project by 2026. Third, GEA will green its global fleet. A green mobility policy stipulates that all new incentive cars for GEA</p>

		<p>managers in Germany will be 100% electric- to be completed by 2026. Therefore the timeline for these initiatives is medium term (6 years).</p> <p>Optimizing GEA's manufacturing footprint is another important factor for achieving GEA's climate and sustainability goals. In 2022, GEA opened its brand-new production facility in Koszalin, Poland. The facility produces its own energy by integrating PV panels on the roof and storing power in batteries which can be used to power fleet vehicles. A combined heat and power (CHP) system is used to generate electricity and heat. LED lighting, best-in-class insulation and low emissivity glass are all part of the factory's climate-neutral building concept. This initiative required a roughly EUR 37 mill. investment.</p>
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C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	<p>In recent years, climate-related risks and opportunities have increasingly influenced and have been increasingly integrated into GEA's financial planning and will become even more integrated in the long term, particularly as GEA implements its ambitious climate strategy.</p> <p>GEA has increased its sustainability team with several additional FTEs to focus on sustainability and climate-related issues. GEA has also allocated investment in protective measures by GEA Insurance against climate related risks such as floods, as well as energy savings programs.</p> <p>In 2022, GEA invested 2.3 percent of revenue into research and development (R&D). A proportion of the expenditure (9% or 12.7 m€) was used on products, solutions and initiatives to meet customer demands for sustainable solutions. This included increased capital allocation/R&D investment in the SEnS (Sustainable Engineering Solutions) initiative, an initiative focused on developing solutions that lower energy consumption and carbon footprint in the processing industry. It also included the start of R&D into Carbon Abatement technologies for key industries and customers of GEA, including glass and cement within GEA's emission control department.</p>

		<p>In 2022, GEA accelerated energy saving projects by increasing investment in energy saving technologies and lower-carbon solutions within our operations. Also in 2022, GEA made progress with many further projects such as the E-fleet transformation, renewable energy procurement, optimization of production facilities across GEA's operations, and the decarbonization of building facilities. These are medium-term initiatives and part of GEA's Mission 2026 in order to achieve GEA's medium and long term targets (i.e. climate neutral by 2040) and will require additional significant investment.</p> <p>As a direct result of the increased capital expenditure on energy saving projects, we have initiated various projects of installing solar panels on our sites, that will reduce our demand for purchased energy at those locations. The total global electricity demand was covered by renewable energies in 2022. This was 37.3% of the total energy demand.</p> <p>GEA's climate strategy is the first building block of a comprehensive Environment, Social and Governance (ESG) strategy at GEA. Beyond climate protection, this strategy takes social and corporate governance aspects into account. It reinforces the company's commitment to the United Nations Sustainable Development Goals (UN SDGs) and becomes a foundational element of 'Mission 26'. GEA's new corporate strategy 'Mission 26' was presented at GEA's Capital Markets Day in September 2021.</p> <p>Thus, sustainability topics, in particular GEA's climate strategy, are strongly influencing GEA's financial planning: In terms of GEA's strategic planning and Mission26, examples include the implementation of climate performance KPI on our credit facilities, on future acquisitions or on capital expenditures for decarbonization of our building portfolio.</p> <p>Lately, GEA launched its new sustainability-related label Add Better to empower our customers with resource-efficient solutions. The label shall answer the question, what the value of an engineering solution is that consumes less energy and fewer natural resources – that operates more cleanly, efficiently and reliably over a longer lifespan. Is it the lower cost of ownership and higher operational resilience? Is it the improved health of the planet? It's hard to put a price tag on a better future. So we've decided to put a label on it. Our Add Better label calls attention to GEA solutions that are significantly better than their predecessor product when it comes to efficiency and environmental impact. These belong to our most resource-efficient solutions – this is sustainability value.</p>
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C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with a sustainable finance taxonomy	At both the company and activity level

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

Revenue/Turnover

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

398.940.000

Percentage share of selected financial metric aligned in the reporting year (%)

7,7

Percentage share of selected financial metric planned to align in 2025 (%)

12

Percentage share of selected financial metric planned to align in 2030 (%)

16

Describe the methodology used to identify spending/revenue that is aligned

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and

the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

55.421.000

Percentage share of selected financial metric aligned in the reporting year (%)

20,7

Percentage share of selected financial metric planned to align in 2025 (%)

23

Percentage share of selected financial metric planned to align in 2030 (%)

25

Describe the methodology used to identify spending/revenue that is aligned

The method for CAPEX & OPEX is identical to the method used to determine revenue, therefore, the overall methodology is described above.

The additions in the fiscal year presented in the “Additions” line of this Annual Report in the statement of changes in property, plant and equipment and intangible assets, as well as additions to investment property in the fiscal year, represent the capital expenditure and thus the denominator for the KPI. The numerator is equivalent to the proportion of the denominator which group companies have identified as taxonomy-relevant and meets one of the following criteria: There is a connection between assets or processes and taxonomy-relevant economic activities; it relates to the purchase of products from taxonomy-relevant economic activities and individual measures that make it possible for the group to reduce carbon and other greenhouse gas emissions in the performance of its economic activities (primarily expenditure towards buildings and mobility), provided these measures are implemented within 18 months of the reporting date.

Taxonomy-relevant CAPEX includes expenditure that is directly and exclusively attributable to taxonomy-relevant products, technologies and applications (machinery used exclusively to manufacture taxonomy-relevant products), service and sales vehicles, and construction costs for new administrative buildings and production facilities.

Capital expenditure which is not directly taxonomy-eligible or taxonomy-aligned is calculated indirectly in relation to taxonomy-relevant revenues. This includes general expenses required to generate taxonomy-relevant revenues, such as machinery, IT equipment or the transport of goods. The factor of the taxonomy-relevant revenue KPI is applied to the total sum of capital expenditure – reduced by the portion of directly allocated capital expenditure.

Financial Metric

OPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

13.895.000

Percentage share of selected financial metric aligned in the reporting year (%)

9,7

Percentage share of selected financial metric planned to align in 2025 (%)

12

Percentage share of selected financial metric planned to align in 2030 (%)

15

Describe the methodology used to identify spending/revenue that is aligned

The method for CAPEX & OPEX is identical to the method used to determine revenue, therefore, the overall methodology is described above. Taxonomy-relevant OPEX incl. expenditure that is directly & exclusively attributable to taxonomy-relevant products, technologies & applications, i.e., R&D costs, renovation costs for buildings owned by GEA & maintenance/repair of machinery/equipment. OPEX which is not directly taxonomy-eligible or taxonomy-aligned is calculated indirectly in relation to taxonomy-relevant revenues. This relates to operating expense required to keep the assets in functional condition. The factor of the taxonomy-relevant revenue KPI is applied to the total sum of operating expense – reduced by the portion of directly allocated operating expense.

C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Economic activity

Manufacture of renewable energy technologies

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

29.868.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0,6

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0,6

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.523.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,6

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,6

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.099.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0,8

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0,8

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

3.1 Manufacture of renewable energy technologies: Manufacture of renewable energy technologies, where renewable energy is defined in Article 2(1) of Directive (EU) 2018/2001.

Application of the economic activity at GEA:

- Manufacturing of heat pumps
- Manufacturing of technologies for the production of bio diesel, bio ethanol, bio gas and hydrogenated vegetable oil (HVO) and bio mass

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all of GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis

of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Manufacture of energy efficiency equipment for buildings

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

7.852.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0,2

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0,2

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.820.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

212.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0,1

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0,1

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

3.5 Manufacture of energy efficiency equipment for buildings at GEA: Manufacturing of refrigeration systems for building (such as shopping malls, airports, production plants)

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all of GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Manufacture of other low carbon technologies

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

225.291.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

4,4

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

4,4

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

12.761.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

4,8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

4,8

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

6.148.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

4,3

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

4,3

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

3.6 Manufacture of other low carbon technologies at GEA:

- Manufacturing of technologies for the development and production of alternatives to milk and meat e.g. plant-based, insect or fermented proteins, or in-vitro meat
- Design and manufacturing of customized Sustainable Engineering Solutions ("SEnS") that aim for process technology changes to reduce

greenhouse gas emissions

- Manufacturing of electric ovens using electric heating rods instead of industry standard direct gas burners
- Manufacturing of freezing tunnels with highly energy-efficient pre-cooling sections
- Technologies for the production of active material for lithium batteries, e.g. spray dryers for the production of cathode material as well as the crystallization of active material
- Manufacturing of plants for CO₂ recovery in breweries

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all of GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Production of heat/cool using waste heat

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

3.308.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0,1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0,1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

407.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,2

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,2

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

737.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0,5

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0,5

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

4.25 Production of heat/cool using waste heat at GEA:

- Manufacturing of waste heat recovery systems (e.g. by mechanical or thermal compression or Organic Rankine Cycle)

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

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A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Construction, extension and operation of water collection, treatment and supply systems

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

51.629.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

1

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.928.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

2.035.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

1,4

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

1,4

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

5.1 Construction, extension and operation of water collection, treatment and supply systems at GEA:

- Manufacturing of plants for the purification and reprocessing of wastewater and industrial process wastewater e.g., as drinking water and/or service water

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

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A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Construction, extension and operation of water collection, treatment and supply systems

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

Turnover
CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

17.146.000

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

0,3

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

608.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

0,2

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

463.000

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

0,3

Type(s) of substantial contribution

Calculation methodology and supporting information

5.1 Construction, extension and operation of water collection, treatment and supply systems at GEA:

- Manufacturing of plants for the purification and reprocessing of wastewater and industrial process wastewater e.g. as drinking water and/or service water

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

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A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

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Economic activity

Material recovery from non-hazardous waste

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

80.530.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

1,6

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

1,6

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

4.129.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

1,5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

1,5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

2.674.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

1,9

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

1,9

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

5.9 Material recovery from non-hazardous waste at GEA:

- Manufacturing of technologies for the conversion of manure into bio fertilizer and bedding from cow dung

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Research, development and innovation for direct air capture of CO₂

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

466.000

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

0

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

0

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

17.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

13.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

9.2 Research, development and innovation for direct air capture of CO₂ at GEA:

- Research on and development of carbon capture plants

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

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Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

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Economic activity

Retrofitting of sea and coastal freight and passenger water transport

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

Turnover

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

14.263.000

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

0,3

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

506.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

0,2

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

385.000

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

0,3

Type(s) of substantial contribution

Calculation methodology and supporting information

6.12 Retrofitting of sea and coastal freight and passenger water transport at GEA:

- Technologies for saving fuel consumption in the shipping industry

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Operation of personal mobility devices, cycle logistics

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

62.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

50.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

6.4 Operation of personal mobility devices, cycle logistics at GEA:

- Leasing of (electric) bicycles

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level.

Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE,

Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labor Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Urban and suburban transport, road passenger transport

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

1.106.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

0,4

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Calculation methodology and supporting information

6.3 Urban and suburban transport, road passenger transport at GEA:

- Leasing of factory buses

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for

taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Transport by motorbikes, passenger cars and light commercial vehicles

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.958.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

6.5 Transport by motorbikes, passenger cars and light commercial vehicles at GEA:

- Leasing of sales and service vehicles as well as incentive cars

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Transport by motorbikes, passenger cars and light commercial vehicles

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

18.351.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

6,8

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Calculation methodology and supporting information

6.5 Transport by motorbikes, passenger cars and light commercial vehicles at GEA:

- Leasing of sales and service vehicles as well as incentive cars

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the

basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Freight transport services by road

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

89.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Calculation methodology and supporting information

6.6 Freight transport services by road at GEA:

- Leasing of trucks for freight transportation

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible

for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Installation, maintenance and repair of energy efficiency equipment

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.389.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,5

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

778.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0,5

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0,5

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

7.3 Installation, maintenance and repair of energy efficiency equipment at GEA:

- Installation, maintenance, and repair of energy-efficient equipment in owned and/or leased buildings

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary

reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Installation, maintenance and repair of energy efficiency equipment

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

1.022.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

0,4

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)
475.000

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year
0,3

Type(s) of substantial contribution

Calculation methodology and supporting information

7.3 Installation, maintenance and repair of energy efficiency equipment at GEA:

- Installation, maintenance, and repair of energy-efficient equipment in owned and/or leased buildings

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief

Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

697.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,3

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

53.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) at GEA:

- Installation of charging stations for electric vehicles (incl. maintenance, servicing etc.)

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this

analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

395.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,1

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,1

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

70.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings at GEA:

- Installation, maintenance and repair of equipment for measuring, regulating and controlling the energy performance of owned and/or leased buildings

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief

Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Installation, maintenance and repair of renewable energy technologies

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

OPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

1.791.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0,7

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

27.000

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

0

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

0

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Activity enabling mitigation

Calculation methodology and supporting information

7.6 Installation, maintenance and repair of renewable energy technologies at GEA:

- Maintenance and repair of heat pumps and heat exchanger/heat recovery systems installed as a building services system
- Installation, maintenance and repair of solar- and photovoltaic systems

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief

Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level. Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Acquisition and ownership of buildings

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

26.544.000

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

9,9

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

9,9

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

7.7 Acquisition and ownership of buildings at GEA:

- Construction of a production center incl. administration building as well as warehouse and logistics areas for own use in Koszalin, Poland
- Construction of a CO2-neutral pharmaceutical and technology center
- Leasing of (existing) buildings at GEA locations

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic

activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level.

Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

Economic activity

Acquisition and ownership of buildings

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Taxonomy Alignment

Taxonomy-eligible but not aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

23.016.000

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

8,6

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Calculation methodology and supporting information

7.7 Acquisition and ownership of buildings at GEA:

- Construction of a production center incl. administration building as well as warehouse and logistics areas for own use in Koszalin, Poland
- Construction of a CO2-neutral pharmaceutical and technology center
- Leasing of (existing) buildings at GEA locations

Data is collected on a decentralized basis by the group companies. These collect relevant revenue, capital and operating expense for taxonomy-eligible activities and report them to the Global Corporate Center in a predetermined format. The data is consolidated and key figures collated on a centralized basis.

Technical screening criteria met

No

Details of technical screening criteria analysis

GEA is committed to playing its part in the fight against climate change and in achieving the EU's climate targets. Therefore, GEA has formed a dedicated project team in 2022 comprising the Controlling, Accounting, Sustainability and Investor Relations departments, which is responsible for the structured, group-wide organization and implementation of the requirements of the Taxonomy Regulation, including the necessary reporting structures and control mechanisms. The project team reports regularly to the Steering Committee with the participation of the Chief Financial Officer. The procedure was documented and established in a business process. A complete top-down analysis of all GEA's economic

activities was performed based on the technical screening criteria as defined in the Taxonomy Regulation. The activities identified based on this analysis were then allocated to the economic activities listed in the Taxonomy Regulation and other delegated regulations. Subsequently, the identified activities were then discussed and verified on a bottom-up basis with heads of the business units and the product managers. The taxonomy-alignment of these economic activities was evaluated with regard to the technical screening criteria and compliance with the minimum safeguards for the first time for fiscal year 2022. The results have been documented in consultation with the heads of the business units and the product managers.

A possible significant contribution to the environmental objectives (1) climate change mitigation and (2) climate change adaptation was verified for each taxonomy-eligible economic activity on an individual basis at a product level. As part of the analysis, GEA only identified economic activities that make a significant contribution to climate change mitigation.

Do no significant harm requirements met

No

Details of do no significant harm analysis

The DNSH criteria are primarily based on legal requirements and regulations that apply in the EU and can be reviewed at the local level.

Environmental requirements were discussed and assessed by the project team with local management or with central functions such as QHSE, Compliance and Risk Management. Individual criteria for assessing taxonomy alignment laid out in the Taxonomy Regulation were analyzed and assessed on a product-specific and site-specific basis. The DNSH-criteria related to the relevant appendices under the Regulation are met.

Minimum safeguards compliance requirements met

No

Details of minimum safeguards compliance analysis

The minimum safeguards relate in particular to the OECD Guidelines, the United Nations Guiding Principles, the ILO Core Labour Standards and the Universal Declaration of Human Rights. Compliance with these principles, standards and rights is implemented and monitored on the basis of a Group-wide management approach, with a particular focus on compliance with human and employee rights and combating bribery and corruption. GEA has developed guidelines, processes and systems through which potential risks and violations of minimum social standards can be identified and combated.

In the course of the Supply Chain Act, GEA will ensure that the implementation of the requirements of the Minimum Safeguards under the Taxonomy Regulation related to human rights are further expanded and monitored.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

The disclosures required by the Taxonomy Regulation are mandatory for GEA and are made within the non-financial statement. Consequently, the disclosures are audited by GEA's auditor in a limited assurance engagement as part of the audit of the group's non-financial statement.

The Taxonomy Regulation is only applicable to GEA's economic activities to a certain extent, since the production of technologies, plant and machinery for the manufacture of beverages, food and pharmaceutical products is not included as a specific economic activity in the Taxonomy Regulation. As a system and machinery manufacturer and supplier, GEA enables customers in the food and pharmaceutical industries in particular to make a sustainable contribution to the climate neutrality of the European economy through the use of new technologies and machines. This is reflected in GEA's corporate purpose, "engineering for a better world."

As a result, the economic activity "3.6 Manufacture of other low-carbon technologies" is considered to be of great importance to GEA, as it includes technologies aimed at significantly reducing greenhouse gas emissions in other sectors of the economy. The product portfolio analysis classified economic activities as taxonomy-eligible if they target and demonstrably achieve significant reductions in life-cycle greenhouse gas emissions compared to the best-performing alternative technology or solution available on the market.

There are some areas which are fairly open to interpretation in connection with economic activity 3.6 Manufacture of other low-carbon technologies. This section addresses the underlying assumptions and provides information about how GEA estimated the reduction in greenhouse gas emissions. The economic activity involves the manufacture of technologies which target and demonstrably achieve significant reductions in life-cycle greenhouse gas emissions compared to the best-performing alternative technology or solution available on the market. Greenhouse gas reductions should be determined using life cycle analyses based on standards set by the Regulation and verified by an independent third party. With reference to GEA's business model, GEA does not consider the life cycle analysis standards required by the Regulation to be appropriate in all business areas and for all technologies. The reasons for this vary depending on the business area and technology. GEA focuses exclusively on the use phase in the life cycle analysis of certain machinery and equipment, as it is primarily the use phase of our customer-specific machinery and equipment that has a significant impact on the greenhouse gas emissions of GEA's business activities. GEA developed a tool specifically to calculate the potential reductions offered by integrated solutions for production processes and utilities designed to save energy and reduce greenhouse gas emissions. The calculation is based on the standard calculation defined by the Regulation. In accordance with the Regulation, these calculations were audited by an external independent consulting firm. Since the aforementioned technologies, equipment and projects are customer-specific solutions, the methodology and accuracy of the assumptions and assessment parameters were reviewed in each case rather than the individual, quantifiable reductions pursuant to the Regulation. The audit confirmed that the calculation was accurate and appropriate. GEA requires customer-specific information and data to perform life cycle

analyses for pioneering technologies and equipment, with a particular focus on the food industry. Due to the limited availability of data, official analyses by scientifically recognized organizations were used to calculate potential reductions in greenhouse gas emissions. As a result, GEA assumes that the calculations used to estimate the reductions in greenhouse gas emissions are sufficiently reliable.

Other facilities (such as CO₂ recovery systems in brewery plants) prevent the need for additional purchases of CO₂ and therefore inherently lead to reduced greenhouse gas emissions. Therefore, no separate life cycle analysis is performed for these business activities. For materiality reasons, manufacturing of equipment for the production of hydrogen was not included in the reporting and not factored in when calculating the key performance indicators according to the Taxonomy Regulation.

Although the reduction in greenhouse gas emissions is required to be substantial according to the Regulation, it does not specify any threshold. GEA assumes that any reduction will be based on technological advances rather than efficiency gains within the existing system. From GEA's point of view, a reduction of 10 percent is considered substantial and therefore makes a significant contribution to climate change mitigation. However, each case must be considered on its own merits.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

35.550

Base year Scope 2 emissions covered by target (metric tons CO2e)

31.998

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

67.548

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

60

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

27.019,2

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

32.292

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

726

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

33.018

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

85,1986735359

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In 2021 the Science Based Targets initiative (SBTi) has validated our interim targets for 2030 of cutting Scope 1 and 2 CO2 emissions by 60 percent (base year 2019). SBTi has 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. This target was newly set in 2021 as part of GEA's Sustainability Strategy. This target supports GEA on the path to reduce greenhouse gas emissions to net-zero at every link in the value chain by 2040. This target includes the 85 sites, which includes production sites, workshops, and service locations as well as some large offices, including the main headquarters.

In 2022 the absolute target to reduce Scope 1 + Scope 2 (market based) was positively underway, with GEA already reducing 51.1 % of its Scope 1+2 Emissions compared to 2019. GEA's operations in 2022 emitted significantly fewer greenhouse gases (Scope 1 and 2) than in 2021. This is due to GEA's initiatives to purchase 100% green/renewable electricity. In addition, GEA is implementing several energy efficiency saving

projects such as LEDs and solar panels. Overall, GEA was able to reduce its greenhouse gas emissions in absolute terms.

Plan for achieving target, and progress made to the end of the reporting year

GEA has identified six levers to achieve this target, including:

- Implementation of energy management systems in all relevant sites in order to manage energy
- Implementation of energy efficiency measures identified such as transition to LED lighting
- Decarbonization by modernizing the building stock
- Switch to fully electric vehicles & alternative mobility
- Employee awareness program to raise the awareness of energy consumption
- Transformation to 100% renewable energy/biogas

These levers are validated by the Science Based Target initiative.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 2: Capital goods

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 11: Use of sold products

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO₂e)

Base year Scope 2 emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

1.241.575

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO₂e)

17.692

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

13.473

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

116.884

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

1.089

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

18.412

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

10.034

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

24.768.194

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

26.187.353

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

26.187.353

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

18

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

21.473.629,46

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

1.220.912

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

17.764

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

15.089

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

109.493

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

906

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

12.464

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

6.261

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

35.190.372

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

36.573.261

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

36.573.261

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

-220,3334139533

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

GEA calculates its greenhouse gas emission footprint for the entire value chain at least twice a year. All categories of Scope 3 which are not listed above have been assessed while setting up the climate strategy, but were identified as not material to GEA's business model/activities. Materiality review is done annually. Based on this hotspot analysis, GEA has set this ambitious science-based target to reduce Scope 3 (upstream and downstream) by 18% by 2030, which got validated by the Science Based Targets initiative.

Plan for achieving target, and progress made to the end of the reporting year

GEA has identified their resource efficient product development as the key lever to achieve this target. 95% of the entire Scope 3 emissions are caused in the customer use phase (Scope 3.11) due to energy intense production processes at customers end and an average lifetime of GEA's products of 20 years. GEA allocates R&D expenses in the development of more energy efficient solutions. This key lever is validated by the Science Based Target initiative. To accelerate innovation in resource efficient products and solutions, GEA's top management decided in

2022 to dedicate the year 2023 to the year of innovation in sustainability, i.e., encouraging our engineers to breakthrough or disruptive innovation. GEA is doing so called "Sustainathons" across all divisions to foster "outside box thinking" and, since 2022, GEA is annually awarding the best sustainable innovations with the so called "Better World" Award, i.e., employees can apply and pitch in front of the CEO and the Chief Sustainability Officer. The best three innovations will be awarded in a festive ceremony to appreciate GEA's innovative engineers. Lately we launched our milestone on the way to a greener future: GEA's Add Better label answering the following questions: What is the value of an engineering solution that consumes less energy and fewer natural resources – that operates more cleanly, efficiently, and reliably over a longer lifespan? Is it the lower cost of ownership and higher operational resilience? Is it the improved health of the planet? It's hard to put a price tag on a better future. So, we've decided to put a label on it. Our Add Better label calls attention to GEA solutions that are significantly better than their predecessor product when it comes to efficiency and environmental impact. These belong to our most resource-efficient solutions – this is sustainability value. Due to a complex process behind the label, the preparation was kicked off in 2022: ISO 14021 defines several stringent requirements for our Add Better label. But it does not require validation by TÜV. GEA took this additional step on its own. Why? Because we are engineers. We wanted to get our evaluation processes right, benefit from TÜV's input, and let our stakeholders know that transparency is our priority with Add Better.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 3

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 2: Capital goods

Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Category 4: Upstream transportation and distribution

Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting

Category 11: Use of sold products

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO₂e)

Base year Scope 2 emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

1.241.575

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO₂e)

17.692

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

13.473

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

116.884

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

1.089

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

18.412

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

10.034

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

24.768.194

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

26.187.353

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

26.187.353

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2040

Targeted reduction from base year (%)

90

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

2.618.735,3

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

1.220.912

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

17.764

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

15.089

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

109.493

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

906

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

12.464

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

6.261

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

35.190.372

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

36.573.261

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

36.573.261

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

-44,0666827907

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

By 2040, GEA aims to reduce its greenhouse gas emissions to net zero at every link in the value chain. By 2030, Scope 3 greenhouse gas emissions are to be cut by 18 percent compared with the base year 2019. These interim targets have already been validated by the globally recognized Science Based Targets initiative (SBTi). In doing so, SBTi has confirmed that GEA's commitments follow the latest climate science and will effectively contribute to achieving the 1.5°C target. GEA calculates its greenhouse gas emission footprint for the entire value chain annually. All categories of Scope 3 which are not listed above have been assessed while setting up the climate strategy but were identified as not material to GEA's business model/activities. Materiality review is done annually. Based on this hotspot analysis, GEA has set this ambitious science-based target to reduce Scope 3 (upstream and downstream) by 18% by 2030, which got validated by the Science Based Targets initiative.

GEA now aims to have the steps on its path to achieving net zero by 2040 independently validated. GEA has already submitted its measures for

achieving the net zero target SBTi for review. GEA expects to receive confirmation in the first quarter of 2024 that the measures have been validated by SBTi. We adhere to SBTi's definition of net zero, which requires all direct and indirect emissions to be reduced by at least 90% and all remaining emissions to be permanently neutralized.

Plan for achieving target, and progress made to the end of the reporting year

Reference is made to Abs. 2. On top of that, to achieve our net-zero target by 2040, GEA has further specified its action plans and defined a comprehensive set of measures. For Scope 3, these include a 90% reduction by harnessing areas of control, influence and concern across the whole value chain. 10% Neutralization with technology-based-solutions:

- Establish a robust net-zero governance structure to ensure the integration of sustainable practices across the organization
- Strengthen engineering capabilities and investments in R&D to maximize energy efficiency and to phase out fossil fuel
- Prioritize climate protection throughout the sales process, emphasizing the economic and ecological benefits for customers

Example:

The recently introduced TÜV-validated "Add Better" ecolabel also helps to reduce Scope 3 emissions. This labels all solutions - from machines to processes to entire plants - that are significantly more resource efficient than their predecessors. The ecolabel allows customers to see exactly what improvements have been made and how the "Add Better" solution helps them reduce their environmental impact.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 4

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

35.550

Base year Scope 2 emissions covered by target (metric tons CO2e)

31.998

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

67.548

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2040

Targeted reduction from base year (%)

90

Total emissions in target year covered by target in all selected Scopes (metric tons CO₂e) [auto-calculated]

6.754,8

Scope 1 emissions in reporting year covered by target (metric tons CO₂e)

32.292

Scope 2 emissions in reporting year covered by target (metric tons CO₂e)

726

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

33.018

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

56,7991156906

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

By 2040, GEA aims to reduce its greenhouse gas emissions to net zero at every link in the value chain (company-wide). By 2030, Scope 1 and 2 greenhouse gas emissions are to be cut by 60 percent and Scope 3 greenhouse gas emissions by 18 percent compared with the base year 2019. These interim targets have already been validated by the globally recognized Science Based Targets initiative (SBTi). In doing so, SBTi has confirmed that GEA's commitments follow the latest climate science and will effectively contribute to achieving the 1.5°C target.

GEA now aims to have each step on its path to achieving net zero by 2040 independently validated. GEA has already submitted its measures for achieving the net zero target SBTi for review. GEA expects to receive confirmation in the first quarter of 2024 that the measures have been validated by SBTi. We adhere to SBTi's definition of net zero, which requires all direct and indirect emissions to be reduced by at least 90% and all remaining emissions to be permanently neutralized.

Plan for achieving target, and progress made to the end of the reporting year

Reference is made to Abs. 1. However, to achieve our net-zero target by 2040, GEA has specified its action plans and defined a comprehensive set of measures. For Scope 1 and 2, these include a 90% reduction compared to 2019:

- Investment in low-emission transformation at sites & operations
- Establish a robust net-zero governance structure to drive sustainable practices throughout the organization and sites
- Distribution of target across all divisions & functions, ensuring collective responsibility and accountability
- Conduct net-zero audits to inform future-oriented development of sites
- Avoid, mitigate and shift as key pillars to reduce emissions and drive meaningful impact

We intend to neutralize residual emissions and/or further mitigate emissions beyond our value chain. As a technology company, we are committed to technology-driven permanent "carbon removals." Our core lever here is the scale-up and further development of GEA's Carbon Capture Storage and Utilization Solutions. This is a cost-efficient way to neutralize emissions in our own operations and those of our customers. We are also developing additional technology-based solutions such as Direct Air Capture.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Abs2

Target year for achieving net zero

2040

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

GEA has made a clear commitment to achieve net-zero greenhouse gas emissions along its entire value chain (company-wide) by 2040 in line with 1.5-degree warming potential. GEA is a member of the Business Ambition for 1.5°C campaign. Initiatives to achieve the target are implemented such as the decarbonization of the building stock and the development of an energy efficient product portfolio. GEA has further detailed its pathway to being net-zero in 2040 and has already pledged for validation by the SBTi. Review by SBTi has been confirmed for November 2023. We expected the validation in Q1/2024.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

The production processes of nutrition and pharmaceutical items are energy intense. GEA is committed to reduce emissions along the entire value chain to the absolute minimum of 90% (all Scopes) compared to 2019. However, all unabated emissions which absolutely cannot be eliminated must be neutralized by permanent carbon removals. We intend to neutralize residual emissions and/or further mitigate emissions beyond our value chain. As a technology company, we are committed to technology-driven permanent "carbon removals." Our core lever here is the scale-up and further development of GEA's Carbon Capture Storage and Utilization Solutions. This is a cost-efficient way to neutralize emissions in our own operations and those of our customers. We are also developing additional technology-based solutions such as Direct Air Capture.

Scope 1 and 2:

To achieve our net-zero target by 2040, GEA has specified its action plans and defined a comprehensive set of measures. For Scope 1 and 2, these include

- Investments in low-emission transformation at sites & operations
- Establish a robust net-zero governance structure to drive sustainable practices throughout the organization and sites
- Distribution of target across all divisions & functions, ensuring collective responsibility and accountability
- Conduct net-zero audits to inform future-oriented development of sites
- Avoid, mitigate and shift key pillars to reduce emissions and drive meaningful impact

Scope 3:

For Scope 3, we harness the area of control, influence and concern across the whole value chain. 10% Neutralization with technology-based-solutions:

- Establish a robust net-zero governance structure to ensure the integration of sustainable practices across the organization
- Strengthen engineering capabilities and investments in R&D to maximize energy efficiency and to phase out fossil fuel
- Prioritize climate protection throughout the sales process, emphasizing the economic and ecological benefits for customers

Example:

The recently introduced TÜV-validated "Add Better" ecolabel also helps reduce Scope 3 emissions. This labels all solutions - from machines to processes to entire plants - that are significantly more resource efficient than their predecessors. The ecolabel allows customers to see exactly what improvements have been made and how the "Add Better" solution helps them reduce their environmental impact.

Planned actions to mitigate emissions beyond your value chain (optional)

GEA is already a carbon-neutral company (Scope 1 and 2) thanks to offsetting 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. Please see additional information in C11.2a.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	128	
To be implemented*	4	3.754
Implementation commenced*	20	4.282
Implemented*	3	2.998
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Company policy or behavioral change
Change in purchasing practices

Estimated annual CO₂e savings (metric tonnes CO₂e)

1.046

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 3 category 4: Upstream transportation & distribution

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Wherever possible, GEA applies the “Local for Local” principle to ensure shorter and hence more sustainable delivery routes with fewer emissions. At the same time, we are indirectly supporting the local economy in the vicinity of our own sites. Yet our “Local for Local” principle also ensures that transportation and logistics account for only a small proportion of our procurement volume. Which means of transportation are used depends on various factors. In the context of our efforts to further minimize our carbon footprint, the aim is to reduce the number of transportation operations to the bare minimum. A GEA air cargo policy specifies that divisions must obtain approval for air cargo shipments. In principle, shipment by sea should be given preference because of its more favourable carbon footprint.

Since 2022, logistics service providers have been required to determine the carbon footprint of air transports and to report this to GEA. In addition, any request for proposal from a new supplier includes the condition that they must share their transportation data with GEA.

In 2023, we are introducing a global transportation management system as part of our “Mission 26” strategy. This will not only change the way transportation operations are planned and carried out in the future. It will also define the carbon footprint as an additional criterion for choosing the best possible route.

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO₂e savings (metric tonnes CO₂e)

1.097

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

92.000

Investment required (unit currency – as specified in C0.4)

700.000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

The company is expanding its own power generation capacity using photovoltaics (PV). Following this plan, in 2022 at Suzhou, China, a unit with an output of 1,200 MWh has been installed, supplying one third of the site's total needs.

Initiative category & Initiative type

Transportation

Company fleet vehicle replacement

Estimated annual CO₂e savings (metric tonnes CO₂e)

855

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

70.000

Payback period

4-10 years

Estimated lifetime of the initiative

Ongoing

Comment

By starting to changing our fleet policy from combustion to full electric vehicles, we have been able to save 855 tCO₂e of direct emission in 2022. In Germany, Belgium and the Netherlands, for example, there is already a company car policy for executives implemented under which only fully electric vehicles are allowed to be purchased. In 2022, we have transformed about 150 vehicles into fully electrical vehicles.

For the coming years we are working on an alternative mobility incentive systems in order to not only electrify our company cars, but also reduce the overall energy consumption on individual transportation by motivating and incentivizing a mind change at our employees.

We are also preparing for an e-mobility infrastructure at our factories and our employees homes to be able to achieve our fleets electric self-sufficiency through interna, successive build-up of own Photovoltaic generation systems. Our investment have been spent for e-charging stations at our Headquarters, which we are sure to amortize well within a period of below 10yrs, however the exact (monetary) saving depends on drivers behavior and GEA's dynamic progression in own energy generation build-up (eg. PV) – therefore no value ('0') has been set this time.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	<p>Investment in emissions reduction activities are driven through energy audits. These are conducted especially in Germany and Europe, to ensure legal compliance with legal requirements such as the EU-EED 2012/27. This drives GEA to enhance its environmental targets, for example, GEA has set new science based targets in line with a 1.5 degree climate scenario.</p> <p>GEA sites with an implemented energy management system according to DIN EN ISO 50001:2011 have passed the respective third party surveillance audit, and thus have proved to continuously improve the energy efficiency.</p> <p>Our drivers for QHSE and Sustainability are our Employees, the legal requirements, our Customers and our Investors.</p> <p>To reduce its Scope 1 and 2 emissions, GEA is pursuing multiple initiatives. First, the company aims to gradually increase its share of renewable power to 100 percent within the next five years. To achieve this, GEA will make use of renewable energy certificates, extend its own green power generation and look into long-term power purchase agreements.</p>
Employee engagement	<p>In 2022 we launched an energy-saving campaign calling on all GEA employees to share their ideas and suggestions for saving energy at a global or local level with their co-workers and to evaluate and comment to the ideas of others. Due to the global situation which led to a rise in gas prices in the past year – especially in Europe – GEA has set itself the target of reducing gas consumption by 20 percent at each site.</p>

	<p>In addition, all GEA employees have been called upon to reduce the company's energy consumption at local or global level, thereby not only saving costs but also acting in line with the company's sustainability strategy. As part of a global energy-saving drive, all employees can put forward their ideas to inspire others and bring about sustainable change.</p> <p>Alongside the reduction of greenhouse gas emissions, all GEA sites are required to save water, thus reducing water consumption on a continuous basis. For GEA sites, the specific target is a year-on-year reduction in consumption of 2.1 percent per employee each year.</p>
Internal incentives/recognition programs	<p>To recognize excellence and honor contributions that strengthen our common purpose, the GEA Better World Awards, sponsored by the Executive Board, launched in January 2022. With the award scheme, the Executive Board and the Global Executive Committee annually seek to reward the talent, dedication and outstanding performance of individuals and teams across GEA. Five categories (including Sustainability) reflect GEA's long-term aspirations and are therefore linked to Mission 26. Each category is sponsored by an Executive Board member, while the role of defining the criteria and screening nominations falls to the subject matter expert. The gold, silver and bronze winners of the GEA Better World Awards were announced on a festive event in Milano/Italy. In the area of sustainability we honored the Danish team innovating a software which lowers energy and water consumption in cleaning processes (gold), the Italian team achieving a significant emission reduction at Italian sites (silver) and the German team optimizing a inline blending & carbonation unit which saves water and energy (bronze).</p> <p>Since 2022, GEA incentivizes its total workforce in achieving Mission 26 targets, including climate-related commitments to accompany GEAs corporate business strategy until 2026. This is an additional bonus scheme for all employees worldwide independent of other bonus plans. The plan consists of two targets, each weighted 50%, which are defined annually until 2026:</p> <ul style="list-style-type: none"> - EBITDA Margin - Organic Sales Growth (one of the drivers behind the organic sales growth target is to increase the share of new products (not older than 5 years) and here especially new products with a focus on environmentally sustainability (i.e. climate-friendly) should be the major contributor) <p>The bonus payout results from a fixed target bonus multiplied by the degree to which the predefined target values were</p>

	<p>achieved in fiscal year 2022. The fixed target bonus amount depends on the country and results from classification in one of three country groups. The overall target achievement here is max. 200%, min. 100%. If one of the targets has a target achievement of less than 100%, the total achievement is 0%.</p>
Dedicated budget for other emissions reduction activities	<p>GEA is working to boost the energy efficiency of its global infrastructure with initiatives to modernize office buildings and production facilities, prioritizing the 29 most energy-intensive production sites covering 80 percent of total group wide energy consumption. This requires a dedicated budget that GEA is currently establishing.</p> <p>GEA aims to gradually increase its share of self-generated renewable electricity. In 2022, 3.1 % of our electricity demand was covered through our photovoltaic. Our goal is to install a total capacity of another 7,000 MWh in 2023.</p> <p>Additionally, by investing globally in Gold Standard-certified projects to generate clean energy from wind, sun, biomass and waste gases, GEA's own operations are already climate-neutral since the beginning of 2021. Established by the World Wide Fund for Nature (WWF), the Gold Standard certifies climate protection projects that have the highest possible positive climate impact.</p>
Dedicated budget for low-carbon product R&D	<p>Since 2021, GEAs "Mission 26" strategy bundles all of its research and development activities under the umbrella of "innovation and digitalization" which is subdivided into four key growth drivers: Environmental sustainability, New Food, Digital Solutions and Modularization & Configuration. That said, GEA is committed to increase our R&D spending from 2.3% of our revenue in 2022 to 3.0% of our revenue by 2026. Thereof, in 2022 our R&D spending allocated to sustainability was 9%, i.e. 12.7 m€. R&D with a dedicated focus on environmental sustainability will play a major role in raising the total R&D spending at GEA. By 2026 40% out of the 30% new product sales should come from environmental sustainability, which includes low carbon products as the launch of new low carbon products is essential for our decarbonization. Product innovation is the key lever to reach our 18 percent reduction target for Scope 3 in 2030. The R&D budget is tracked by GEAs innovation controlling team and reported to the Executive Committee at least twice a year.</p>
Other Sustainable products	<p>We aim to make a positive contribution to our customers' sustainability by offering a net-zero product portfolio by 2040. For instance, the GEA AddCool high-temperature heat pump technology can reduce primary energy consumption and CO₂ emissions by up to 50 percent.</p>

	Through the use of heat pumps and compressors in place of gas boilers or oil-fired heating systems, which run on fossil fuels, as well as with efficient heat recovery systems in our project business, GEA was in 2022 able to avoid emissions from its customers amounting to around 686,000 tons of CO2 equivalents over the entire product life cycle.
Dedicated budget for energy efficiency	A specific example is, that by 2026, 50% of the annual energy needs across ten GEA sites shall be covered by a certified energy management system (ISO 50001). Practically that means, that GEA trains employees to become certified energy managers, globally installs software for automated data handling and placing meters in relevant factories. The measures were kicked-off in 2022. Prerequisite is a dedicated budget approved by the Executive Board for CAPEX and OPEX to realize the measures. In general, GEA (= final approver depends on certain threshold of investment) approves dedicated budgets for energy efficiency measures in benefit of our climate strategy in Scope 1.
Internal price on carbon	To further raise employee awareness, take stakeholder expectations into account and encourage sustainable project decisions, GEA introduced an internal CO2 price. We will apply a virtual shadow price per emitted ton of CO2 to flow into the cost calculation for investments. The calculated valuation will be reviewed annually and adjusted if necessary. This signals that investment decisions take environmental costs into account. As a stress test for investments, the introduction of the internal CO2 price will support further efficiency improvements and drive the identification of low-carbon opportunities.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Avoided Emissions Framework

Type of product(s) or service(s)

Heat

Large-scale heat pump

Description of product(s) or service(s)

GEA's heat pumps and efficient heat recovery systems sold in 2022 alone will allow our customers to achieve avoided emissions of around 686,000 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 cause waste but use waste heat and are powered by electricity which will increasingly come from renewable and emission-free sources going forward.

Heat pumps convert existing ambient energy from a low to a higher temperature level to provide targeted and concentrated heat for a subsequent process. In doing so, they use naturally occurring thermal energy and energy accumulated in the environment within a limited area for a technological process. For this purpose, mechanical work or - indirectly via a motor - electrical energy must be supplied. Thus, not only this supplied electrical energy, but together with it additionally the thermal energy from the reservoir with lower temperature is available as useful heat on the higher temperature level. Heat pumps thus consume less electrical energy than in the case of direct heating with electric current.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

The Avoided Emissions Framework (AEF)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

We evaluated all sold GEA heat pumps and some waste heat recovery units replacing already installed gas burners. We are accounting all avoided emissions of that machines in the year they are sold, as it is the same calculation method we utilize for our scope 3.11 emission reporting.

Reference product/service or baseline scenario used

Right now, gas burners are used preferably by our customers to produce steam. Unfortunately, this method can't be decarbonized and high quality carbon capture units are not regularly used. At the same time, the efficiency of these burners is limited by physics.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

686.000

Explain your calculation of avoided emissions, including any assumptions

As this was the second year for GEA to report the avoided emissions, we compared different methodologies and frameworks to find the one, fitting to our business model and requirements. We decided to go with: World Resources Institute (2019): Estimating and reporting the comparative emissions impacts of products and Net-Zero Compatible Innovations Initiative (2020): The Avoided Emissions Framework (AEF).

Within this framework we calculated the Net Avoided Emissions:

Starting with the evaluation of relevance of the different life stages, with the result, that only the use stage has a relevant impact.

Emissions for both, the heat pump, the waste heat recovery system, as well as the old/ reference solution were calculated and with (avoided emissions of reference)-(emissions of heat pump), the Net Avoided emissions were derived.

Further products were identified in the meantime and will be reported in the upcoming sustainability report 2023. The reporting of Avoided Emissions of heat pumps will be maintained

Reporting the avoided emissions for heat pumps and other products helps us to communicate the relevance of our products, which increases our use stage emissions, but in sum help to reduce the GHG emissions.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Other

Other, please specify

The EU Taxonomy for environmentally sustainable economic activities - "New Food" which is classified as taxonomy-aligned under environmental target 1, activity 3.6

Description of product(s) or service(s)

A growing middle class combined with a world population that is expected to reach 10 billion by 2050 will increase global demand for nutrition dramatically, particularly meat and other protein-rich foods. However, science tells us we cannot expand existing agricultural production capacities without severe environmental and societal consequences. According to the latest IPCC report >20 % of total GHG emissions are attributable to the food industry. In parallel, food preferences are changing quickly among consumers, many of whom are looking to follow a healthier, low-impact diet that places more attention on animal welfare. New Food embraces the basic principle and goal of feeding more people using fewer resources. As a category, the primary focus is protein rich foods and components and other nutritious compounds, produced through traditional processing methods, precision fermentation or tissue engineering, or a combination of these methods. GEA supports start-ups, ingredient suppliers and food processors to develop, scale-up and produce the nutritious new foods consumers are looking for. The calculation of GHG emission savings is based on empirical studies and life cycle analyses published, such as from the Good Food Institute.

Example: To produce oat drinks (plant-based beverages to replace GHG intense cow-milk), GEA decanters are utilized to separate the solids out of the drink to upgrade customers taste experience.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate

Functional unit used

Reference is made to the example above: The functional unit used is the sum of oat drinks being produced by all GEA decanters sold in 2022 to customers who verifiable produce oat drinks. Calculation assumptions please see below.

Reference product/service or baseline scenario used

The baseline scenario is the equivalent sum of cow milk compared with the sum of oat drinks being produced by all GEA decanters sold in 2022 to customers who verifiable produce oat drinks.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

248.400

Explain your calculation of avoided emissions, including any assumptions

For this reason, official analyses by scientifically recognized organizations were used to calculate the potential for greenhouse gas emission savings. Hence, one liter of milk produces 3.2 kg CO₂e, one liter of oat drink produces 0.9 kg of CO₂e. So, in general one liter of oat drink avoids 2.3 kg of CO₂e, based on a Statista graphic that compares the environmental impact of different types of milk using data from Science Magazine and the New York Times. GEA decanters we have sold in 2022 enabled an oat drink production volume of 300,000,000 kg per year, assuming a production input (hrs/year) and output (l/hrs) market average. This oat drink volume avoided CO₂e emissions of 690,000t per year (in comparison to milk production). Average lifetime of a GEA decanter is roughly 20 years, so we are talking about 13,800,000t CO₂e avoidance over the entire lifetime of a decanter. As a GEA decanter is a part of the whole value chain to produce oat drinks, our CO₂ avoidance impact will only be a fraction of the 13,800,000t CO₂e. Due to given process knowledge and an internal lifecycle assessment, including the full value chain, we have applied a conservative estimate of a 1.8% share of our decanters in the entire production process. Therefore the avoided

emissions of 13,800,000t CO₂e x 1.8% amounts to 248,400 t CO₂e.

Please note that the revenue share of New Food has been 2% in fiscal year 2022. However, this 2% contains a lot more New Food projects than the given example of oat drinks. Unfortunately, we are not yet able to calculate the full CO₂ savings for the entire New Food business in 2022. Hence, the above given estimated avoided emissions are most likely understated.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

2

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, other structural change, please specify

Moving of sites

Name of organization(s) acquired, divested from, or merged with

not applicable

Details of structural change(s), including completion dates

GEA Process Engineering China Ltd., Shijiazhuang has moved to Suzhou (early 2022)
 GEA Procomac S.p.A, Sala Baganza: 1 site closed and moved to main site (early 2022)
 GEA Diessel GmbH, Hildesheim: activities moved to GEA TDS GmbH, Sarstedt (31.12.2022)
 GEA CMT S.p.A. has been moved from Peveragno to Beinette (mid 2022)
 All moves have no significant influence on our total consumptions

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	Locations have been moved to other (already existing) locations, so no significant changes in consumption are expected. The relocated sites have been moved with their entire equipment to the related site. Example: The site in Shijiazhuang (China) has moved to Tianjin where a production site already existed. Thus, management processes were optimized but not the energy consumption.	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

35.550

Comment

Scope 2 (location-based)

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

36.685

Comment

Scope 2 (market-based)

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

31.998

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

1.241.575

Comment

Scope 3 category 2: Capital goods

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

17.692

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

13.473

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

116.884

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

1.089

Comment

Scope 3 category 6: Business travel

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

18.412

Comment

Scope 3 category 7: Employee commuting

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

10.034

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 9: Downstream transportation and distribution

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 10: Processing of sold products

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 11: Use of sold products

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

24.768.194

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 13: Downstream leased assets

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 14: Franchises

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO₂e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3 category 15: Investments

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3: Other (upstream)

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

Scope 3: Other (downstream)

Base year start

Januar 1, 2019

Base year end

Dezember 31, 2019

Base year emissions (metric tons CO2e)

0

Comment

Not applicable for GEA, as assessed by external consultants.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

32.292

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

In 2019, we began to collect the electricity share of green/mix energy for all production facilities in Germany and New Zealand (23 locations) and in 2021, we have further expanded our Scope 2 market-based reporting to 49 sites (100% renewable as well as mixed).

2022: 85 sites reported scope 2

GEA purchases in all countries 100% renewable electricity.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

31.688.819

Scope 2, market-based (if applicable)

726

Comment

GEA purchases in all countries 100% renewable electricity.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Small offices used for sales and service operations.

Scope(s) or Scope 3 category(ies)

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of Scope 3 emissions from this source

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

3

Estimated percentage of total Scope 3 emissions this excluded source represents

0

Explain why this source is excluded

The reason for exclusion is the fact that data collection is focused on production sites, hygiene plants, repair workshops, large service and sales offices, and certified ISO locations (14001, 50001). Small offices are excluded due to their very low level of emissions as well as difficulty to receive emissions data since many of the facilities are rented and/or shared facilities where invoices are not available and unable to be solely attributed to GEA.

However, GEA expanded its reporting to 9 selected larger offices where data is available to further increase the system boundary to reach 95% as requested by the SBTi.

Explain how you estimated the percentage of emissions this excluded source represents

2,069 tons CO₂ (Scope 1 and 2 Location based) for small offices.

In 2022, GEA reported 63,981 (Scope 1 and 2 Location based) = $2,069/63,981 = 3.2\%$

GEA has estimated the percentage by using the CREM method and impact factors for offices and warehouses based on GEA's actual square meters of office/warehouse size.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

1.220.912

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Currently in development and should be implemented within this year, but no PCFs used for the reported calculation for the time being

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

17.764

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Not in focus due to small share

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

15.089

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Scope 3.3 is split into three categories:

Electricity, consisting of three buckets of emissions:

WTT Emissions:

= Electricity Consumption (MWh) reported and approved x WTT Emission Factor (tCO₂e/MWh) from DEFRA actual reporting year

T&D Emissions:

= Electricity Consumption (MWh) reported and approved x Emission Factor (tCO₂e/MWh) from GHG actual scope 2 grid- SoFi x Loss Rate for T&D Worldbank

WTT – T&D Emissions

= Electricity Consumption (MWh) reported and approved x WTT - T&D Emission factor for generation (tCO₂e/MWh) from DEFRA actual reporting year

District Heat

WTT Emissions:

= District Heat Consumption (MWh) reported and approved x

WTT Emission Factor (tCO₂e/MWh) from DEFRA WTT-Heat and Steam actual reporting year

T&D Emissions:

= District Heat Consumption (MWh) reported and approved x

Emission Factor (tCO₂e/MWh) from GHG actual scope 2 grid- SoFi x

Loss Rate for T&D DEFRA actual year WTT- Heat and Steam of actual year

WTT – T&D Emissions

= District Heat Consumption (MWh) reported and approved x WTT - T&D Emission factor for generation (tCO₂e/MWh) from DEFRA WTT-Heat and Steam actual reporting

year

Other Fuels

The total emissions are the sum of the calculated emissions of each reported and approved consumption of fuel such as Burning Oil, Fuel Oil, Gas Oil, LNG, LPG, Natural

Gas, Diesel and Petrol.

The following calculation should be followed for each kind of reported Fuel:

= Selected fuel consumption (MWh) reported and approved x WTT Emission Factor GROSS CV in (tCO₂e/MWh) from DEFRA WTT- Fuel actual reporting year

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

109.493

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Supplier emission data available but not used for reported calculation in 2022

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

906

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The total emissions are the sum of the calculated emissions of each reported and approved generated waste such as Mixed Municipal Waste, Aqueous Rinsing Liquids, Machining Emulsions, Paper and Cardboard Packaging, Paper and cardboard, Wood, Plastic and Metal.

The following calculation should be followed for each kind of generated waste:

Generated Waste mapped to Product Category DEFRA in (tons) x Emission Factor in (kgCO₂e/ton) from DEFRA Waste Disposal actual reporting year x 1000

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

12.464

Emissions calculation methodology

Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Scope 3.6 is directly reported to GEA in the following categories:

CO2 Emissions emitted by Rental Cars:

Reporting on a yearly basis by GEA Global Travel Management for GEA Contactors such as Europcar, Enterprise, National, SIXT, etc.

Submitted CO2e emissions calculation is based on Greenhouse Gas Emissions Protocol.

CO2 Emissions emitted by Deutsche Bahn (DB):

Reporting on a yearly basis direct by DB via GEA Global Travel Management.

Submitted CO2 emissions are calculated in accordance with DB internal approach. CO2 Emissions calculation is based on Greenhouse Gas Emissions Protocol.

Emissions emitted by GEA Business Flights:

Reporting on quarterly basis by GEA Travel Agency (currently BCD Travel)

Submitted CO2 emissions are calculated in accordance with GHG Protocol

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

6.261

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The calculation of the CO2 emissions resulting from employee commuting is estimated globally on a yearly basis by QHSE Governance based on commuting type, average commuting distance, average yearly commuting day, office working rate, number of employees, average emission factors for Diesel and Petrol (kg CO2e/km) from DEFRA, and average emission factors for local bus, light rail & tram (kg CO2e/km) from DEFRA .

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. Major emissions from leased assets are electricity and other fuels, which are reported in other categories. We are evaluating this matter on a regular basis to check if this category has become material to us.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. Frequently, our customers purchase machinery “ex- works”, meaning they are organizing the transport on their own, resulting in no GHG emission at GEA’s site. We are evaluating this matter on a regular basis to check if this category becomes material to us.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. As GEA is selling “plug-and-win” skids, as well as turn-key solutions, there is no need to additional processing. Even standard equipment has no need to be integrated with efforts as all is aligned to the customers processes during engineering. We are evaluating this matter on a regular basis to check if this category has become material to us.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

35.190.372

Emissions calculation methodology

Average product method

Methodology for direct use phase emissions, please specify

Electricity, fuel and refrigerant leakage

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

We utilize the data from the engineering that we perform together with or for our customers. If no information is available, we rely on historical data and expert evaluations. By doing so, we can ensure, that the highest data quality available is utilized. Recommended emission factors from the International Energy Agency, as well as DEFRA are utilized to transform electricity and fuel demand, as well as refrigerant leakage into CO2e. We allocate the life-time emissions of our machinery (average lifespan in 2022: approx. 18 years).

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. As GEA's products are made of a very high amount of high-quality steel, including precious alloys, it can be recycled very easily, which is also the standard due to the simplicity of melting iron and the prices of the material. Thus, no relevant emissions need to be accounted here. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. All emission relevant GEA equipment is used within the GEA facilities and thus allocated accordingly in other categories. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. GEA has no franchises, so nothing to be accounted here. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. GEA is mostly investing and holding shares to its fully owned subsidiaries, as well as other joint ventures, which emissions have been allocated in all categories. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do not report those in our annual emission reporting. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Within a first analysis to set up our climate strategy, we estimated all emission categories with an experienced consultancy. This category was found to have no material/relevant impact and was thus not included into our GHG emission reporting. The SBTi also validated this, so we do

not report those in our annual emission reporting. We are evaluating this matter on a regular basis to check if this category has become/becomes material to us.

C-CG6.6

(C-CG6.6) Does your organization assess the life cycle emissions of any of its products or services?

	Assessment of life cycle emissions	Comment
Row 1	Yes	Yes, we do calculate relevant LCAs for products. This is for both, internal and external knowledge build-up: For the EU taxonomy, in order to qualify products in dedicated activities as e.g. environmental objective 1, activity 3.6, we conducted LCAs, but also for internal assessments to identify emission hotspots. We usually do so by utilizing the ISO 14040 and 14044 standards, but also 14067 or other, where required.

C-CG6.6a

(C-CG6.6a) Provide details of how your organization assesses the life cycle emissions of its products or services.

	Products/services assessed	Life cycle stage(s) most commonly covered	Methodologies/standards/tools applied	Comment
Row 1	Representative selection of products/services	Cradle-to-grave	GHG Protocol Product Accounting & Reporting Standard ISO 14040 & 14044	GEA documents each phase of the product life cycle in order to record and account for both favourable and detrimental impacts on the natural environment that result from the development and project-planning phases, and when products (and process solutions, if applicable) are purchased, transported, produced, delivered, operated and disposed of. Throughout a product's life cycle, all product information is compiled with a focus not only on the technical but also the commercial and ecological aspects. GEA is thereby seeking to ensure the transparency and traceability of any

				environmental impacts that occur at each stage of the product life cycle. The life cycle perspective has already been documented in detail at many international sites, including Drummondville, Canada (manure technology); Parma, Italy (homogenizers); Plainfield, Austria (animal hygiene products and teat dips); Oelde (separators), Büchen (valves), Bönen (dairy equipment) in Germany; as well as at other sites in the United Kingdom.
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C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0,000014

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

63.981

Metric denominator

unit total revenue

Metric denominator: Unit total

5.165.000.000

Scope 2 figure used

Location-based

% change from previous year

4,7

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Change in revenue

Please explain

Emissions were lower in 2022 because of various energy saving initiatives of GEA like LED lighting, Solar Panels etc

Intensity figure

0,0000108

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

33.018

Metric denominator

unit total revenue

Metric denominator: Unit total

5.165.000.000

Scope 2 figure used

Market-based

% change from previous year

38,5

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption

Other emissions reduction activities

Change in revenue

Please explain

GEA also continued emission reduction initiatives such as LED projects in Germany and solar panel projects conducted in Italy, India, Netherlands and Australia.

Additionally, GEA increased the number of locations reporting market-based emissions.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Other, please specify	1.678
APAC (Asia Pacific incl. China)	

Other, please specify DACH & EE (Germany and Eastern Europe)	17.573
Other, please specify NAM (North America)	5.660
Other, please specify NCE (North Central Europe)	2.055
Other, please specify WE & MEA (Western Europe, Middle East, and Africa)	5.319
Other, please specify LAM (Latin America)	8

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO ₂ e)
GEA Farm Technologies	5.164
GEA Food & Healthcare Technologies	6.741
GEA Liquid and Powder Technologies	2.448
GEA Heating and Refrigeration Technologies	2.466
GEA Separation and Flow Technologies	10.257
GEA Global Corporate Center	5.216

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Other, please specify APAC incl. China	5.862.787	0
Other, please specify DACH & EE	14.230.269	237
Other, please specify NAM	4.261.394	0
Other, please specify NCE	2.484.933	490
Other, please specify WE & MEA	4.737.831	0
Other, please specify LAM	111.604	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
GEA Farm Technologies	4.144.363	181

GEA Food & Healthcare Technologies	7.844.072	0
GEA Liquid and Powder Technologies	4.130.358	490
GEA Heating and Refrigeration Technologies	3.541.858	56
GEA Separation & Flow Technologies	11.826.926	0
GEA Global Corporate Center	201.242	0

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation

Change in renewable energy consumption	18.379	Decreased	358	<p>Our total energy needs (Scope 1 and 2) in the reporting period amounted to 240,646 MWh, 36.6 percent of this was met from green power. That means consumption decreased by 6.3 percent compared with 2021 (see "Energy consumption" table). In 2022, total CO2 emissions (market based) for Scope 1 and Scope 2 were 33,018 tons, a decrease of 35.8 percent from the previous year (see "Greenhouse gas emissions" table). GEA is thus on track to achieve the aforementioned target for Scope 1 and 2.</p> <p>The lower energy consumption in 2022 was due to the intensive measures aimed at reducing natural gas consumption. All of the company's electricity needs worldwide were supplied from renewable sources.</p>
Other emissions reduction activities	343	Decreased	100	<p>Photovoltaics: In order to reduce greenhouse gas emissions, GEA has installed photovoltaic systems for its own electricity generation at its sites in Colognola ai Colli and Quinto di Treviso (Italy), Melbourne (Australia), 's-Hertogenbosch (Netherlands), Suzhou and Tianjin (China), and Vadodara (India). The 250-kilowatt plant in Vadodara, for instance, will save 343 tons of CO2 and more than EUR 23,000 in operating costs per year. Other plants are currently projected or under construction in Janesville (USA), Koszalin (Poland) and Oelde (Germany), in Colognola ai Colli, Parma, Sala Baganza and Uzzano (all Italy).</p>
Divestment	0	No change	0	No divestments done in reporting year
Acquisitions	0	No change	0	No acquisitions done in reporting year
Mergers	0	No change	0	No mergers done in reporting year
Change in output	19	Decreased	2,1	<p>GEAs revenue has increased by 9.8% to 5,165 Mio. €. The lower energy consumption in 2022 was due to the intensive measures aimed at reducing natural gas consumption. All of the company's electricity needs worldwide were supplied from renewable sources, representing 36.6 percent of the total energy requirement.</p>

Change in methodology	0	No change	0	There were no changes in methodology in the reporting year
Change in boundary	0	No change	0	There were no changes in boundaries in the reporting year
Change in physical operating conditions	1.612	Decreased	9,7	We have reduced gas consumption (-14%) and heating oil (-15%) because of internal global reduction programs in the reporting year
Unidentified	0	No change	0	There were no unidentified changes in the reporting year
Other	0	No change	0	There was no other reason for changes in the reporting year

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C-CG7.10

(C-CG7.10) How do your total Scope 3 emissions for the reporting year compare to those of the previous reporting year?

Increased

C-CG7.10a

(C-CG7.10a) For each Scope 3 category calculated in C6.5, specify how your emissions compare to the previous year and identify the reason for any change.

Purchased goods and services

Direction of change

Increased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO₂e)

46.729

% change in emissions in this category

4

Please explain

Increased purchased volumes due to increased output / sales

Capital goods

Direction of change

Increased

Primary reason for change

Unidentified

Change in emissions in this category (metric tons CO₂e)

1.032

% change in emissions in this category

0,06

Please explain

Regular deviations from year to year

Fuel and energy-related activities (not included in Scopes 1 or 2)

Direction of change

Decreased

Primary reason for change

Other, please specify

We had a warm winter in Europe in 2022 in comparison to 2021, resulting in a decreased consumption of natural gas by 14.4%.

Furthermore, the Russia / Ukraine conflict led to the implementation of numerous reduction measures in the reporting year.

Change in emissions in this category (metric tons CO2e)

1.612

% change in emissions in this category

9,7

Please explain

We had a warm winter in Europe (where most of GEA's sites are located) in 2022 in comparison to 2021, resulting in a decreased consumption of natural gas by 14.4%. Furthermore, the Russia / Ukraine conflict led to the implementation of numerous reduction measures in the reporting year.

Upstream transportation and distribution

Direction of change

Decreased

Primary reason for change

Change in supplier or distributor

Change in emissions in this category (metric tons CO2e)

1.046

% change in emissions in this category

0,95

Please explain

Slight shift from air-freight to sea-freight

Waste generated in operations

Direction of change

Decreased

Primary reason for change

Other emissions reduction activities

Change in emissions in this category (metric tons CO₂e)

19

% change in emissions in this category

2,1

Please explain

In 2022, GEA experienced an increase in order intake and sales compared to 2021, nevertheless, the value of waste generated in operations could be reduced

Business travel

Direction of change

Increased

Primary reason for change

Other, please specify

Increase to more normal after Covid restrictions.

Change in emissions in this category (metric tons CO₂e)

6.600

% change in emissions in this category

112,6

Please explain

Business travel increased back to more normal levels in 2022 as Covid restrictions were released and GEA's employees were able to travel again and visit customer sites.

Employee commuting

Direction of change

Decreased

Primary reason for change

Other, please specify

Home office agreement for employees

Change in emissions in this category (metric tons CO2e)

860

% change in emissions in this category

12,1

Please explain

From the year 2021, home office became agreed between GEA and its employees and thereby resulted in less commuting.

Use of sold products

Direction of change

Increased

Primary reason for change

Unidentified

Change in emissions in this category (metric tons CO₂e)

867.898.700

% change in emissions in this category

42,1

Please explain

The increase is mainly driven by increased sales, especially in the region Asia, which has a quite bad grid mix. Additionally, we had big chemical projects to produce Lithium, where a lot of energy is required. The top 3 of these chemical projects alone were responsible for approx. 15% of GEA's 3.11 emissions. Overall, these projects are helping to decarbonize several industries, i.e., the transportation industry by providing lithium for batteries of electric vehicles.

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No

Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	997	147.423	148.420
Consumption of purchased or acquired electricity		87.973	0	87.973
Consumption of purchased or acquired heat		0	4.253	4.253
Consumption of self-generated non-fuel renewable energy		2.852		2.852
Total energy consumption		91.822	151.676	243.498

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No

Consumption of fuel for co-generation or tri-generation

No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

997

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

997

Comment

GEA generated heat using wood pellets in 2 locations

Other biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

GEA does not use other biomass.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

GEA does not utilize other renewable fuels.

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

GEA does not use coal.

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

38.143

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

This consists of burning oil, fuel oil and gas oil, as well as petrol and diesel (100% mineral and bio) and jet fuel. This is used primarily for GEAs fleet and private plane.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

108.026

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

108.026

Comment

This considers LPG and natural gas

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

GEA does not utilize other non-renewable fuels

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

148.420

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

This refers to the complete scope 1 fuel consumption

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	2.852	2.852	2.852	2.852
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Germany

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

34.015

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Germany

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

All German sites have been provided with energy from Enercity as of January 1st, 2022 until December 31st, 2023 and guarantees emission factor zero g CO₂/kwh; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Italy

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

13.851

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Italy

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Wind (57.1%), Solar (17%), Water (23.9%) Biomass (2%)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1.364

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

All Belgium sites have been provided with energy from Eneco starting January 1st, 2021 until December 31st, 2022 and guarantees emission factor zero g CO₂/kwh; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Austria

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

185

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Austria

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country of origin is 100% Austria; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Spain

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

361

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Spain

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Argentina

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

180

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Argentina

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, /2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Australia

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

211

Tracking instrument used

Australian LGC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Australia

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

574

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Canada

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6.590

Tracking instrument used

Other, please specify

CAN-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Canada

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

France

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

852

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

France

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

India

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2.492

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

India

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January, 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Netherlands

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3.805

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Netherlands

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

New Zealand

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

721

Tracking instrument used

Other, please specify

NZECS

Country/area of origin (generation) of the low-carbon energy or energy attribute

New Zealand

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

China

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

5.936

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

China

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Poland

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2.953

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Poland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Russian Federation

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

339

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Russian Federation

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Singapore

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

273

Tracking instrument used

TIGR

Country/area of origin (generation) of the low-carbon energy or energy attribute

Singapore

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Slovenia

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

349

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Slovenia

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

South Africa

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

702

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

South Africa

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

Switzerland

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

200

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Switzerland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

504

Tracking instrument used

REGO

Country/area of origin (generation) of the low-carbon energy or energy attribute

United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

8.872

Tracking instrument used

US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Since January 1st, 2022 GEA purchases 100% renewable electricity only; approved by third party auditor (see section C10).

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Germany

Consumption of purchased electricity (MWh)

34.015

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

34.015

Country/area

Italy

Consumption of purchased electricity (MWh)

13.851

Consumption of self-generated electricity (MWh)

1.062

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

14.913

Country/area

Denmark

Consumption of purchased electricity (MWh)

2.646

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

2.867

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

5.513

Country/area

Austria

Consumption of purchased electricity (MWh)

185

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

185

Country/area

Poland

Consumption of purchased electricity (MWh)

2.953

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

56

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

3.009

Country/area

Russian Federation

Consumption of purchased electricity (MWh)

339

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

1.330

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1.669

Country/area

India

Consumption of purchased electricity (MWh)

2.492

Consumption of self-generated electricity (MWh)

23

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2.515

Country/area

Singapore

Consumption of purchased electricity (MWh)

273

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

273

Country/area

Australia

Consumption of purchased electricity (MWh)

211

Consumption of self-generated electricity (MWh)

112

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

323

Country/area

New Zealand

Consumption of purchased electricity (MWh)

721

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

721

Country/area

Slovenia

Consumption of purchased electricity (MWh)

350

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

350

Country/area

Switzerland

Consumption of purchased electricity (MWh)

200

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

200

Country/area

China

Consumption of purchased electricity (MWh)

5.936

Consumption of self-generated electricity (MWh)

1.240

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

7.176

Country/area

Brazil

Consumption of purchased electricity (MWh)

574

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

574

Country/area

Canada

Consumption of purchased electricity (MWh)

6.590

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6.590

Country/area

United States of America

Consumption of purchased electricity (MWh)

8.872

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

8.872

Country/area

Belgium

Consumption of purchased electricity (MWh)

1.364

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1.364

Country/area

Netherlands

Consumption of purchased electricity (MWh)

3.805

Consumption of self-generated electricity (MWh)

415

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

4.220

Country/area

France

Consumption of purchased electricity (MWh)

852

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

852

Country/area

Spain

Consumption of purchased electricity (MWh)

361

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

361

Country/area

South Africa

Consumption of purchased electricity (MWh)

702

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

702

Country/area

Argentina

Consumption of purchased electricity (MWh)

180

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

180

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

504

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

504

C-CG8.5

(C-CG8.5) Does your organization measure the efficiency of any of its products or services?

Measurement of product/service efficiency	Comment
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Row 1	Yes	Yes, annually, we revise the energy consumption of certain product groups in order to be able to calculate our use phase emissions. At the same time, we have introduced an environmental label, called Add Better, pointing out specific energy saving solutions.
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C-CG8.5a

(C-CG8.5a) Provide details of the metrics used to measure the efficiency of your organization's products or services.

Category of product or service

Heating & cooling systems

Product or service (optional)

The products are

- Industrial heat pumps and compressors to replace gas boilers or oil-fired heating systems, which run on fossil fuels,
- efficient heat recovery systems in our project business to recover heat in a production process to be used in another part of this production process.

% of revenue from this product or service in the reporting year

1

Efficiency figure in the reporting year

686.000

Metric numerator

tCO₂e

Metric denominator

Other, please specify
year

Comment

Through the use of industrial heat pumps and compressors in place of gas boilers or oil-fired heating systems, which run on fossil fuels, as well as with efficient heat recovery systems in our project business, GEA was in 2022 able to avoid emissions from its customers amounting to around 686,000 tons of CO₂ equivalents over the entire product life cycle. Heat pumps are significantly more energy-efficient because they make use of waste heat rather than allowing it to dissipate. In addition, they are powered exclusively by electricity, which will increasingly be generated using emission-free, renewable energy sources going forward. These net avoided emissions are calculated according to the World Resources Institute (2019): Estimating and reporting the comparative emissions impacts of products and Net-Zero Compatible Innovations Initiative (2020): The Avoided Emissions Framework (AEF) with the consequential approach. We even expect a ramp up of these avoided emissions as the demand for sustainable solutions will raise. And we will also roll-out the metric to other products.

Category of product or service

Heating & cooling systems

Product or service (optional)

A standard separator is cooled with fresh tap water, which is dumped afterwards according to hygiene regulations as it was in contact with the product and thus contaminated. With the new cooling unit, this water is now circulated in a close loop and thus saved. The GEA Centrifuge Water Saving Unit is a compact add-on unit that compensates waste of fresh tap water by recirculating used water, available both for new installations and retrofitting of separator.

% of revenue from this product or service in the reporting year

0

Efficiency figure in the reporting year

99

Metric numerator

%

Metric denominator

unit of production

Comment

As the product was launched in 2022, there is not yet significant revenue share. Compared to GEAs total revenue in 2022 of approx. 5.2 bn€ the % of revenue is close 0.

Depending on the individual machine setup, the GEA Centrifuge Water Saving Unit enables our customers to save around 1 million liters of fresh water per year by reusing and recycling resources that are already part of the production process.

Sample calculation (coolant requirement for hood, solids catcher and drive: 180 l/h – daily operating time 20 h/day – annual production days 350 days/a):

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

Due to the tiny size* and low installation efforts, neither large investment costs nor extensive conversions or shutdowns are necessary.

Installation takes no more than half a day, and the unit requires little maintenance during operation. The fast payback time also makes the unit a cost-effective alternative to larger wastewater treatment plants.

*new machine version: 380 (w) x 380 (l) x 485 (h) mm / retrofit version: 380 (w) x 580 (l) x 495 (h) mm

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Waste

Metric value

13.437

Metric numerator

tons

Metric denominator (intensity metric only)

0

% change from previous year

0,7

Direction of change

Increased

Please explain

The total volume of waste generated in the reporting period was 13,437 tons, an absolute increase of 0.7 percent compared with the previous year. The reasons for this were increased production activities, a major archive cleanup and a collection campaign for metal scrap.

Overall, waste generation almost stable. GEA's target is to reduce waste especially at production sites (-2,1% YoY) and to increase the waste recovery rate. Furthermore we have started a project for circular economy (5R).

Description

Other, please specify
Water Consumption

Metric value

50,21

Metric numerator

thousand cubic meters

Metric denominator (intensity metric only)

0

% change from previous year

2,5

Direction of change

Decreased

Please explain

GEA is actively trying to reduce its water consumption and increase its re-use/recycling rate of water. GEA has set a target to reduce total water consumption by 2,1%, so for 2022 this Target has been achieved. GEA is focusing on water conservation projects aimed at reusing water/reducing water consumption at locations located in water stressed areas, this includes production sites in Vadodara and Bangalore, India.

Description

Other, please specify

of sites certified under ISO 14001

Metric value

40

Metric numerator

number of sites

Metric denominator (intensity metric only)

0

% change from previous year

1

Direction of change

Increased

Please explain

ISO 14001 is an international environmental management standard that stipulates the requirements to be met by an environmental management system and forms part of the family of standards applicable to environmental management. Step by step additional GEA companies are being integrated into the umbrella certificate with the company seeking to cover the entire range of production sites within the three management systems ISO 9001, ISO 14001, and ISO 45001 by 2026. This sites that are certified include production sites, service sites, sales sites and headquarters. In 2021, due to Covid, GEA was not able to extend its ISO 14001 certification.

Description

Other, please specify

of Sites Certified under ISO 50001:2011/2018.

Metric value

15

Metric numerator

number of sites

Metric denominator (intensity metric only)

0

% change from previous year

0

Direction of change

No change

Please explain

ISO 50001 governs the establishment of a corporate energy management system for the purpose of increasing energy efficiency in the long term. Certification under ISO 50001:2018 is performed at site level. Unrelated to certification, energy-efficiency measures, energy projects and measuring energy consumption are grouped and performed in cooperation with QHSE.

By 2026, GEA aims 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.

Description

Waste

Metric value

9.595

Metric numerator

12,892

Metric denominator (intensity metric only)

13,437

% change from previous year

0

Direction of change

No change

Please explain

GEA created a new target in 2021 regarding waste as part of GEA's Mission 26 sustainability strategy. The target relates to the waste recovery rate which is calculated and approved by external consultants. The target of this KPI is to be higher than 95% and GEA has met this target in 2022 as well as in 2021.

The formula to calculate the target is the sum of recycled material, treated/reused material and incinerated waste with energy recovery divided by total generated waste.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	<p>Yes, sustainability is one of our four key pillars in R&D, with different sub- categories, i.e., energy reduction, water consumption and circular economy.</p> <p>In 2022, we spent 12.7 million € on research and development in sustainability, which corresponds to 9.0% of GEA's total R&D expenditure.</p>

C-CG9.6a

(C-CG9.6a) Provide details of your organization's investments in low-carbon R&D for capital goods products and services over the last three years.

Technology area

Carbon capture, utilization, and storage (CCUS)

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

1

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

2

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In the reporting year 2022, we stated a "0" (see above) as we do not disclose the R&D investment figure on product level for confidentiality reasons.

CCU will be a major driver to decarbonize high- emission processes like cement, which can only be replaced by more sustainable processes to some extent (please see C2.4a Opp. 4) . CCU will help to reduce the environmental impact of these processes without interfering into the products quality. Due to the high need of circular carbon, CCU and CCS will play a big role to substitute fossil carbon sources as oil. At GEA, we want to create sustainable processes across all industries as we see our process know-how being a major advantage. We want to share and support a joint transition towards more sustainable industries.

Our business strategy "Mission 26" shall, inter alia, empower our customers to achieve their climate commitments. Carbon capture is a perfect example how our technology enables the customer's decarbonization.

Technology area

Low to medium temperature heating

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

1

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

2

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In the reporting year 2022, we stated a "0" (see above) as we do not disclose the R&D investment figure on product level for confidentiality reasons.

GEA launched an initiative to meet customer demands in terms of sustainability. 'SEnS' (Sustainable Engineering Solutions) stands for long term energy solutions offering lower energy consumption levels, minimized operating costs, as well as reduced carbon footprint that may go as far as climate-neutral emissions. By relying on energy-efficient cooling and heating solutions as well as natural refrigerants like ammonia and CO₂, plant operators may generate up to 90% of their required heat from waste heat produced during the cooling process. This will lower their energy costs by up to 30%. GEA's SEnS experts take a holistic approach along the entire process chain in their quest to optimize both the demand for and the use of heating and cooling for realizing significant savings in energy.

In this context, SEnS provides solutions for operators of both planned and existing plants and facilities. For this purpose, a GEA team of experts in process engineering, sustainability, cooling and heating technology is working on a comprehensive proposal for a more sustainable and integrated process solution within the framework of this initiative.

In 2022, GEA generated roughly 70 % of its sales with the food and beverage industry which is a very greenhouse gas emission intense industry and needs support on the transition to a carbon-neutral production. We are one of the leaders for food-processing technology and are the only one having at the same time utility expertise inhouse. This provides GEA with a unique selling point as we can offer our customers processing and utility expertise out of one hand. Our business strategy "Mission 26" shall, inter alia, empower our customers to achieve their climate commitments. SEnS is a perfect example how our technology enables the customer's decarbonization and hence our Scope 3.11 emissions reduction.

Technology area

Other, please specify

Further products and solutions with focus on high GHG emission caused by electricity, fuels, steam, and compressed air consumption. These technologies are the basis to run efficient processes for the food, beverage, and pharmaceutical industries.

Stage of development in the reporting year

Applied research and development

Average % of total R&D investment over the last 3 years

3

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

7

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In the reporting year 2022, we stated a "0" (see above) as we do not disclose the R&D investment figure on product level for confidentiality reasons.

Alongside product functionality and cost effectiveness, sustainability aspects are the main considerations in product and process development due to its long term on customer site. Therefore, fulfillment of sustainability requirements for energy and emission reduction are compulsory when our development process is executed. In doing so, we are enabling our customers to reduce their emissions and at the same time we achieve our climate commitments regarding emissions by low-carbon products, i.e. Scope 3.11 emission reduction. Our business strategy "Mission 26" shall, inter alia, empower our customers to also achieve their climate commitments. Our R&D activities in terms of energy efficiency are a perfect example of how our technology enables the customer's decarbonization and hence our Scope 3.11 emissions reduction.

Consequently, our development activities cover hardware optimization, software development and process design for whole plants. For example, we continuously integrate the latest generation of high-efficient electric direct drives throughout the whole separation portfolio (Marine separator).

Furthermore, a specific software solution for filtration equipment reduces the run time and speed of pumps for energy reduction (Smart

Filtration).

By the utilization of the developed high-temperature industrial heat pump technology, we do not only electrify fossil- fuel processes, but also gain cooling energy which can be used in food processing (AddCool).

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

-  GEA22_CDP Verification (003).pdf
-  Auditors site verification GEA Canada.pdf
-  GEA_Limited Assurance Statement Auditor_2022.pdf
-  GEA_Annual Report 2022.pdf
-  Auditors site verification GEA India.pdf
-  GEA_Sustainability Report 2022.pdf

Page/ section reference

Please see: Environmental reporting in GEAs Annual Report 2022, pages 100ff; limited assurance report of the independent auditor regarding the non-financial group statement (pages 263ff of the annual report); as well as the CDP Verification document from GEA's external auditor for the assured data for 2022, which includes Scope 1.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process





Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

-  GEA22_CDP Verification (003).pdf
-  GEA_Limited Assurance Statement Auditor_2022.pdf
-  GEA_Annual Report 2022.pdf
-  GEA_Sustainability Report 2022.pdf

Page/ section reference

Please see: Environmental reporting in GEAs Annual Report 2022, pages 100ff; limited assurance report of the independent auditor regarding the non-financial group statement (pages 263ff of the annual report); as well as the CDP Verification document from GEA's external auditor for the assured data for 2022, which includes Scope 2 (market-based).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process



Status in the current reporting year


Complete


Type of verification or assurance

Limited assurance

Attach the statement

-  GEA22_CDP Verification (003).pdf
-  GEA_Limited Assurance Statement Auditor_2022.pdf

 GEA_Annual Report 2022.pdf

 GEA_Sustainability Report 2022.pdf

Page/section reference

Please see: Environmental reporting in GEAs Annual Report 2022, pages 100ff; limited assurance report of the independent auditor regarding the non-financial group statement (pages 263ff of the annual report); as well as the CDP Verification document from GEA's external auditor for the assured data for 2022, which includes Scope 3.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100


C10.2




(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C9. Additional metrics	Other, please specify Number of ISO Certifications	ISAE3000	GEA's external auditor also audits and verifies the number of GEA locations that has been certified under ISO, including ISO 14001 (environmental management) and ISO 50001 (energy management).  1, 2, 3, 4, 5

C9. Additional metrics	Waste data	ISAE3000	GEA's external auditor also audits GEA's waste figures, including waste diverted from disposal by method of recovery and waste forwarded for disposal by disposal process.  1, 2, 3, 4, 5
C6. Emissions data	Other, please specify Calculation of greenhouse gas emissions	UK DEFRA 2019-2022	Where applicable, the calculation of greenhouse gas emissions was based on the emission factors of UK DEFRA 2019-2022.  6, 7
C6. Emissions data	Other, please specify Market based emissions	GHG protocol Scope 2-guidance ; GHG IEA 2020	Where contract-specific emission factors were not available, GHG IEA 2020 emission factors were used and calculated using the location-based method.  6, 7


 1Auditors site verification GEA Canada.pdf


 2GEA_ISO 14001.pdf

 3GEA_ISO 45001.pdf

 4Auditors site verification GEA India.pdf

 5GEA_ISO 9001.pdf

 6GEA_Limited Assurance Statement Auditor_2022.pdf

 7GEA_Sustainability Report 2022.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Geothermal

Type of mitigation activity

Emissions reduction

Project description

The Project Ulubelu Unit 3 – 4 PT. Pertamina Geothermal Energy ("Project") developed by PT. Pertamina Geothermal Energy ("Project Developer") is a geothermal power plant in Lampung, Indonesia. The Project's net installed capacity is 2 x 55 MW, while its total gross power output installed capacity will be 2 x 58 MW. An estimated power generation of 867 GWh per annum (based on the predicted load factor of 90% multiplied with the net installed capacity) will be supplied to the grid operator. The key purpose of the project is to utilize the geothermal resources of the mountain areas surrounding Ulubelu to generate electricity to be transmitted to the Sumatera Interconnected grid ("Grid") through the Perusahaan Listrik Negara (PLN, state-owned electricity company) interconnection point in the Ulubelu geothermal project area. The Ulubelu geothermal field will supply steam to the 110 MW Ulubelu I power plant (units 1 and 2, owned by PLN) and the Project, which is Ulubelu II power plant. Both power plants will not share the same steam wells and steam header during their operational time. As a geothermal company, PGE business has been focusing on geothermal resource development and steam production. Most of produced geothermal steam is sold to power plant owner. Ulubelu II power plant will be the second total project by PGE, to have a specific Power Purchase Agreement with PLN. The project is contributing to sustainable development of Indonesia. Specifically, the project:

- Is increasing community development and corporate social responsibility at Ulubelu geothermal area, as this project shows great improvement to existing geothermal field operation (social sustainability)

- Enhances the local investment environment and therefore improves the local economy, increasing employment opportunities as 30 – 40 persons will be permanently employed for the project activity operation, another 40 persons will be employed for the Ulubelu geothermal field operation, and the construction of the project provides employment in the construction sector (economic sustainability)
- Diversifies the sources of electricity generation, which is important for meeting growing energy demands and facilitates the transition away from diesel and coal-supplied electricity generation (environmental sustainability)
- Makes greater use of geothermal renewable energy generation resources for sustainable energy production with leading local contractor (technology sustainability).

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

10.803

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2018

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

Gold Standard

Method(s) the program uses to assess additionality for this project

Investment analysis

Market penetration assessment

Other, please specify

sensitivity analysis

Approach(es) by which the selected program requires this project to address reversal risk

Other, please specify

No risk of reversal as it is a renewable energy project.

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Other, please specify

There are no project leakage emissions from the project activity as it is a renewable energy project.

Provide details of other issues the selected program requires projects to address

All negative environmental impacts are subject to mitigation measures which are detailed in the project documents. Local stakeholder consultations were carried out with no negative comments provided by the participants. With regards to the economic impact, the projects increase employment opportunities in the area where the projects are located, improving the local economies.

Comment

Project type

Hydro

Type of mitigation activity

Emissions reduction

Project description

The CPA involves the construction of the Thoong Cot 2 Hydropower plant, which is located on Quay Son River in Chi Vien commune, Trung Khanh district, Cao Bang province of Viet Nam. The CPA's installed capacity and estimated annual gross power generation is 3.5 MW and 14,710 MWh, respectively. The project's purpose is to supply renewable electricity to the national grid via the Power Purchase Agreement signed with the Electricity Corporation of Viet Nam (EVN). The net electricity generated from this project - annual estimated volume is 14,415 MWh - will be supplied to the national grid. The CPA will generate renewable power, which will displace parts of the electricity otherwise supplied by fossil fuel fired power plants. Thus, GHG emission reductions are achieved via this CPA. The project's contributions to the

sustainable development of the local area as well as the host country are as follows:

General contributions towards national sustainable development:

- In recent years, Viet Nam has suffered a critical electricity shortage as a consequence from rapidly increasing demand and insufficient supply, thereby imposing negative impacts on economic growth as well as on daily lives of people.
- Reducing reliance on exhaustible fossil fuel based power sources and also reducing the import of fuels for the purpose of power generation.
- Modern and highly efficient turbines and generators are being used in the project and the power transmission will be at high voltage to ensure low losses. The CPA will contribute to accelerate the deployment of renewable energy technologies in Viet Nam.

Contributions towards local sustainable development:

a) Economic well-being

- Once implemented, this CPA will increase the industrial share in the economic structure of Cao Bang province – a poor mountainous province in Viet Nam.
- By supplying a stable and high electric output, this CPA will facilitate the industrialization process of the province.

b) Social well-being

- This CPA will contribute directly to improve the low-quality infrastructure systems of Chi Vien commune, where only minority ethnics settle.
- The communication system and clean water treatment serving for workers of the project during both construction and operation phases will be shared with local people. Besides, new jobs will be created during construction and operation phases. The CPA could result in the employment of the local people for the construction and operation of the hydropower plant later on.

Credits canceled by your organization from this project in the reporting year (metric tons CO₂e)

40.000

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2015

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

Gold Standard

Method(s) the program uses to assess additionality for this project

Consideration of legal requirements

Investment analysis

Barrier analysis

Other, please specify

common practice analysis

Approach(es) by which the selected program requires this project to address reversal risk

Other, please specify

No risk of reversal as it is a renewable energy project.

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Other, please specify

There are no project leakage emissions from the project activity as it is a renewable energy project.

Provide details of other issues the selected program requires projects to address

All negative environmental impacts are subject to mitigation measures which are detailed in the project documents. Local stakeholder consultations were carried out with no negative comments provided by the participants. With regard to the economic impact, the projects increase employment opportunities in the area where the projects are located, improving the local economies.

Comment

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Social cost of carbon

Benchmarking against peers

Price with material impact on business decisions

Objective(s) for implementing this internal carbon price

Change internal behavior

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

Stress test investments

Scope(s) covered

Scope 1

Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The price shall be annually adapted based on the market environment, CO₂-prices and stated policies.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO₂e)

126

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO₂e)

126

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Risk management

Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify

price on carbon is included in the investment sheet for CapEx investment decisions >50 k€ in all business units in order to drive emission reductions within Scope 1&2.

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

The introduction of an ICP within GEA is in line with the progressive ambitions to reduce carbon emissions from our business activities. The ICP functions as an effective mechanism to achieve our reduction targets by embedding the climate strategy in our core business decisions. We thereby do not only create awareness internally but also externally and answer the demands of our customers and investors for a future proof business strategy.

An ICP - respectively a shadow price - is incorporated in the CAPEX decision process. With this, GEA anticipates future costs of carbon and includes them into the investment decision, factors in climate risks and opportunities and strengthens the business case of sustainable investments.

A shadow price on carbon is included in the investment sheet for CAPEX investment decisions >50 k€ in all business units in order to drive emission reductions within Scope 1 & 2. This aims to foster deep emissions cuts, playing a crucial role in our goal to reduce emissions drastically until 2040.

An extended carbon analysis within the regular CAPEX application process as well as the calculation of an additional case within the investment sheet is obligatory for those investments. In the additional case, shadow carbon costs/ savings need to be incorporated, based on the annual increase/ decrease in CO₂-emissions and the shadow price. This leads to additional climate-related investment KPIs (Dynamic Payback Period, Net Present Value, IRR).

As a result, the ICP improves the financial KPIs for CO₂-decreasing investments and downgrades the KPIs for CO₂-increasing investments and will be the foundation for decision makers within GEA.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change
Provide training, support, and best practices on how to set science-based targets
Climate change performance is featured in supplier awards scheme

% of suppliers by number

1

% total procurement spend (direct and indirect)

23,8

% of supplier-related Scope 3 emissions as reported in C6.5

3,8

Rationale for the coverage of your engagement

Most important / critical suppliers to GEA are classified as “preferred suppliers” (230 preferred suppliers out of 37.000 in 2022, therefore, 1% is entered). Those have to fulfill GEA’s sustainability criteria by the end of 2026 at the latest. Amongst 4 criteria, GEA requires “preferred suppliers” to share an Ecovadis Scorecard, which covers climate-related topics. Below-average performance must be improved within a year based on an action plan. Additionally, suppliers are requested to start Scope 1, 2 and 3 tracking and share relevant data with GEA (e.g., product carbon footprints for products delivered to GEA). While those suppliers make only 23.8% of the spend today, they have a special platform for growth supported by the business. By 2026, the requirement applies to preferred/most important/critical suppliers. It is a publicly available information that each preferred supplier has been requested to share the Ecovadis scorecard covering climate-related topics, labour and human rights, environment, ethics and sustainable procurement and requirements for suppliers.

Impact of engagement, including measures of success

Fulfillment of sustainability criteria is a precondition to be a preferred supplier for GEA from 2026 on. The Ecovadis score is one selection criteria in the supplier selection process. GEA reports progress on this goal in its yearly sustainability report. In 2022, it states that alongside GEA’s efforts to produce responsible, GEA is committed to making the greatest possible contribution to the United Nations Sustainable Development Goals (SDGs) by defining and increasingly applying sustainability criteria in the selection, evaluation, and development of our suppliers (reference: GEA Sustainability Report 2022, page 90). Moreover, GEA focused on the topic of sustainability at its annual Supplier Summit. There, the Sustainable Procurement strategy and vision as well as the four sustainability criteria were published and presented and the invited

suppliers were informed about the future requirements regarding sustainability in procurement at GEA. With regards to the criterion to undergo the sustainability assessment by EcoVadis, this criterion has already been carried out for 68% of the purchasing volume for GEA's preferred suppliers and the results made available to GEA (see GEAs Sustainability Report, page 88). The impact of the engagement could be improved sustainability awareness / behaviour of suppliers or an improved Ecovadis scorecard of the suppliers. The required threshold for success until 2026 is that all of the preferred suppliers (100%) have completed the Ecovadis scorecard.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

0,01

% total procurement spend (direct and indirect)

1

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

GEA kindly request the supplier's participation in reporting the greenhouse gas (GHG) emissions associated with the goods and services a supplier provides to GEA (Scope 3.1). By collecting this data, GEA is able to calculate more accurately its own Scope 3 emissions and work collaboratively with its suppliers towards emissions reduction. By using a supplier questionnaire regarding GHG emissions, we are striving for cooperation and joint improvements in the future. The purpose of this engagement is to develop standards with suppliers on how to report and use product carbon footprint data. This serves as a first step to request product carbon footprints (PCFs) from a broader range of suppliers and

use the data for more accurate Scope 3 accounting and reduction tracking. To start with, suppliers with a significant share in GEA's Scope 3.1 emissions are selected to create and share PCFs with GEA already today. We take into account purchasing volumes and countries of origin, energy consumption profiles and cost structures of our production sites as well as key target markets. The commitment to share selected GHG emission data is requested by all preferred suppliers by 2026.

Impact of engagement, including measures of success

Currently, we are piloting a supplier questionnaire regarding information collection on GHG emissions and specific carbon footprints, starting with seven suppliers. The questionnaire is based on relevant requirements of the GHG Protocol as well as the WBSCD Pathfinder Framework. Data is used to "learn" how to use primary emission data from suppliers (piloting) and combine it with spend-based emission data. This is part of the supplier sustainability strategy and is planned to be rolled-out until 2026. It is one of our sustainability criteria for preferred suppliers. The measure of success is that all preferred suppliers return the questionnaire completed (100%) as well as qualitatively that a better understanding of the emission drivers is created - both at GEA and at the suppliers. All preferred suppliers shall be committed to share selected GHG emission data for product-life-cycle-assessments.

The impact of engagement could be reduced emissions in the future.

Sustainability is also the focus of GEA's yearly supplier summit:

- In 2022, we used 50% of the air time in the event to disclose our overall ESG ambition at GEA, set clear targets for our suppliers and started a dialogue around the collaboration to achieve those targets
- In 2023, we are again using this platform to celebrate our best performing suppliers with sustainability being one independent category for the "GEA Suppliers Awards", and we will continue the dialogue with an innovation forum centered around ESG.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation

Other, please specify

Joint researches, e.g. in brewery business

% of customers by number

1

% of customer - related Scope 3 emissions as reported in C6.5

4

Please explain the rationale for selecting this group of customers and scope of engagement

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 also in the brewery business, i.e., GEA provides the machinery and production processes for beer. The brewery business is highly water consuming and an energy intense business. Our customers are approaching GEA to come up with resource efficient solutions. For example, our heat pumps, compressors and waste heat recovery units sold by GEA in 2022 alone, as reported in 2022, allow our customers to achieve avoided emissions of around 686,000 tons of CO₂ equivalents over the life cycle of these solution, as they replace natural gas-fired heating systems and other components such as fans required for the production of brewery products. 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.

We have identified via a global market research questionnaire sent to 18 brewery multinational companies the customer needs and found out that GEA can support them by adding unique competences in process knowledge, plant and utilities knowledge across the divisions in order to identify the status quo of the plant, the feasibility of optimization measures in the carbon-footprint and water consumption and to suggest a roadmap. The objective of the cooperation is to exchange on joint development projects on sustainability incl. energy efficiency and water consumption.

For example, together with a key customer in the brewery business - i.e. one of the largest brewery companies in the world (name is confidential as NDA's are in place) - we have a collaborative research for development based on a cooperation contract on water usage and energy demand in their production facilities. The impact of this cooperation is significant as this research influences the entire brewery industry. The cooperation is about in the field of CIP (cleaning in place). The objective is to reduce carbon emissions, water consumption and product losses. There are conversations on a bi-weekly jour fixe to discuss the status, the roadmap for product development and execution of the projects.

Impact of engagement, including measures of success

GEA's customer base is quite diverse with approx. 20.000 customers worldwide and the largest customer being responsible for 3% of GEA's global revenue and the Top 200 add up to 50%. We provide solutions for sophisticated production processes also in the brewery business, i.e., GEA provides the machinery and production processes for beer. The brewery business is highly water consuming and an energy intense business. Our customers are approaching GEA to come up with resource efficient solutions. We've identified via a global market research questionnaire sent to 18 brewery multinational companies, which represent 50% of the global brewery market, the customer needs and found out that GEA can support them by adding unique competences in process knowledge, plant and utilities knowledge across the divisions in order to identify the status quo of the plant, the feasibility of optimization measures in the carbon-footprint and water consumption and to suggest a roadmap. The objective of the cooperation is to exchange on joint development projects on sustainability incl. energy efficiency and water consumption. For example, together with a key customer in the brewery business - i.e., one of the largest brewery companies in the world (name is confidential as NDA's are in place) - we do have that collaborative research for development based on a cooperation contract on water usage and energy demand in their production facilities. The impact of this cooperation is significant as this research influences the entire brewery industry. The cooperation is, i.e., in the field of CIP (cleaning in place). The objective is to reduce carbon emissions, water consumption and product losses. The business unit of GEA doing brewery business, represented 4% of GEA's Scope 3.11 emission.

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

1

% of customer - related Scope 3 emissions as reported in C6.5

4

Please explain the rationale for selecting this group of customers and scope of engagement

GEA's customer base is quite diverse with approx. 20.000 customers worldwide and the largest customer being responsible for only 3% of GEA's global revenue and the Top 200 add up to 50%. With GEA being a turn-key-supplier for complex production processes with decades of expertise in the brewery industry, our customers see us not only as a supplier, but as a key partner when it comes to achieve their targets on climate. Our collaboration, which was kicked off 2021 and speeded up in 2022, is called "Green Partner". To better understand their obstacles,

GEA regularly invites and includes key customers to take part in the development of new products, solutions and services. This is to 100% meet the expectations of our customers in terms of our products in the value chain. These customers are selected based on the size of their production capacity and the product we want to design and often it depends on the respective end-product or the geographical situation. Their total production capacity of the partners involved represent approx. 50% of the worldwide brewery market, but only 4% of our Scope 3 emission. The customers are involved at two different stages within an agile development week: At the first day, many customers are interviewed one by one regarding their challenges in production. After that, the development team takes 2-3 days to work on a suitable solution. At the last day of that week, all invited customers and/or new customers get the results presented. GEA requests their feedback and where to focus on regarding the next design phase. At the same time, we enable our customers to quickly understand the impact of savings through the process chain via calculators which are available at our website. We do so, because we at GEA are sure, that the challenge of climate change can only be handled together, and we want to use our knowledge to enable our customers to do better. If a customer needs support on running the diagnostics, we offer solutions or services to assist. The range is from providing software to ease the process optimization to GEA audits with concrete improvement suggestions. The goal is to reduce the energy consumption as far as possible without changing equipment. As this is quite challenging, an improvement of efficiency/ decrease of energy consumption by 10% is a huge win.

Impact of engagement, including measures of success

The measure of success depends on the prerequisites of our customers: Those who foster carbon neutral production processes actively request energy and water efficient solutions. GEA is doing an audit. The results are laid down in a tailored, individual report incl. suggestions on how to improve and with which threshold. Due to the fact that GEA's engineering solutions are customized, there is no fixed threshold. Each production facility must be assessed on an individual basis. Thus, the thresholds are aligned among GEA and the customer on an individual basis. Together with our customer, which is one of Germany's leading producers in their industry, we optimized their processes, resulting in increased production rates, so better utilization of existing equipment, reduced waste and reduced energy demand. The energy demand went down by 4.2%, which is a huge success looking at the overall energy consumption and large production processes. Given the size of that plant this results in huge savings of GHG, especially if you also take the reduced water into consideration.

By involving our customers into the development process, GEA is gaining insights into their internal processes incl. decision making processes on sustainability. Another measure of success is that GEA improves the production processes without any negative impact towards the quality of the end product. Keeping the quality is absolute and key.

Furthermore, GEA is adding the most energy efficient solution to the request for proposal even if the customer has requested a conventional product. On top of that, regarding our energy efficient solutions called SEnS (Sustainable Engineering Solutions), we calculate the project

related avoided emissions to visualize the improvements for our customers. We do so by calculating financial advantages, but also saved CO₂, through a tool, which is audited by an independent third party.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

As GEA, we strongly believe that our solutions can and will help reduce GHG emissions at our customer site. But to do so, we need to educate our customers regarding the possible energy and emission saving machinery and solutions. We offer this kind of trainings and education to all customers as we want to shift from a linear supplier-customer relationship towards a more collaboration mode as GEA strongly believes, that we have to join forces to tackle climate change. As this information are shared via webinars, which are announced on our website, 100% of our customers have access to both, the webinar, as well as the recordings, representing 100% of our emission. To further close the gap to our customer, GEA Digital has set up a customer success community to have a closer collaboration and develop sustainable solutions collaboratively. This ensures, that the sustainable solutions are later adopted and utilized by our customers, helping to decarbonize worldwide processes and products.

Impact of engagement, including measures of success

We utilize our holistic process know-how during the engineering or designing phase of production factories. More specifically, we offer our customers a so call (pre-)engineering, i.e. without providing equipment to ensure the sustainable process design. The impact of GEA educating customers regarding sustainable alternatives is that less emissions occur. A quantitative threshold could be that 100% of customers have access to the webinars or that a specific number of sustainable products is sold in relation with the information from the webinars. By doing so, we reduce our Scope 3.11 emission footprint but, more importantly, customers Scope 1 and Scope 2 footprint.

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

What is the value of an engineering solution that consumes less energy and fewer natural resources – that operates more cleanly, efficiently and reliably over a longer lifespan? Is it the lower cost of ownership and higher operational resilience? Is it the improved health of the planet? It's hard to put a price tag on a better future. So we've decided to put a label on it. Our Add Better label calls attention to GEA solutions that are significantly better than their predecessor product when it comes to efficiency and environmental impact. These belong to our most resource-efficient solutions – this is sustainability value.

Impact of engagement, including measures of success

Transparency empowers our customers to make smart decisions – and real progress – towards a greener future.

Example: GEA AddCool is a cost-effective heat pump solution for spray dryers, allowing dairies and other food industries to substantially improve process sustainability. Innovative GEA technology, backed by decades of experience in heat pumps and spray drying, can enable up to 49% less energy consumption and typically 50-80% reduced carbon footprint. We encourage customers to partner with us to meet their sustainability goals and enhance their performance.

We track the success of the Add Better label according to our sales figures.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Our goal is to shift from a linear customer-supplier relationship to a more solution-based collaboration to tackle climate change and other sustainability challenges jointly. We do so by aligning our goals with our customers and suppliers- this include committing to the SBTi and catching up on existing customer demands. This also includes academical partners and other networks. We do so by joining networks, e.g., "it's OWL" to generate solutions, which are not only interesting for our business. Together with partners of other industries, e.g., the creation of an intelligent assistance system for the calculation and reduction of GHG along the value chain. We do so by collaborating with known players as Miele, PHOENIXCONTACT and universities: In the Technology Network it's OWL, around 200 companies, research institutes and organisations join forces to develop solutions for the digital transformation of SMEs, including topics of sustainability within the value chain, i.e., the automated PCF calculation. "All across Europe, it's OWL stands for a very successful transfer of technologies for SMEs. The Leading-Edge Cluster contributes considerably to making the opportunities and methods of Industrie 4.0 available. Funded joint projects promise a new innovation impetus for the region: it's OWL opens up new perspectives to important sectors, creates new offers for apprenticeships and study courses, thus making jobs sustainable. it's OWL is the North Rhine-Westphalia beacon for innovation around the world."- Prof. Dr. Andreas Pinkwart, Minister of Economic Affairs, Innovation, Digitalization and Energy of the State of North Rhine-Westphalia.

Additionally, we also engage with supplier of our supplier to ensure, that our high standards are secured along the full value chain.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

100% of preferred suppliers must meet GEA's sustainability criteria by 2026. One criterion is the commitment to a Greenhouse Gas reduction target, approved by the SBTi. As of end June 2023, ca. 25% of GEA's preferred suppliers have an STBi approved GHG reduction target.

Besides those strategic requirements, all suppliers must comply with legal/regulatory environmental as stipulated in GEA's mandatory CoCSS

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Grievance mechanism/Whistleblowing hotline

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a low-carbon energy target

Description of this climate related requirement

One of GEA binding sustainability criteria for preferred supplier is to set a science-based emissions reduction target. 100% of preferred suppliers must meet GEA's sustainability criteria by 2026. One criterion is the commitment to a greenhouse gas reduction target, which is approved by the SBTi. As of end June 2023, ca. 25% of GEA's preferred suppliers have an STBi approved GHG reduction target.

Besides those strategic requirements, all suppliers must comply with legal/regulatory environmental as stipulated in GEA's mandatory CoCSS.

% suppliers by procurement spend that have to comply with this climate-related requirement

23,8

% suppliers by procurement spend in compliance with this climate-related requirement

9,4

Mechanisms for monitoring compliance with this climate-related requirement

Certification

Response to supplier non-compliance with this climate-related requirement

Suspend and engage

Climate-related requirement

Climate-related disclosure through a non-public platform

Description of this climate related requirement

One of GEA's sustainability criteria is to share emission related information via the platform Ecovadis ratings.

% suppliers by procurement spend that have to comply with this climate-related requirement

23,8

% suppliers by procurement spend in compliance with this climate-related requirement

17,8

Mechanisms for monitoring compliance with this climate-related requirement

Second-party verification

Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Suspend and engage

Climate-related requirement

Product Carbon Footprint (PCF) reductions

Description of this climate related requirement

One of GEA's sustainability criteria is to start creating product carbon footprints and share them with GEA. In a next steps, these must be reduced step by step.

% suppliers by procurement spend that have to comply with this climate-related requirement

23,8

% suppliers by procurement spend in compliance with this climate-related requirement

1

Mechanisms for monitoring compliance with this climate-related requirement

First-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Sustainability Report 2022 (page 35) and website announcement (page 4: GEA is committed to climate protection, see also <https://www.gea.com/en/company/sustainability/our-path-to-netzero.jsp>

📎 GEA announces next steps on its path to net zero by 2040.pdf

📎 GEA_Sustainability Report 2022.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

GEA is not only transforming its own business model in the direction of decarbonization but is also publicly committed to more climate protection and to limiting global warming to as close to 1.5 degrees Celsius as possible compared to pre-industrial time - in accordance with the Paris Agreement. We regularly exchange views with our stakeholders on our positions on climate protection and represent them in our international committee work. In doing so, we check whether the positions of our member organizations fit with our strategy and stance. We also take an active role in sharing our experience and knowledge and taking others along on the journey.

GEA is among the first European machinery manufacturers to set science-based targets. We have one of the most comprehensive and ambitious climate strategies in the mechanical and plant engineering sector. It involves the entire value chain, enabling us to reduce both direct and indirect emissions. To drive forward the progress toward our climate protection targets, GEA participates in initiatives such as the World Economic Forum (WEF) Alliance of CEO Climate Leaders, a global community of CEOs from major corporations across different industries. Its goal is to facilitate the transition to a net-zero economy by the middle of the century at the latest by encouraging action across all sectors and engaging with policymakers. The Alliance was founded to support the Paris Climate Agreement and climate protection measures by companies. These companies set themselves ambitious targets, reduce their own emissions and encourage others to do the same.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

World Economic Forum (WEF) Alliance of CEO Climate Leaders

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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 CEO's 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 other companies to take bold climate action by setting ambitious targets, reducing their own emissions and encouraging others to do the same.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

212.793

Describe the aim of your organization's funding

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 CEO's 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 other companies to take bold climate action by setting ambitious targets, reducing their own emissions and encouraging others to do the same.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

International Sustainability Standard Board (ISSB)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The ISSB is demanding global sustainability standards. The aim of the ISSB is to establish internationally accepted and globally used minimum standards for sustainability reporting. If necessary, these could be added to EU or US standard. This goal is equally important for companies, investors and society uniform standards is in danger as we are expecting different standards. As part of the Corporate Sustainability Reporting Directive (CSRD), the European Union has adopted the European Financial Reporting Advisory Group (EFRAG) commissioned to develop very comprehensive own European standards. If these do not comply with the international specifications of the ISSB, internationally operating companies must look for two different, in the worst case conflicting reports on sustainability. This must be prevented to deliver consistent information to the addressees of the reporting and the already very high disclosure standards. GEA has signed an open letter to the German Federal Minister of Finance to call for their support on European level. GEA fully supports their position.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

7.650

Describe the aim of your organization's funding

The ISSB is demanding global sustainability standards. The aim of the ISSB is to establish internationally accepted and globally used minimum standards for sustainability reporting. If necessary, these could be added to EU or US standard. This goal is equally important for companies, investors and society uniform standards is in danger as we are expecting different standards. As part of the Corporate Sustainability Reporting Directive (CSRD), the European Union has adopted the European Financial Reporting Advisory Group (EFRAG) commissioned to develop very comprehensive own European standards. If these do not comply with the international specifications of the ISSB, internationally operating companies must look for two different, in the worst case conflicting reports on sustainability. This must be prevented to deliver consistent

information to the addressees of the reporting and the already very high disclosure standards. GEA has signed an open letter to the German Federal Minister of Finance to call for their support on European level. GEA fully supports their position.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

World Economic Forum (WEF) Alliance of CEO climate leaders

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

212.793

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

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 CEO's 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.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

International Sustainability Standards Board (ISSB)

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

7.650

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

By funding and supporting the ISSB GEA aims to prevent different standards on reporting.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).




Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

-  GEA_Annual Report 2022.pdf
-  GEA_Sustainability Report 2022.pdf
-  Environmental Policy.pdf

Page/Section reference

Annual financial report 2022: pages 85-101, 147-150, Sustainability Report TCFD: 152-164

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Page/Section reference

Sustainability report 2022: page 29-38

Content elements

Governance
 Strategy
 Risks & opportunities
 Emissions figures
 Emission targets
 Other metrics

Comment**C12.5**

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Global Reporting Initiative (GRI) Community Member Race to Zero Campaign Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact Other, please specify	<p>To drive forward the progress toward our climate protection targets, GEA participates in initiatives such as the World Economic Forum (WEF) Alliance of CEO Climate Leaders. Its goal is to facilitate the transition to a net-zero economy by the middle of the century at the latest by encouraging action across all sectors and engaging with policymakers. Members set themselves ambitious targets, reduce their own emissions and encourage others to do the same. GEA CEO Stefan Klebert, led a workshop in Davos at the WEF Annual Meeting in May 2022.</p> <p>GEA has also been a member of the Alliance for Clean Air since 2022. The Alliance for Clean Air, which was</p>

	<p>World Economic Forum - Alliance of CEO Climate Leaders and Alliance for Clean Air; Viva con Agua</p>	<p>set up by the WEF and the Clean Air Fund, brings together business leaders committed to measuring and reducing value chain air pollutant emissions, investing in innovation and working with policymakers and other peers to champion the social, economic and climate benefits of tackling air pollution.</p> <p>Viva con Agua supports WASH projects with the vision: "Water for all – All for water". WASH stands for water, sanitation and hygiene – everyone should have access to clean drinking water, hygiene facilities and basic sanitation. GEA is exclusively supporting a WASH project to supply water to schools in Tanzania, East Africa, over the next three years. Viva con Agua received a donation of EUR 250,000 for this project in late 2022. In addition, GEA employees, especially in the field of environmental protection, contribute their expert knowledge to the project Cloud Fisher - a special technology for water harvesting - by joining forces with the Viva con Agua teams. Given GEA's technological expertise and based on the country's capacities, Viva con Agua welcomes the cooperation with GEA's team on the ground as well as their support in assessing and recommending appropriate technologies.</p> <p>Since 2021, GEA is a member of the UN Global Compact and fully committed to the 10 principles.</p> <p>Disclosures in 2022 via the Annual Financial Report and the Sustainability Report are annually done with reference to the GRI standard.</p> <p>GEA's mid-term climate targets are validated by the SBTi and in line with the 1,5 degree limitation. Thus, we pledged for the "Business Ambition for 1,5C".</p> <p>Since 2021, GEA is a member of the TCFD recommendations. In 2022, we fully embedded the standard into our enterprise risk management system.</p>
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C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues
Row 1	No, but we plan to have both within the next two years

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas Commitment to no trade of CITES listed species Other, please specify Pledge to not engage in deforestation and, therefore, to end all deforestation related to its operational activities.	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool

IBAT – Integrated Biodiversity Assessment Tool

SBTN materiality tool

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

GEA recognizes that its activities can directly and indirectly impact ecosystems and biodiversity along its product and value chains. GEA, thus, commits to the permanent preservation of biodiversity and strives to minimize its impact on the environment. As an initial step, GEA has conducted a high-level biodiversity risk assessment to identify key areas of concern, determine suitable mitigation strategies, and set biodiversity-related targets. This assessment incorporates all GEA sites regardless of their type of use (i.e., production, office, R&D). In applying a combination of predominant, market standard tools including IBAT, ENCORE, the WWF Biodiversity Risk Filter, as well as the tools provided by SBTN in its guidance released at the end of May, GEA is convinced that the outcomes will be reliable, complete and thorough. GEA's plan encompasses setting time-bound targets and developing monitoring systems to ensure compliance with regulations and mandatory standards.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

ENCORE tool

IBAT – Integrated Biodiversity Assessment Tool

SBTN materiality tool

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

GEA recognizes that its activities can directly and indirectly impact ecosystems and biodiversity along its product and value chains. GEA, thus, commits to the permanent preservation of biodiversity and strives to minimize its impact on the environment. As an initial step, GEA has conducted a high-level biodiversity risk assessment to identify key areas of concern, determine suitable mitigation strategies, and set biodiversity-related targets. This assessment incorporates all GEA sites regardless of their type of use (i.e., production, office, R&D). In applying a combination of predominant, market standard tools including IBAT, ENCORE, the WWF Biodiversity Risk Filter, as well as the tools provided by SBTN in its guidance released at the end of May, GEA is convinced that the outcomes will be reliable, complete and thorough. GEA's plan encompasses setting time-bound targets and developing monitoring systems to ensure compliance with regulations and mandatory standards.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Natura 2000 network of protected areas

Country/area

Germany

Name of the biodiversity-sensitive area

Niederahr, Kitzingen, Oelde

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

The sites encompass production and office facilities. Biodiversity-sensitivity has been evaluated in the framework of EU-Taxonomy Regulation Appendix D for only taxonomy-relevant sites. All relevant sites either carry ISO 13001 certification and/or are in Germany, so it is considered that - if necessary - compensatory measures have been taken as part of site closure/new construction. In addition, a biodiversity assessment has been conducted high-level to identify high-priority areas and impacts and dependencies of and to biodiversity.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

Nature reserve area

Country/area

United Kingdom of Great Britain and Northern Ireland

Name of the biodiversity-sensitive area

Nature reserve area

Proximity

Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Organization's activities: Operating a production site and office facilities incl. related activities.

Biodiversity-sensitivity has been evaluated in the framework of EU-Taxonomy Regulation Appendix D for only taxonomy-relevant sites. All relevant sites either carry ISO 13001 certification and/or are in Germany, so it is considered that - if necessary - compensatory measures have been taken as part of site closure/new construction. In addition, a biodiversity assessment has been conducted (high-level) to identify high-priority areas and impacts and dependencies of and to biodiversity.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
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Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Livelihood, economic & other incentives
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C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Our Environmental Policy was published in April 2023 on our intranet site and at GEA's Webpage. It is available in 14 languages.  ₁
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Biodiversity Commitment  ₂
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Sustainability Report, p. 58, 73  ₃

 ₁Environmental Policy.pdf

 ₂GEA_Biodiversity Commitment.pdf

 ₃GEA_Sustainability Report 2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

GEA Group is an internationally active technology group specializing in machinery and plants, together with process technology and components. It provides solutions for sophisticated production processes in diverse end-user markets and also offer a comprehensive service portfolio. In doing so, we help our customers to 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 such as chemicals. The group is a specialist in its respective core technologies and a leader in many of its markets worldwide. It promotes a strong innovation-led culture in order to maintain its technological edge going forward. In 2022, GEA generated consolidated revenues of around 5.165 EUR million. As of December 31, 2022, the group employed nearly 18,236 full-time employees worldwide. Since January 1, 2020, GEA Group is working in five divisions, each with up to six business units. The divisions are based on similar technologies and mostly have leading market positions. Each division is headed by a

management team comprising three members: 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.

The company is listed on the German MDAX stock index (G1A, WKN 660 200) , the STOXX® Europe 600 Index, as well as the DAX 50 ESG Index, selected MSCI Global Sustainability Indexes and the Dow Jones Sustainability Index.

Since the course of business, the economic position, and the opportunities and risks associated with the future development of GEA Group Aktiengesellschaft do not differ from the course of business, the economic position, and the opportunities and risks associated with the future development of the group, the management report of GEA Group Aktiengesellschaft has been combined with that of the group in accordance with section 315 (5) of the Handelsgesetzbuch (HGB – German Commercial Code). In contrast to the consolidated IFRS financial statements, the annual financial statements of GEA Group Aktiengesellschaft are based on the HGB, supplemented by the Aktiengesetz (AktG – German Stock Corporation Act). All the financial statements relate to the 2022 financial year (January 1 to December 31, 2022). GEA reports also on non-financial performance factors in the 2022 Annual Report. The sustainability report follows the international standards of the Global Reporting Initiative (GRI). Since 2016, GEA's Annual Reports have included an annual sustainability report.

GEA is a specialist in its respective core technologies and a leader of its sales markets worldwide. GEA consistently promotes an innovation-led culture in an effort to preserve its technological edge. The company considers profitability more important than volume and practices systematic portfolio management and cost control. Active risk management, stability through diversification, and a focus on the markets of the future are binding principles for all GEA business units. GEA's enduring success is based on major global megatrends, such as: Global population growth, Growth of the middle class, Healthy and safe nutrition, Essential and affordable medicines, Sustainable and efficient production processes that conserve resources.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	5.164.700.000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

Burns & McDonnell, Inc.

Scope of emissions

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 11: Use of sold products

Allocation level

Business unit (subsidiary company)

Allocation level detail

This figure is only based on the 250 biggest projects of our Liquid&Powder Technologies. This division had a revenue in 2022 of 1,716 million €.

Emissions in metric tonnes of CO₂e

2.771,77

Uncertainty (±%)

20

Major sources of emissions

Within our Scope 3.11 emission, we allocate emissions from electricity, fuel and refrigerant leakage. For this specific calculation, we even included emissions from steam, compressed air and vacuum.

This particular customer bought equipment running on electricity and compressed air, with electricity being by far the biggest driver of these emissions. We recognise all lifetime 3.11 emissions of this plant over the years of operation within this single figure.

Verified

Yes

Allocation method

Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member

1

Unit for market value or quantity of goods/services supplied

Other, please specify

Project, incl. All equipment

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

We identify the biggest projects of the mentioned GEA division. Afterwards, together with our experts and the customer (if needed) we assess the consumption of the sold equipment and by utilizing information from the International Energy Agency and DEFRA, transform these into CO2 equivalents. Our auditor verified the emission data with limited assurance.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

For the emission calculation, we use our engineering data, which has been set up together with the customer. The consumption data of these projects are not public as they involve customer process data, which is confidential. The shown emission information is part of our reported 3.11 emissions,

which can be found within our annual sustainability report. We do not publish this information on a customer hierarchy level, but instead as GEA emissions.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	GEA provides many low emission products and solutions, but GEA has a very large customer base which is very diverse, and it is very difficult to track emission on the customer level.
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	<p>GEA portfolio is very widespread. GEA provides a very large range of products for industries such as dairy, farmer, pharma, beverage, refrigeration, emission control, food and many others. GEA also provides both products, but also solutions in which GEA develops entire production lines/factories. Thus, our efforts to develop low emission product are also spread due to the different business lines.</p> <p>Due to the large variety of components and processes and notably, the need to collect comprehensive operating data outside of the company's sphere of influence, global verification of the entire product and service portfolio is not yet possible. Our corporate R&D has the task to channelize all these efforts and integrate them into a GEA common strategy.</p>

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

GEA portfolio is very widespread. GEA provides a very large range of products for industries such as dairy, farmer, pharma, beverage, refrigeration, emission control, food and many others. GEA also provides both products but also solutions in which GEA develops entire production lines/factories. And thus, our efforts to develop low emission product are also spread due to the different business lines.

Due to the large variety of components and processes and notably, the need to collect comprehensive operating data outside of the company's sphere of influence, global verification of the entire product and service portfolio is not yet possible. Our corporate R&D has the task to channelize all these efforts together and integrate it into a GEA common strategy.

GEA has begun calculating GEA's CO2 footprint in the product use phase related to product groups within GEA. Therefore it is extremely difficult for GEA to allocate emissions to customers, additionally a customer may have a product that is made up of components from several GEA product groups.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

Yes

SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.

Requesting member

Diageo Plc

Initiative ID

2023-ID1

Group type of project

Change to provision of goods and services

Type of project

Other, please specify

Engineer and construct a new carbon-neutral production site for beverages

Description of the reduction initiative

The customer engaged us to engineer and construct a carbon-neutral factory for beverages located in Europe. The site will be operated with 100% renewable energy due to GEAs knowledge on heating and cooling process technologies. This technology enables the customer to minimize the overall energy and water consumption for the production of beverages to the absolute minimum. By doing so, this particular site saves the customer up to 15,000 tCO₂e annually.

Emissions reduction for the reporting year in metric tons of CO₂e

15.000

Would you be happy for CDP supply chain members to highlight this work in their external communication?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data



Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms