

CLIMATE TRANSITION PLAN 2040

Our pathway to Net Zero



→ Dear GEA Shareholders, Dear Readers,

At GEA we are committed to climate action and leadership. Every day we are taking concrete steps – applying the power of innovation to enable our customers to make progress towards a more sustainable future. “Engineering for a better world” is what we do. It’s in our DNA.

Progress calls for a plan, of course, and that’s what we want to share with you here: our Climate Transition Plan 2040. The plan includes an accelerated timeline for the emissions reduction targets we first outlined in 2021: We now aim to reduce emissions from our own operations (Scope 1 and 2) by 60 percent by 2026 and by 80 percent by 2030. We also plan to reduce product-related emissions (Scope 3) by 27.5 percent by 2030. These upgraded 2030 targets, as well as our ambitious Net Zero target for 2040, were validated by the Science Based Targets initiative (SBTi).



Stefan Klebert
CEO at GEA Group

→ How do we get there?

By transforming our company. We're reshaping both our own operations and our diverse product portfolio. We're helping customers reduce their carbon footprints downstream, while working with suppliers to decarbonize the supply chain upstream. And we're embedding sustainability into our corporate culture.

This is a comprehensive approach. It starts with reducing the greenhouse gas emissions of our own operations – phasing out fossil fuels, converting our entire fleet to electric vehicles, developing our own renewable energy production, and upgrading our buildings to make them more energy efficient.

The results so far are encouraging: as of 2023, emissions from our own operations were already down 53 % compared to the 2019 baseline.

The biggest challenge and opportunity lies in our Scope 3 target. Emissions generated by our products during their lifetimes make up by far the largest part of GEA's overall carbon footprint. Improving the environmental performance of our machines is where we can have the biggest positive impact. Consider the food and beverage industries, our core strategic markets. Many production processes in food and beverage consume huge amounts of energy, mainly for heating or cooling. As an engineering and technology company, we are in a unique position to help our customers produce much more efficiently, save energy and reduce their emissions.

A great example is our "Add Better" label. Launched in 2023, this independently validated label helps our customers identify those GEA solutions that are verifiably more resource efficient than their predecessors. Our Add Better family of products and solutions is constantly growing. Meanwhile, our Add Better consulting services provide comprehensive consulting to companies in the area of decarbonization. And across the board, we are using the power of digitalization and artificial intelligence to take GEA machines to unprecedented levels of efficiency.

At the Annual General Meeting (AGM) in April 2024, we will ask our shareholders to vote on our Climate Transition Plan 2040 as part of a consultative vote. In fact, we will ask the AGM to vote every three years on the progress made. While responsibility for executing our Climate Transition Plan 2040 remains squarely on the shoulders of the Executive Board, this vote ensures greater transparency and accountability vis-à-vis our investors. Ultimately, achieving Net Zero by 2040 will require all GEA stakeholders to pull in the same direction.

Although this is about climate protection, it is also very much about ensuring our long-term growth. The future belongs to intelligent, low-emission solutions that save energy and conserve resources. We plan to lead, not follow – and keep GEA and our customers ahead of the competition.



Stefan Klebert
CEO of GEA



Rebecca Marmot

Chief Sustainability Officer at Unilever

“Sustainability is key to the future of the food industry and is a top priority at Unilever. A critical step in this is the decarbonization of our production processes, which we are proactively driving forward in collaboration with leading technology providers such as GEA.”

01

→ Foreword

02

→ Our climate targets
at a glance

03

→ Our climate strategy

04

→ Transformation of
our product portfolio

05

→ Transformation of
our own operations

06

→ Governance, data
and reporting



OUR CLIMATE TARGETS AT A GLANCE

NET ZERO

2040



It is our responsibility to
make climate protection
our top priority.

→ Our climate targets at a glance



GHG Protocol:

- Scope 1** covers all direct greenhouse gas emissions in our own business activities, such as those from primary fuel sources used directly at company sites. Examples include natural gas, heating oil, gasoline and diesel. This also includes emissions from refrigerant leakages and the combustion engine vehicle fleet.
- Scope 2** covers the indirect greenhouse gas emissions in our own business activities that result from the generation of purchased energy. The CO₂ emissions are caused by the consumption of secondary energy sources, such as electricity, district heating, steam or cooling energy in buildings and electric vehicles.
- Scope 3** covers other indirect greenhouse gas emissions in the upstream and downstream value chain that are primarily associated with the company's activities. Scope 3 emissions are split into 15 categories, for example, the consumption of energy in the use phase of our machines and systems, the procurement of raw materials and semi-finished products, our business travels and employee commuting.



SBTi confirms our Net Zero 2040 target



GEA as an industry trailblazer

The Science Based Targets initiative (SBTi) has validated our Net Zero 2040 target, thus confirming that our measures are in line with the latest climate research findings and will make an effective contribution to achieving the 1.5°C target.

With SBTi validation of the Net Zero 2040 target, GEA has achieved a key milestone as a pioneer in climate protection.



Do you know the SBTi?

The SBTi is a partnership between CDP (originally established as the 'Carbon Disclosure Project'), the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

- It defines and promotes best practice in emissions reductions and Net Zero targets in line with climate science.
- It provides technical assistance and expert resources to companies who set science-based targets in line with the latest climate science.
- It brings together a team of experts to provide companies with independent assessment and validation of targets.

The SBTi was the lead partner in the Business Ambition for 1.5°C campaign - an urgent call to action from a global coalition of UN agencies as well as business and industry leaders, which mobilized companies to set science-based Net Zero targets in line with a 1.5°C future.

1.5°C



Our targets align with the most ambitious efforts to limit global warming to 1.5 °C. The Science Based Targets initiative, a globally recognized organization for reviewing climate targets, has confirmed that our climate targets are in line with the latest climate research findings and will make an effective contribution to achieving the 1.5 °C target.

OUR CLIMATE STRATEGY

→ Our climate strategy

We have set a clear target for 2040: GEA will reduce its greenhouse gas emissions to Net Zero at every link in the value chain (Net Zero 2040).

In addition to reducing our own emissions, this involves developing sustainable solutions for our customers and creating climate-neutral supply chains.

To achieve our climate targets, we have defined a climate strategy with interim targets and transformation measures. These are presented on the following pages.

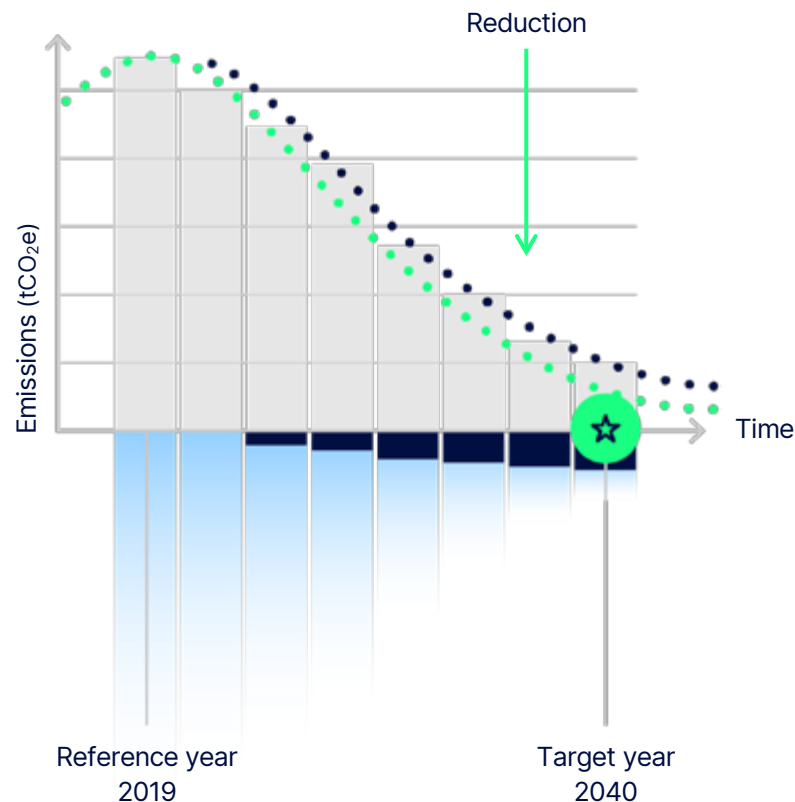


July 2023 marked the hottest month ever measured globally, according to data from Copernicus, the EU's climate change monitoring service. According to calculations, it has not been this warm for 120,000 years.

→ Net Zero by 2040

The race for a better world

Our climate strategy is deliberately ambitious. We aim to achieve climate neutrality along the full length of the value chain by 2040, outpacing both the European Union (Net Zero 2050) and the Germany (Net Zero 2045).



★ Net Zero

Net zero involves reducing all direct and indirect emissions by at least 90 % and then neutralizing the greenhouse gas emissions by permanently removing carbon from the atmosphere.

How will we achieve this?

↓ Reduction

GEA will implement measures to avoid, reduce or eliminate greenhouse gas emissions at every stage of the value chain.

■ Neutralization (max. 10 %)

GEA will use permanent carbon removal and storage solutions to counterbalance the maximum of 10 % of residual emissions that cannot be eliminated.

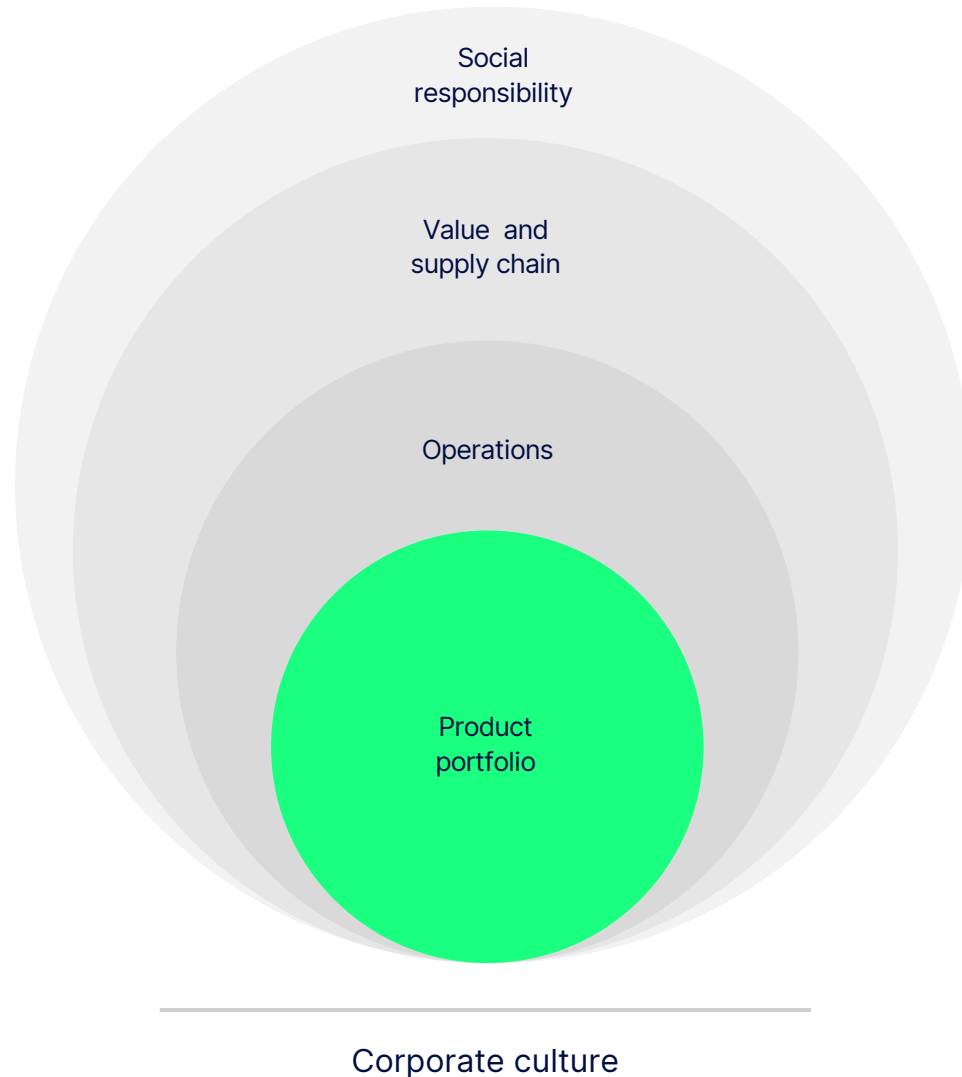
■ Offsetting

Since 2021, GEA has been investing in climate protection projects that 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.

● GEA pathway to Net Zero 2040

● Paris-compliant emissions reduction strategy

■ Total emissions



→ Reduction of greenhouse gas emissions

Our leverage at every link in the value chain

Transformation of our product portfolio

We are developing sustainable solutions to minimize our customers' environmental footprint.

Transformation of our operations

We are electrifying our production sites, investing in climate-friendly building infrastructure and generating our own renewable energy to reduce our own greenhouse gas emissions.

Value and supply chain obligations

We require our suppliers to define their own SBTi-validated climate targets and expect all partners at every link in the value chain to be kind to the climate.

Taking a public stance

We are committed to raising public awareness of climate protection and playing an active role, sharing our experience and expertise and taking others along on our journey.

Our corporate culture is the backbone

Day in, day out, our employees make a valuable contribution to our corporate purpose of "Engineering for a better world". We ensure that each and every one of us is empowered to act responsibly and in harmony with our climate strategy.

→ Neutralization of unavoidable emissions

We will neutralize residual emissions and further mitigate emissions outside our own value chain

As a technology company, we are committed to permanent, technology-driven carbon removals.

Our core lever here is the scale-up and fine-tuning of GEA's carbon capture, storage and utilization solutions. This is a cost-efficient way to neutralize our own emissions and those of our customers.

We are also developing additional technology-based solutions such as direct air capture.



Do you know ...

... what carbon capture and storage is?

Carbon capture and storage is a process in which carbon dioxide (CO₂) emissions released from industrial processes and power generation sources are captured and then stored permanently to prevent it from escaping into the atmosphere. Carbon capture and storage solutions mitigate the impact of the resulting emissions on climate change.

Carbon-intensive industries are facing increased pressure to drastically reduce their CO₂ emissions.



GEA product case study

GEA has developed a standardized line of carbon capture solutions designed to help plant operators get started now with CO₂ removal.



→ Offsetting

Our approach to compensation measures

2040 is still a long way off. Yet we are already taking responsibility for our present-day emissions and implementing compensation measures. We have been investing in Gold Standard climate protection projects since 2021.

According to the German 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 cater to the population's social needs. They meet the criteria and conditions set out in the 2005 Kyoto Protocol on Climate Change.

Investing in these climate protection projects lets us offset the emissions in our own operations (Scope 1 and 2). However, we must be clear that these compensation measures are not part of our GHG reduction targets and will be steadily rolled back as our Climate Transition Plan 2040 is implemented.



What is the connection between rising sea levels and the climate? On the one hand, the heat causes the water molecules expand and, on the other, increasing glacier retreat is producing more and more meltwater that flows into the oceans.






→ External factor: electricity

Role of the power grid mix

Our climate strategy is based on the assumption that countries will meet their climate neutrality commitments*.

Many countries need to implement extensive measures in order to achieve Net-Zero. The respective national power grid mix plays a key role.

GEA anticipates that the global energy markets will shift towards Net Zero. This will require massive growth in renewable energies in all countries as well as drastically improved energy efficiency. At the same time, the energy system needs to become smarter and more flexible.



Every country must contribute to stopping global warming, for example, by using more renewable energies such as solar energy, wind and hydropower

* According to the Stated Policies Scenario (STEPS) of the International Energy Agency (IEA), as of 2023.

TRANSFORMATION OF OUR PRODUCT PORTFOLIO

Abstract geometric shapes in shades of green and blue, including a large curved line and a map-like shape, set against a dark blue background.

→ Our ambition

We are transforming our product portfolio and developing significantly better solutions when it comes to resource efficiency and environmental protection, enabling our customers to minimize their ecological footprint. With our consulting services, we support our customers in assessing their emissions and selecting decarbonization solutions for their production facilities and processes.



The triggering of tipping points in the earth's climate system can lead to chain reactions, causing global warming to intensify uncontrollably. Examples include the irretrievably drying out of the Amazon rainforest, the coral reef death, the thawing of the permafrost in Siberia and North America, and the irreversibly melting of the earth's major ice sheets.

→ Scope 3: Both a challenge and an opportunity

Reducing the greenhouse gas emissions of our products during use

The use of plant and machinery – particularly in the food and beverage industry – is energy-intensive. Food production typically involves processes such as the industrial heating, cooling or freeze drying of the end product.

Our challenge is to make our solutions more energy- and resource-efficient. This positively impacts our own and our customers' greenhouse gas balance.

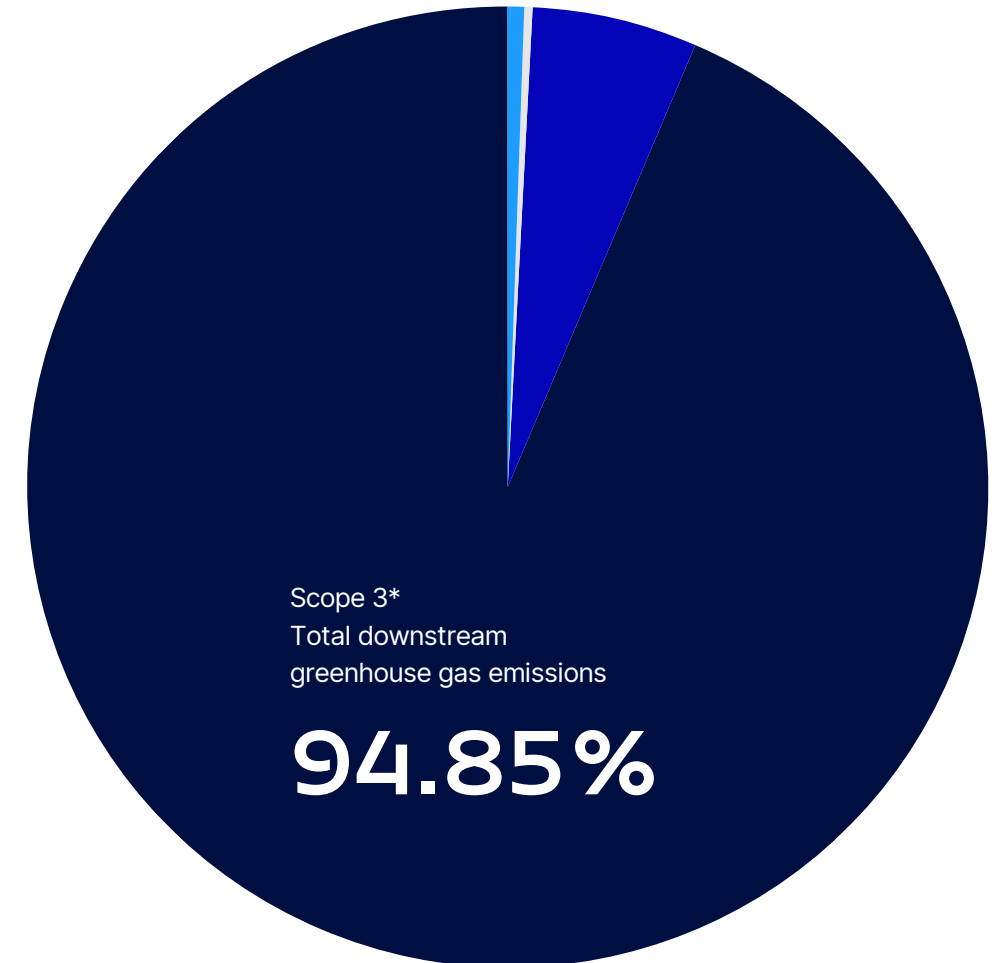
GEA views this challenge as an opportunity. The growing global population and expanding middle class is steadily pushing up demand for processed food and beverages. At the same time, we aim to meet our customers' expectations and requirements when it comes to sustainable solutions.

Our lever for Net Zero 2040:

Product innovation

New business models

Net Zero
2040



Scope 1*
Direct greenhouse gas
emissions | 0.11 %

Scope 2*
Indirect greenhouse gas
emissions | 0.00 %

Scope 3*
Total upstream greenhouse
gas emissions | 5.04 %

*Greenhouse gas emissions in t CO₂e in 2023

→ Our lever for Net Zero 2040

Effort-based transformation through creativity and determination

Anchoring a sustainable mindset change in the company

Product innovation



Launch resource-efficient products on the market



Optimize the use of resources through disruptive system approaches (Scope 4)



Fully integrate sustainability into the product development process



Train the sales organization



Electrify the existing product portfolio



Promote sustainable and disruptive innovations



Provide climate-related consulting services



Implement a circular economy



Service offering to extend lifecycle



Support through digital solutions



Initiate a sustainable mindset among customers

New business models

Sustainable mindset change and innovation enhancement

→ 2026

Technological transformation

→ 2040

2023



ADD BETTER

Resource efficient solution



GEA has an independent, validated and fact-based quality label that enables its customers to choose advanced solutions and innovations offering both better performance and resource efficiency.

→ Add Better



Automated milking*

Empowering customers with resource efficient solutions



up to **19%**
less energy

* The “Add Better” label refers to the DairyRobot R9500 series product, released in July 2021. The comparison refers to the predecessor model.



Spray drying*

up to **49%**
less energy

* The “Add Better” label refers to the series product 1947899, which was launched in November 2022. The comparison refers to the predecessor model.



Aseptic blower*

up to **31%**
less energy



* The “Add Better” label refers to the GEA ABF 2.0, which will be launched in 2024. The comparison refers to the predecessor model.

Marine separator*

up to **9%**
less energy



* The “Add Better” label refers to the GEA Marine Separator, which was launched in September 2018. The comparison refers to the predecessor model GEA OSE Separator.

→ Add Better

A TÜV-validated environmental label for resource-efficient solutions

The “Add Better” label helps our customers to make informed and more sustainable decisions.

The “Add Better” ecolabel identifies solutions – from industrial machines through processes to entire plants – that are significantly more resource-efficient than their predecessors.

The solutions reduce the consumption of resources such as energy and water as well as the generation of waste, calculated on the basis of recognized methods and then validated by German technical inspection agency TÜV Rheinland.



Energy
consumption



Water
consumption



Material
usage



Circular
economy



Greenhouse gas
emissions

Highlights GEA solutions
that are significantly
better than their
predecessor product

Shows savings of
resources such as
energy, water, waste

Independent validation
by TÜV Rheinland

In accordance with
ISO 14021



→ GEA enables the decarbonization of the beverage industry



Did you know ...

... that the beverage market is growing from year to year? Production output in the beverage industry will amount to USD 1.08 trillion in 2024, with an annual growth rate of approx. 5 % up to 2028.* Together with food manufacturers, the beverage industry constitutes the food industry.

What do our customers say?**

- According to a GEA survey, most industry players are planning to invest in sustainability before 2026.
- Sustainability is one of the top three decision-making criteria when awarding contracts.
- The majority of companies in this sector are prioritizing investments to reduce greenhouse gas emissions, with the focus currently on achieving Scope 1 and 2 targets.



Our goal

By 2026***, we expect orders from projects to decarbonize the food and beverage process industry to exceed € 400 million.

* Source: Beverages – Worldwide | Statista Market Forecast | ** Source: GEA's own customer survey | *** Cumulative 2024-2026



GEA customer case study

At its Beckton site, Britvic produces 2,000 drinks every minute, including many of the UK's most popular beverages, such as Robinsons, Tango and Pepsi MAX. GEA is supplying two industrial ammonia heat pumps and a large thermal storage tank. For Britvic, the project is a major step toward its goal of reducing direct carbon emissions by 50 percent by 2025 and achieving Net Zero by 2050.

→ GEA enables next-generation farming



Did you know ...

... that humans will never be able to entirely replace animal protein? We will always need milk. Gross value added in the milk market will amount to around € 82.97 billion in 2024. Annual growth of approx. 5 % is expected.*

What do farmers say?

- Demand for **dairy products is expected to increase by 27 % by 2040**, but the intensive rearing of cows is causing ecological problems.
- To be successful in the coming years, **farmers are focusing on more sustainable approaches**. In the face of structural change in agriculture, they have set their sights on promoting **animal health and welfare**, be it through improved feeding, better living conditions or promoting health for long-lasting and satisfactory milk production.
- Farming is under increasing pressure due to **strict EU regulations and targets coming into force**, such as the specific target of reducing ammonia emissions in agriculture by 29 % by 2030 in Germany for example.



Our goal

By 2026, we aim to achieve a sales volume (new machine business) of over € 200 million per year with sustainable solutions in the Farm Technologies division***.



Example



GEA product case study

The holistic view of herds and automated solutions create significant efficiency advantages. GEA DairyNet revolutionizes herd and farm management to enable optimized and more sustainable farming. Through the intelligent networking of products, processes and animals as well as real-time data interpretation, it enables efficient, resource-saving production that promotes animal welfare.

→ GEA as an enabler of the new food industry



Did you know ...

... that the world's population will grow to around ten billion people by 2050 and that the middle class will continue to grow? However, our planet is already no longer able to feed everyone. Plant-based meat, dairy alternatives, insect proteins as well as the fermentation and cultivation of meat offer the solution. The market for alternative proteins is expected to reach a sales potential of USD 290 billion by 2035.

What is the industry saying?*

- **75 % of consumers worldwide are aware of alternative proteins** and more than half have already tried them.
- By 2035, **alternative proteins could account for 11 to 22 % of the global protein market** with sales of USD 290 billion.
- The largest meat producer is planning to **invest USD 100 million in the production of cultivated meat**, with a market launch projected by 2024.



Our goal

We aim to achieve order intake of more than € 400 million per year in the new food segment by 2026.

* Source: Study by impact investor Blue Horizon and the Boston Consulting Group (BCG) in 2022



New food options

We are experiencing a major transformation in the culinary world. More sustainable alternatives to conventional meat, seafood, eggs and dairy are gaining ground around the globe.

→ GEA advises the food, beverage and pharmaceutical industries on decarbonization

Wherever our customers are on their climate transition journey, we support them in developing an ambitious climate strategy for their business. Together with our network of internal and external partners, we are collaborating closely to develop robust Net Zero pathways to future-proof businesses.

GEA's core business is engineering. Add Better Consulting further provides the possibility for in-depth technical consulting leveraging our extensive expertise in application, heating and cooling. Our focus lies on a technical sparring partner approach and is based on detailed engineering studies:

- **Alignment of production with climate strategy**

Add Better Consulting tackles the challenges of meeting climate targets while optimizing production lines. Our industry expertise provides tailored guidance on Net Zero pathways.

- **Reduction of customers' CO₂ footprint by up to 100 %**

The decarbonization approach includes technical feasibility studies to develop concepts and flexible technical solutions that are in line with customers climate targets and legal requirements. An action plan shows how production lines can be modernized to reduce energy and media demand, reuse waste heat streams and to integrate renewable energies.

- **Improvement of total cost of ownership**

With a holistic approach focused on improving cooling and heating processes, customers can achieve energy and cost savings of up to 30 %.



„We want to brew a better world and we need to act now if we are going to meet our 2030 Net Zero ambitions.

Heat pumps are a key technology on our journey to decarbonizing our breweries and enable us to create a circular process with the excess heat that is created during the brewing process.

As GEA brings a wealth of expertise and knowledge to the project as well as some well-engineered technical solutions, we appointed GEA to support us in decarbonizing our Manchester site.”

Chelsey Wroe, Head of Sustainability at HEINEKEN UK

TRANSFORMATION OF OUR OWN OPERATIONS

An abstract graphic element consisting of several overlapping, flowing shapes in shades of green and blue, positioned diagonally across the slide.

→ Our ambition

We will steadily reduce our direct and indirect greenhouse gas emissions by exiting fossil fuels. We will also oblige our business partners to comply with our requirements and sustainability standards. Our employees are supporting this transformation through their responsible and active participation.



Fossil fuels are fueling global warming, which is resulting in increased species extinction and changes ecosystems due to temperature fluctuations. This threatens biodiversity and has far-reaching ecological consequences.

→ Decarbonizing our sites worldwide

Our Scope 1 and 2 measures

We are implementing a clearly defined package of measures for our production sites and vehicle fleet. Our goal is to achieve Net Zero by 2040 by exiting fossil fuels, driving forward electrification and harnessing renewable energy.

* Remaining vehicle fleet (functional vehicles) by 2040, possibly earlier if taking into account technical developments in the automotive industry.
** This includes both owned renewable energy plants and those financed by GEA, such as photovoltaic or wind power plants.



→ Exit from fossil fuels

Based on site analyses conducted in 2023, we identified the key areas for eliminating fossil fuels in our business processes:

Building refurbishment measures by 2040



Substitution of gas:

- Electrification of heating supply
- Use of district heating from renewable energy sources
- Making efficient use of waste heat
- Switching to hydrogen as an energy source for unavoidable process applications



Energy-efficient refurbishment of the building envelope:

- Implementing refurbishment measures



Increased energy efficiency:

- Implementing building and energy management systems



Electrification of the vehicle fleet by 2030:

- Implementing the roadmap for switching the entire global vehicle fleet* to fully electric vehicles by 2030
- Creating the necessary charging infrastructure at our sites

CLIMATE GROUP
EV100

* Remaining vehicle fleet (functional vehicles) by 2040, possibly earlier if taking into account technical developments in the automotive industry.

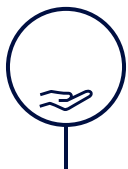


→ Our path to renewable energy sources

To ensure the greatest possible autonomy from the electricity grid, we are focusing on on-site generation based on energy sources such as the sun and wind.

100 %

Electricity from renewable energy sources by 2040



We have been using 100 % green electricity since 2022.



Since 2022, we have been continuously expanding our on-site generation of renewable electricity from **photovoltaic systems**.



Starting in 2024, we will finance the **construction of a photovoltaic system** on GEA-owned land in Germany and invest further in expanding in our own energy sources.



Power purchase agreements (PPA*) for renewable electricity are planned for 2024.



*Did you know ...

... **what a PPA is?** Power purchase agreements (PPA) facilitate the financing of renewable energy systems and secure the price and supply of electricity. They are long-term agreements between energy producers, energy traders and consumers that define details such as price, term, risk distribution and electricity characteristics. This minimizes price risks in volatile energy markets and ensures price stability for planning purposes.

Example



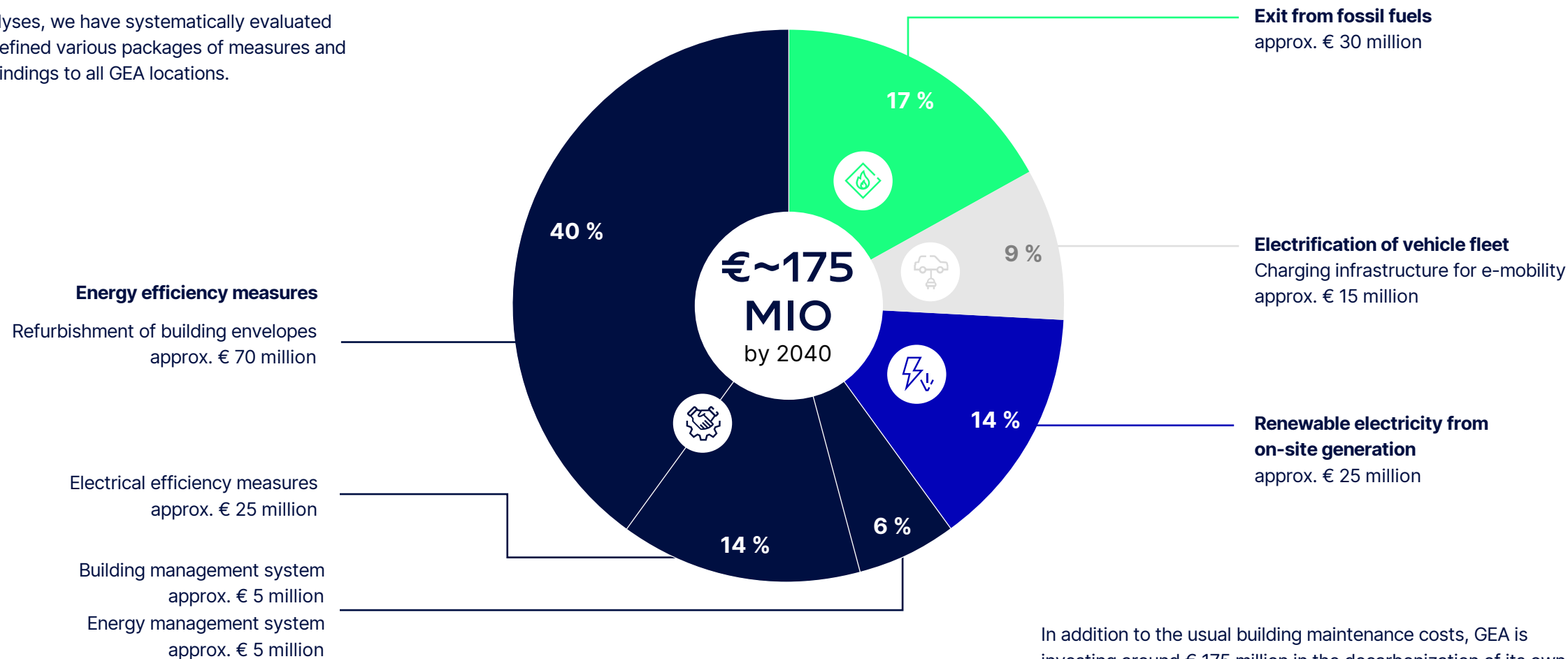
2024 to 2026

PV Park Hachen, Germany

Building the GEA photovoltaic system will enable us to generate as much as 18 % of our electricity requirements in Germany on our own.

→ Implications of the energy transition for GEA's sites worldwide

Based on site analyses, we have systematically evaluated energy sources, defined various packages of measures and extrapolated our findings to all GEA locations.



In addition to the usual building maintenance costs, GEA is investing around € 175 million in the decarbonization of its own sites. These are incremental investment measures of around € 11 million per year over the next 16 years (2024 to 2040).



Exit from fossil fuels



Electrification of vehicle fleet



Renewable electricity from on-site generation



Renewable electricity



Energy efficiency measures

→ Example of a Net Zero site analysis: GEA plant in Buechen (Germany)

Systematic evaluation of energy sources and development of an action plan to decarbonize a GEA site

In 2022, GEA's Buechen site in Germany had greenhouse gas emissions of 1,400 tCO₂e based on energy consumption of around 2,800 MWh electricity and around 2,200 MWh of gas.* Its natural gas-based heat supply and process heat were identified as fields of action to be addressed. The following measures were developed to achieve Net Zero at the site by 2040:



Regenerative heat supply using heat pumps as a substitute for natural gas and efficient waste heat utilization



Building refurbishment such as the renovation of the roof, facade and windows



Investment in a **building and energy management system**



On-site generation of electricity from photovoltaic systems installed in the parking lot and on roofs



Electrification of the vehicle fleet and creation of charging infrastructure for around 60 vehicles



Exit from fossil fuels



Electrification of vehicle fleet



Renewable electricity from on-site generation

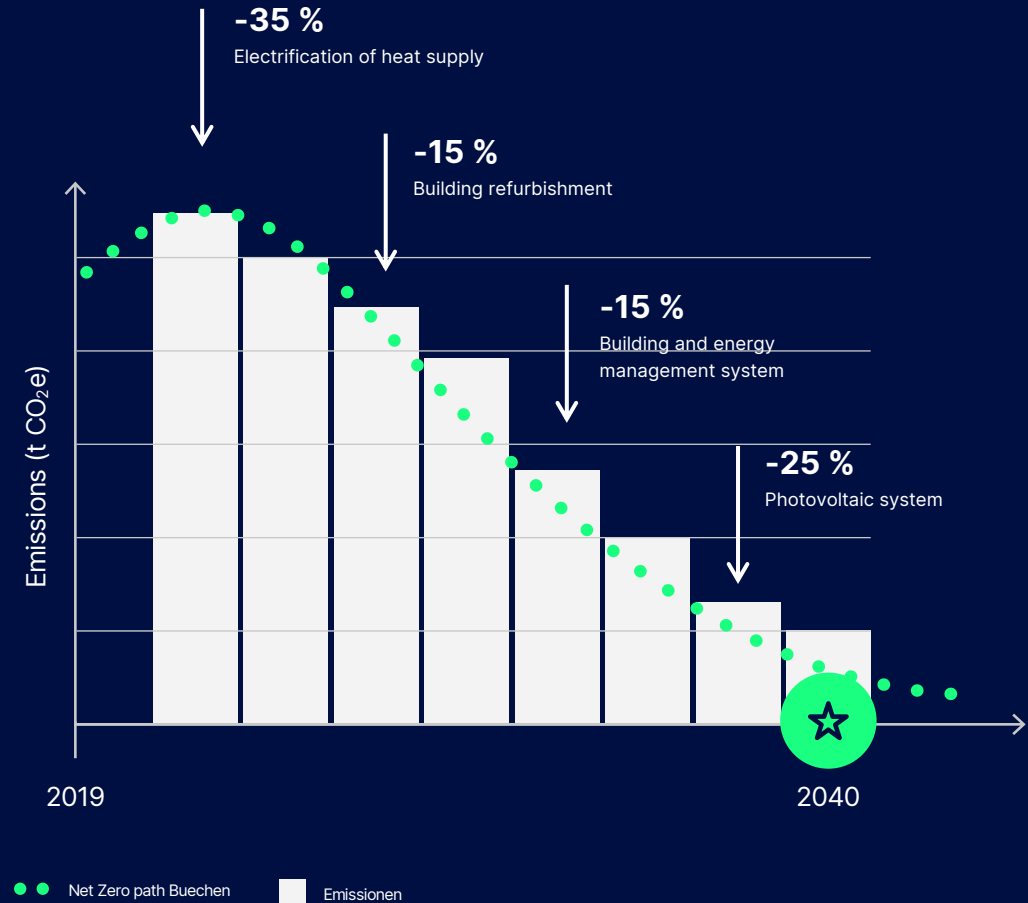


Renewable electricity



Energy efficiency measures

*location-based approach CO₂-accounting



Expected investment requirement at GEA's Buechen plant

APPROX.

€ 9 M

→ Internal emissions tax

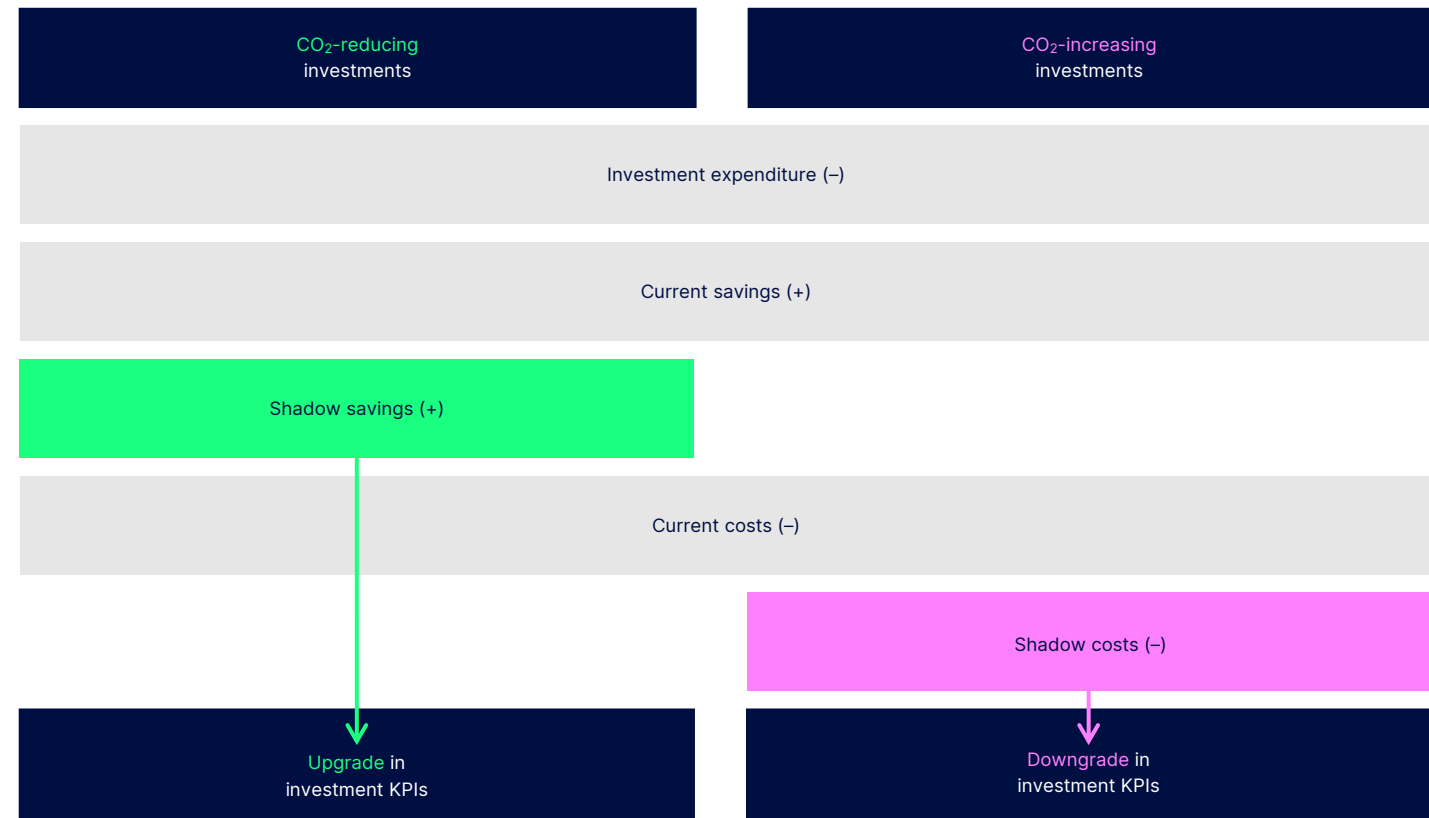
Promoting climate-friendly investments as an incentive to avoid emissions

In 2023, alongside the packages put together to decarbonize our sites, we began applying an internal price for greenhouse gas emissions associated with each investment measure. By introducing carbon pricing, we have put a notional monetary value on the anticipated greenhouse gas emissions. This allows us to evaluate and assess our investment projects in advance based on the expected emissions. Acting as an investment stress test, the introduction of the internal CO₂ price will support further efficiency gains and propel the identification of low-carbon opportunities.

Resilience in the face of future environmental costs

We consider high emissions to be a risk factor that will incur costs in the future, either directly (e.g. through taxes) or indirectly (e.g. through consumer behavior). In order to factor this risk into our business processes as early as today, we apply internal carbon pricing of € 126 per ton of CO₂e emitted, which is above average to our knowledge.

Shadow pricing model* for climate-friendly investments



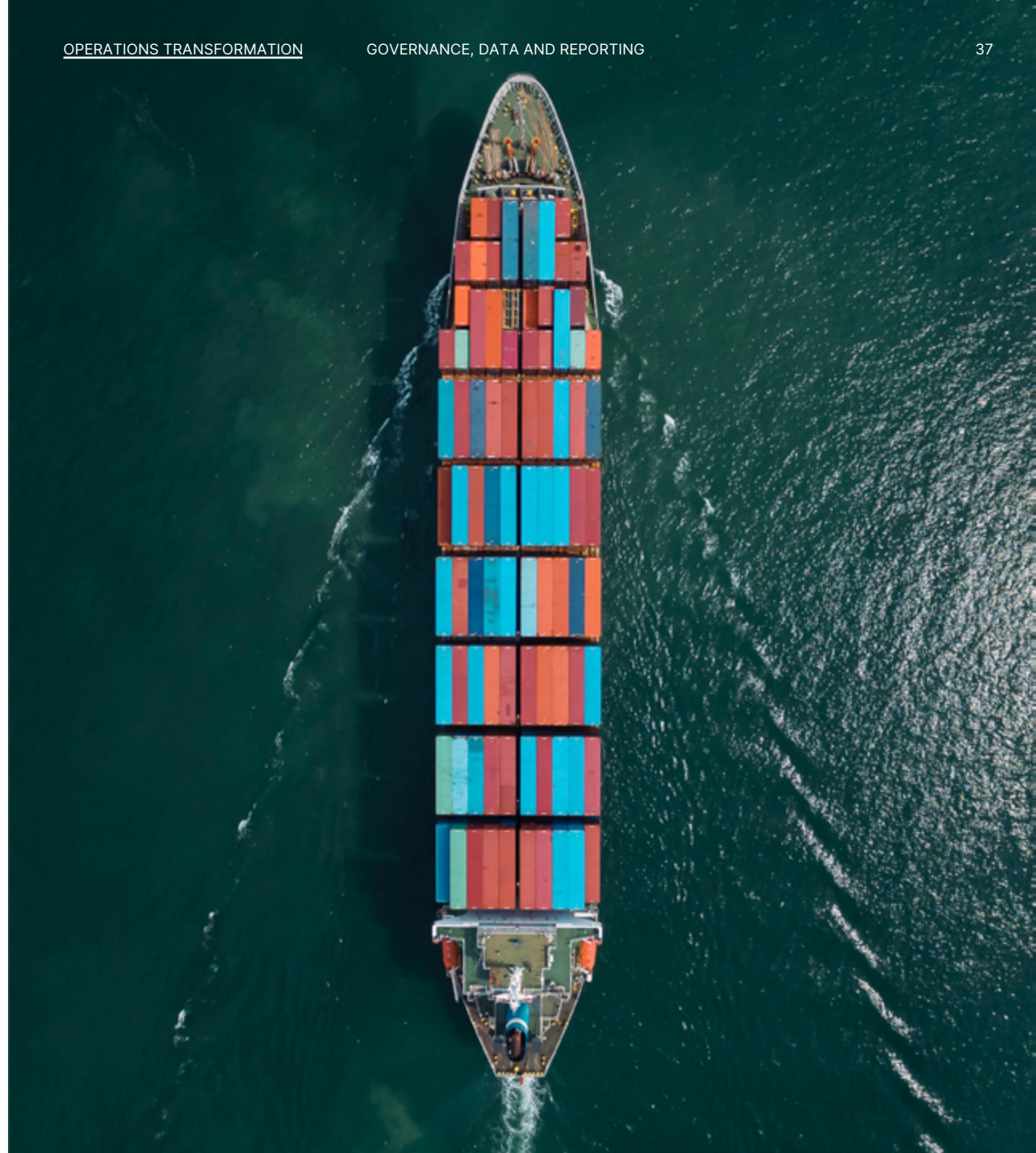
* The shadow pricing model takes future price risks into account by creating a notional metric and setting a price for greenhouse gas emissions. This climate-related mechanism influences our investment KPIs, which pave the way for decision-making at GEA.

→ Decarbonizing our supply chain

Our suppliers are key to ensuring a climate-neutral value chain

We will increasingly source our raw materials, commodities and services worldwide exclusively from verifiably qualified suppliers. We require our strategically most significant partners already today to demonstrate that they operate in an environmentally sustainable manner – because their actions impact our climate footprint. This is why we have established binding requirements with regard to our supply chain:

- 1) Acceptance of our Code of Conduct for Suppliers and Subcontractors**
Minimum requirements in respect of environmental protection, human rights, fair working conditions, anticorruption and the fight against financial crime
- 2) Provision of an annual sustainability assessment**
Assessment performed by external rating organization EcoVadis
- 3) Setting of an SBTi-validated climate target for 2030**
Science-based target for the reduction of greenhouse gas emissions
- 4) Disclosure of greenhouse gas emissions data for products and services**
Provision of the data required to perform life cycle analyses



→ Example: Purchase of green steel

Changes in raw materials to help achieve climate neutrality in the supply chain

The greenhouse gas emissions released by the production of this raw material must be taken into account in the calculation of our climate footprint. That is why we aim to source climate-friendly raw materials, commodities and services.

For the future, there are two options:

1) Use of alternative raw materials:

GEA is involved in various innovation projects aimed at replacing CO₂-intensive raw materials with more sustainable materials in the long term.

2) Purchase of green steel:

Where there is no alternative to stainless steel, green steel is a climate-friendly option. Green steel has been part of our raw materials mix since 2024. We plan to steadily increase the proportion of green steel we use in the years ahead to help reduce the greenhouse gas emissions in our supply chain.



Did you know ...

*... what is green steel?

The term “green steel” refers to climate-friendly steel with a low carbon content. The climate impact caused by the raw materials, transport and production is quantified from the source (= raw material extraction) to the factory gate (= leaving the production facility).

By contrast, “grey steel” refers to conventional steel, the production of which generates CO₂ emissions – for example, through the blast furnace route.

According to the most recent projections, green steel could currently potentially cover 9 % (174 million tons per year) of current global crude steel production (1,831 million tons per year, as of 2022).

→ Corporate culture

“Engineering for a better world” is GEA’s guiding purpose. For us, a better world means a more sustainable one. Our workforce of more than 18,000 employees strives to achieve this each and every day.

We are proud that our technologies and solutions contribute to enhancing daily life – whether at the breakfast table, in hospital or on the farm.

Sustainability is embedded in the company’s DNA and paves the way for all that we do.



→ Engineering
for a better
world.

→ Our
vision

We safeguard future generations by providing sustainable solutions for the nutrition and pharmaceutical industries.

GEA

→ Better World
Awards

→ Our
values



Responsibility



Integrity



Diversity



Passion



Excellence

GOVERNANCE, DATA & DISCLOSURE

→ Our ambition

Our Climate Transition Plan 2040 is a core element of our long-term corporate strategy and will secure our future viability. We believe it is important to make our climate protection measures even more transparent and tangible. With this in mind, we will present our Climate Transition Plan 2040 to shareholders for the first time in 2024. The progress made will be verified annually by an independent third party and then reported to the Annual General Meeting every three years.



Plants and animals are reacting to the global warming. Various plant species are spreading further north. Migratory birds are returning earlier and fish have been found to spawn earlier.

➔ Responsible corporate governance

Drawing on the climate strategy published in 2021, the **Executive Board**, with the approval of the **Supervisory Board**, has developed **GEA's Climate Transition Plan 2040**. The responsibility for implementing this rests with the CEO, Stefan Klebert.

While responsibility for executing our Climate Transition Plan 2040 remains squarely on the shoulders of the Executive Board, the vote of our shareholders at the Annual General Meeting every three years ensures greater transparency and accountability vis-à-vis our investors.

Ultimately, achieving Net Zero by 2040 will call upon all GEA stakeholders to pull in the same direction.



Do you know ...

*... the organizational structure and responsibilities of a German stock corporation?

The management of a German stock corporation is entrusted to the **Executive Board**, which typically consists of multiple individuals. The Executive Board operates independently, though its fundamental direction is subject to oversight by the Supervisory Board.

The **Supervisory Board** appoints, members of the Executive Board and is tasked with providing advice, particularly in matters of supervision and control.

The shareholders exercise their rights and duties through the **Annual General Meeting**, at which they elect their representatives to the Supervisory Board there. Neither the Supervisory Board nor the Annual General Meeting can instruct the Executive Board, which is in charge of managing the company.

→ Climate Transition Plan 2040 embedded in the organization

All activities related to the Climate Transition Plan 2040 – along with other sustainability matters – are consolidated within the Sustainability department, which has global responsibility. This department is led by **the Chief Sustainability Officer (CSO)**, who reports directly to the CEO and is a member of the **Global Executive Committee (GEC)** – GEA's extended management circle that includes not only the Executive Board but also the CEOs of divisions and sales regions, as well as the Head of Human Resources.

The cross-functional **Sustainability Committee** actively involves the global functions and operating divisions in the implementation of sustainability measures. **The Sustainability Committee is headed by the CSO** and is made up of representatives from various departments, notably the divisional Heads of Sustainability, the Head of Sustainable Operation, representatives from Human Resources, as well as employees from Investor Relations and IT. This ensures that operational decisions on implementing the Climate Transition Plan 2040 are coordinated across divisions and functions.

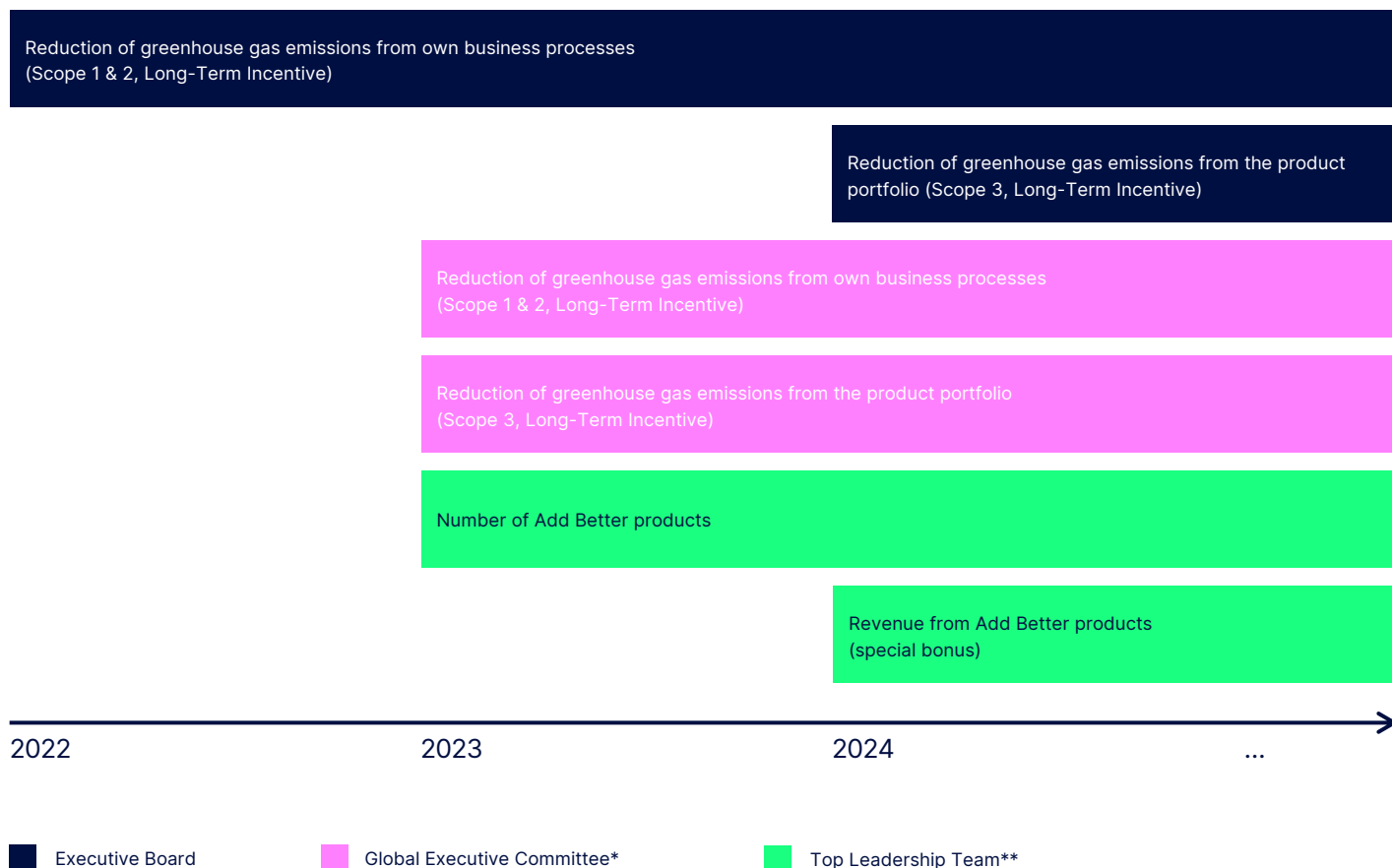


→ Climate targets linked to GEA's remuneration system

Company transformation supported by financial incentives

We can only achieve our Net Zero 2040 target with the support of each of our more than 18,000 employees. To ensure that implementing our Climate Transition Plan 2040 tracks with our goals, we have incorporated climate targets into the remuneration system at all management levels.

Successful implementation of the company's transformation is the responsibility of our executives, who are role models for our employees. Alongside financial incentives, this means we also focus on sharing knowledge about climate-related matters as well as developing the associated skills and expertise.



* The Global Executive Committee (GEC) is the management body comprising the divisional and regional CEOs, Chief Sustainability Officer and the Chief Human Resources Officer, alongside the members of the Executive Board. The members of the GEC are involved in all strategic and operational matters and report to the CEO. ** Comprises around 150 top managers.

→ GEA's Finance department also considers climate-related aspects

GEA considers environmental, social and governance aspects in making investment decisions.

We were the first company in Germany to combine its share buyback program (2022 and 2023) with a sustainability initiative. This enabled us to finance a drinking water project in Tanzania with a donation of € 500,000 to date.

So that our Finance department can make a greater contribution to a more sustainable future, sustainability criteria, such as the reduction of greenhouse gas emissions in our own operating processes (Scope 1 and 2), were added to our syndicated credit facility (club deal) for € 650 million in 2022, making it GEA's first sustainable financing arrangement. These indicators are being used as the basis for further sustainable financing, mainly in connection with the company's syndicated credit facilities.

Fishing clouds in Tanzania

GEA has entered into a three-year partnership with Viva con Agua, a non-profit organization that is working to ensure access to clean drinking water.

Fog nets capture moisture from the air. The low-maintenance nets made from a special three-dimensional textile fabric can draw up to 1,000 liters of water from the air on a misty day. Three schools are among the facilities supplied with clean water by the fog collectors.



→ Transparency as a key element of our climate strategy

Quantifiable. Transparent. Traceable.

We report annually on the progress of our Climate Transition Plan 2040 in our annual and sustainability reports. Our greenhouse gas emissions balance sheet is an important monitoring and control element. Each year, it is audited and certified annually by our auditor. This ensures that we have a transparent and reliable overview of how our greenhouse gas emissions have developed since 2019, both in our business processes (Scope 1 and 2) and in our product portfolio (Scope 3).



As part of our reporting to **CDP**, we report annually on climate-related data, the associated strategies and corresponding transformation paths.

In 2024, we were once again awarded the top grade of "A" by CDP for our performance and transparency in reporting. This makes us one of the few companies out of almost 21,000 surveyed worldwide to make it onto the A list.



Since 2022, we have been following the recommendations of the **Task Force on Climate-related Financial Disclosures (TCFD)** in reporting on our approach to climate change.

We disclose our assessment of the risks and opportunities arising from climate change in our Sustainability Report.

→ Taking a public stance

We are committed to raising public awareness of climate protection and playing an active role, sharing our experience and expertise and taking others along on our journey.

2019



Alliance of CEO Climate Leaders

This alliance is a global community of CEOs from major corporations across different industries. Its goal is to make it possible to complete the transition to Net Zero economy by the middle of the century at the latest by encouraging action across all sectors and engaging with policymakers.

2021



Science Based Targets initiative (SBTi)

GEA obtained SBTi validation of its climate targets for the first time in 2021, also subjecting its upgraded ambitions to the validation process in 2023. The SBTi applies the findings of climate science to define and promote proven processes for reducing greenhouse gas emissions and achieving Net Zero targets. The SBTi Net Zero Standard, which is based on climate science and the 1.5°C target set by the Paris Climate Agreement, requires companies to achieve rapid and extensive emission reductions by means of short-term and long-term science-based targets.



UN Global Compact

The UN Global Compact is a worldwide pact between businesses and the United Nations that aims to make globalization more socially and ecologically responsible.



Business Ambition for 1.5°C

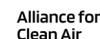
Companies that have signed up to the Business Ambition for 1.5 Campaign remain committed to the SBTi. The UN Global Compact continues to urge companies to define ambitious emission reduction targets aligned with the SBTi's Corporate Net Zero Standard.



VDMA Blue Competence initiative

Blue Competence is the sustainability initiative of the German Mechanical Engineering Association (VDMA) to promote sustainability in the mechanical and plant engineering sector. The initiative also aims to inform the industry about sustainable solutions.

2022



Alliance for Clean Air

The Alliance for Clean Air brings together business leaders to champion the social, economic and climate benefits of tackling air pollution.

econsense

econsense

econsense is the sustainability network of German business. Its goal is to collaborate in actively shaping the transformation to a more sustainable economy.



International Sustainability Standards Board

The International Sustainability Standards Board (ISSB) develops international sustainability reporting standards.

2023



EV100

The members of EV100 have made a commitment to switch their fleets to fully electric or hybrid vehicles and support the development of the charging infrastructure.



German Sustainability Award

The German Sustainability Award recognizes companies and corporate partnerships that are committed to sustainability and take responsibility for their supply chains. GEA is a finalist in the category "Transformation Field Climate".

2024



SteelZero Initiative

SteelZero is a global initiative that brings together leading organizations in order to speed up the transition to a Net Zero steel industry.



ENGINEERING FOR A BETTER WORLD.

→ Disclaimer

Graphics: This document contains numerous graphics, infographics and text boxes with the aim of providing a comprehensive overview of specific elements of this Climate Transition Plan 2040 and making the Plan easier to grasp for readers. These graphics, infographics and text boxes should be read in the relevant context and in connection with this Climate Transition Plan 2040 as an overall document.

Forward-looking statements: This document contains forward-looking statements about GEA Group Aktiengesellschaft, its subsidiaries and affiliates (hereinafter: GEA) as well as the economic and political conditions that may affect GEA's Climate Transition Plan 2040. These statements are based on our current experience, assumptions and forecasts, as well as the information available to us at this time. Forward-looking statements are subject to known and unknown risks and uncertainties. Consequently, actual future outcomes and developments may differ from the forward-looking statements made in this document.

Forward-looking statements notably include GEA's targets under this Climate Transition Plan 2040 (i) to reduce its operational emissions (Scope 1 and 2) by 60 percent by 2026 and by 80 percent by 2030 compared with the 2019 baseline, (ii) to reduce emissions in the product portfolio (Scope 3) by 27.5 percent by 2030 compared with the 2019 baseline and (iii) to achieve net-zero emissions at every link in the value chain (Scope 1, 2 and 3) by 2040.

Forward-looking statements also comprise, but are not limited to, statements regarding targets (i) to (iii) and the measures described in this Climate Transition Plan 2040 to achieve these targets. These include, but are not limited to, measures for phasing out fossil fuels,

electrifying the vehicle fleet, generating renewable electricity on-site, purchasing electricity from renewable sources and increasing energy efficiency, as well as measures for the purpose of research and development of resource-efficient products and/or disruptive system approaches and for electrifying the product portfolio, fostering innovation, introducing the circular economy, providing climate-related consulting services, extending life cycles – in particular through service and digitalization offerings – and measures geared to decarbonizing the supply chain. They also include statements regarding the interest groups and partnerships in wider society mentioned in this Climate Transition Plan.

There are also risks and uncertainties, meaning that actual outcomes may differ significantly from those stated or implied in the forward-looking statements, notably with regard to the circumstances described in this document under "Recognized challenges and uncertainties in relation to data and measurements".

GEA assumes no guarantee for realizing the forward-looking statements contained in this Climate Transition Plan 2040. The forward-looking statements are based on the knowledge and information available to GEA at the time this Climate Transition Plan 2040 was published. Subject to any legal requirements, GEA assumes no obligation to publish any updates of or amendments to the forward-looking statements contained in this Climate Transition Plan 2040 to reflect changes in the expectations or events, conditions or circumstances on which such statements are based.

The Climate Transition Plan 2040 does not form part of GEA's 2023 Annual Report.

Non-binding nature of the consultative resolution: Due to the long time horizon until 2040, the fast pace of developments and the evolving legal framework, the Executive Board reserves the right to make amendments. This is necessary in order for the Executive Board to fulfill its management responsibility. The planned vote on the Climate Transition Plan 2040 at the 2024 Annual General Meeting is therefore non-binding on either the Executive Board or the company.

Rounding: Minor differences may arise due to the commercial rounding of figures and percentages.

→ Disclaimer

Translation: This Climate Transition Plan 2040 is a translation of the German version. The German version applies in case of any discrepancies between the two.

Recognized challenges and uncertainties in relation to data and measurements

GEA has published a comprehensive annual report of its greenhouse gas emissions at all stages of the value chain (Scope 1, 2 and 3) since 2019. Emissions data in general, but especially data on Scope 3 emissions (which by definition include the emissions of other organizations), are subject to numerous assumptions:

- In general, life cycle analyses are based on standard industry data and are not specific to individual suppliers or customers.
- Our product life cycle analyses do not yet cover all products and markets.
- International standards and protocols governing emissions calculations and categories are still evolving, as are recognized norms relating to terminology such as “climate neutrality” and “net zero”.

GEA has taken the decision not to wait until every challenge is resolved and every term is defined before publishing its Climate Transition Plan 2040. It may become necessary to adapt the Climate Transition Plan 2040 as the data basis for measuring emissions in the value chain improves – shifting over time from average data to specific data – and due to the formalization of terms relating to climate neutrality and net zero by national or European lawmakers and NGOs.

Data, measurement and assurance

Our Scope 1 and 2 operational emissions are measured based on energy consumption data gathered by our systems.

Scope 3 emissions in the value chain from procurement to disposal are estimated using a proprietary accounting methodology in accordance with the GHG Protocol. The model is based on life cycle analyses and industry data as well as actual data from suppliers, where available.

To measure progress toward our target of achieving Net Zero by 2040, we need to expand the existing form of measurement of our product life cycle analysis, which currently covers 60 to 70 percent of our total global portfolio, to become a system that encompasses all of our products and relevant business activities. We are testing a range of approaches to achieve this, including working with other companies facing the same challenge, universities as well as other research facilities.

In addition, we will continue to obtain independent third-party assurance that our data is robust and reliable.



Engineering
for a better
world.