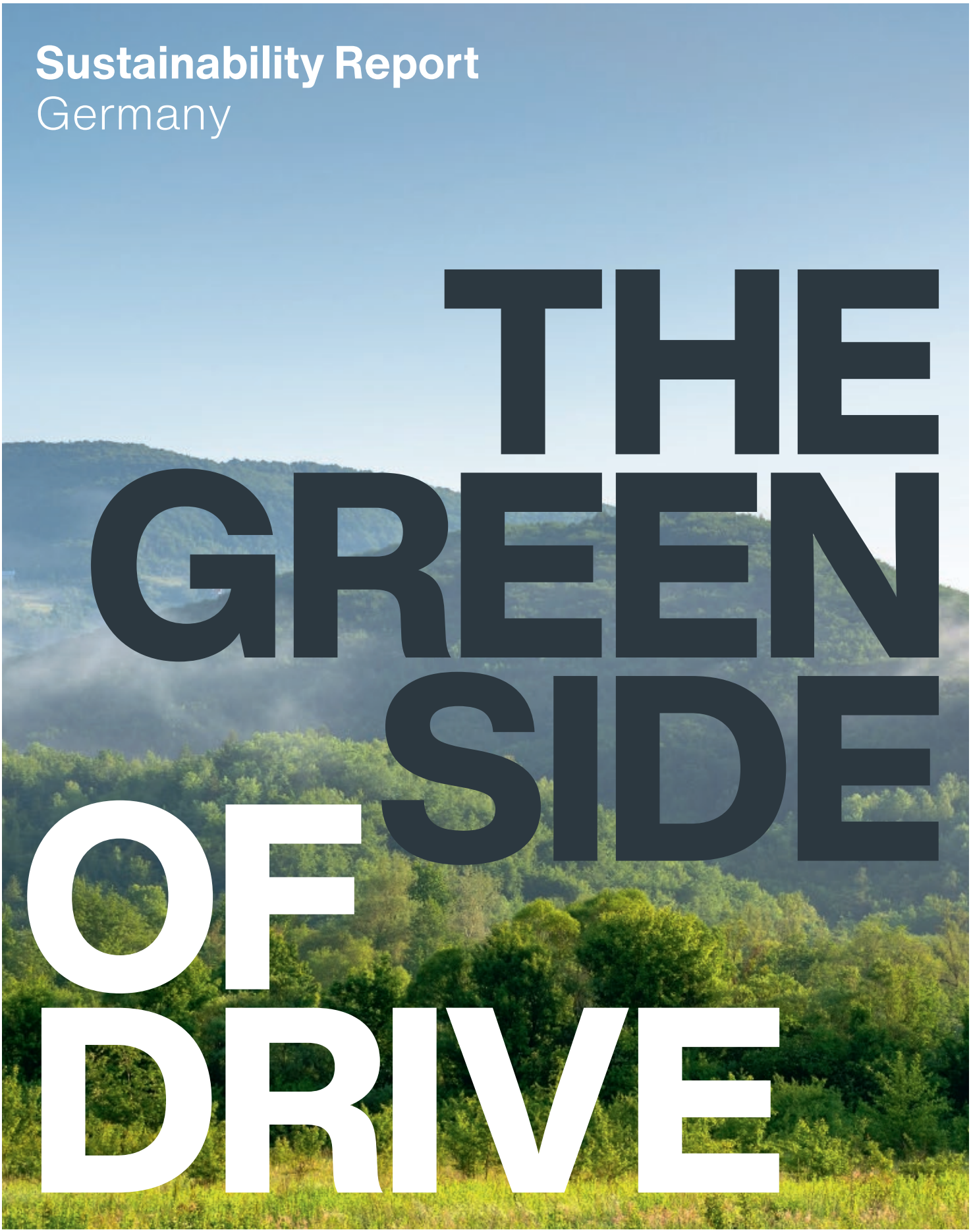
2024

SEW EURODRIVE

Sustainability Report
Germany

THE GREEN SIDE OF DRIVE



Dear Readers,

In previous years, I have used this foreword to highlight the multiple crises affecting our country and our economy. As much as I would like to sound the all-clear this year, the global situation is still fraught, and the economic and political challenges have grown.

As a consequence, issues such as sustainability, climate protection, and resource conservation have been pushed into the background, which was clear to see in the German elections this spring. However, climate change pays no regard to the latest political opinions – nor to the legal requirements that companies such as ours have to follow and that demand ambitious action.

Since we set up our Sustainability Committee and completely realigned our sustainability strategy in 2022, SEW-EURODRIVE has initiated multiple processes that we are carrying forward with focus and determination, regardless of the general mood and crises outside of our company.

We are making a lot of adjustments and changes throughout the company. Highlights include expanding carbon accounting from 13 sites to now cover 17 in Europe, establishing eco-design and circular management as guiding principles for our product design, promoting our in-house SEWWOMEN network, and building a solar park on the Schafswiese site at our Plant for Large Gear Units in Bruchsal.

These examples show that, at a time when the subject of sustainability is becoming less prominent in the public's perception, what we need is not eye-catching virtue-signaling. Instead, we have to hold fast to what is right in the big picture and make positive changes in smaller issues.

Yours,

Jürgen Blickle
Managing Partner

Sustainability Report 2024

Our Sustainability Report has three key aims. We want to inform customers, business partners, employees, and other stakeholders about the progress we are making in all our sustainability initiatives and projects. In doing so, we are also meeting our responsibility to be as thorough and transparent as possible about sustainability at SEW-EURODRIVE in our dealings with stakeholders from politics, society, the media, and social organizations.

Finally, this report is part of the step-by-step implementation of the CSRD (Corporate Sustainability Reporting Directive) and GRI (Global Reporting Initiative), which form the internationally recognized framework for sustainability reporting. As such, its key aim is to document the transformation of processes and structures at the company in a format that is as detailed and compact as possible.

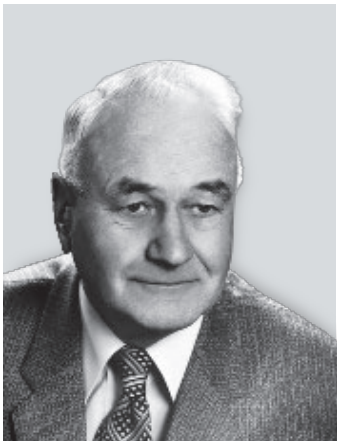
Although this report focuses on Germany, it also presents projects and data from the company's largest sites in the EU. It is envisaged that experience obtained here will serve as a basis for global reporting. The countries included this year are Germany, Italy, Portugal, France, the Netherlands, Poland, Austria, and Denmark.

The focal points and limits of reporting are chiefly based on the sustainability topics identified in a materiality analysis. The 2024 Sustainability Report relates to the fiscal year running from January 1, 2024 to December 31, 2024 and has been approved by the SEW-EURODRIVE Management Board.

Company profile and business model

+ About SEW-EURODRIVE
+ Business model
+ Company management

About SEW-EURODRIVE



Ernst Blickle, son-in-law
of the founder of Süddeutsche
Elektromotoren-Werke SEW

"People don't want products. They want solutions."

Ernst Blickle, son-in-law of the founder of
Süddeutsche **E**lektromotoren-**W**erke SEW

This principle, which was established back when our company was founded in 1931, is still highly apt today and captures the essence of SEW-EURODRIVE. We think and act based on holistic concepts and solutions that drive our customers.

Establishment
of Süddeutsche Elektromotoren-Werke (SEW)
1931

Introduction
of the first modular system for gearmotors
1951

Completion
of the revolutionary modular system
1965

Rainer and Jürgen Blickle
take over the SEW-EURODRIVE Group
1987

Introduction of decentralization
in drive technology, with MOVIMOT®
1996

1945
Son-in-law Ernst Blickle
takes over corporate management

1959
First foreign company
in Hagenau, France

1980
Move
into control technology

1994
Establishment
of a subsidiary in China

2002
Product of the Year
award won for TorqLOC® hollow shaft mounting system

What makes us stand out from virtually every other company in our field is the way we have been combining movement, tradition, innovation, quality, and services for over 90 years. To achieve this, we also drive our own company and are playing a key role in shaping the future of drive technology.

We laid the foundation for this success back in 1951, when we introduced the first modular system for gearmotors.

Further milestones in our company's history in terms of product and production technology were the completion of our modular system in 1965, the move into control technology in 1980, and the launch of decentralized drive technology with MOVIMOT® in 1996.

Rainer and Jürgen Blickle took over the SEW-EURODRIVE Group in 1987

Company growth
Sales > EUR 1 billion
Headcount > 10 000

2005

2007

Start of the success story
of the industrial gear unit

Commissioning
of the Plant for Large Gear Units in Bruchsal

2010

2014

Industry 4.0
arrives at the Graben-Neudorf plant

Opening
of the new electronics plant in Bruchsal

2018

2019

Construction work
in Graben-Neudorf: Opening of "South" site and start of "North" site

Rainer Blickle
dies in March at the age of 73 years

2021

2021

Opening
of the casting production plant and customer center in Graben-Neudorf and 90-year anniversary of the company

The green side of drive
Sustainability initiative with sustainability report

2022

Our sites worldwide

Our principle of personal proximity – we are where our customers are
Our growing global presence means we are getting ever closer to our customers. From an early stage, we have been keen to ensure customer proximity beyond our headquarters in Bruchsal and the heart of our production operation in Graben-Neudorf.

With 18 production plants, 93 Drive Technology Centers, and over 200 sales companies in 57 countries, we are there for our customers worldwide. The distribution of our sites is as follows:

162	Europe
119	Asia
72	North and South America
58	Africa
22	Australia

57
countries

22 000
employees

> EUR 4.5b
in sales (2023)

Business model

Being a specialist in drive technology gives us our own very special drive.
Thanks to our comprehensive product portfolio, we can find a solution for any requirement and any drive. What's more, our solutions are used in all kinds of sectors, in countless processes, plants, and machines.

Based on our flexible, modular design approach, we can precisely meet all customer needs with an exceptionally wide-ranging portfolio. Our individual products can be integrated into applications or system solutions, or adapted based on industry-specific criteria.

We create user-specific and application-specific drive solutions with standard gearmotors, and we produce industrial gear units with decentralized technology, servo technology, and control technology. We ensure functional safety and an interface-specific software connection for all our solutions.

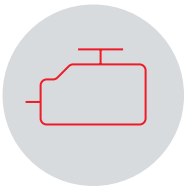
Everything from a single source, comprehensively carefree, and fit for the future
Thanks to our application packages and preconfigured automation modules, we offer everything from a single source, meaning our customers have just one supplier and contact to deal with.

With the help of a comprehensive service concept and a constant stream of new technologies and ideas, we think ahead and look to the future. Our Life Cycle Services and 24 h Hotline give our customers a comprehensively carefree package for all repair and maintenance work. Our journey into the digital future of Industry 4.0 started back in 2014 with our lean smart factory in Graben-Neudorf.

We ensure that our customers get precisely the solution they need – we manufacture with precision and to suit the market.

Our portfolio:

Individual products



Applications

System solutions

Industry expertise

Life Cycle Services

Industry 4.0

Company management

The SEW-EURODRIVE Management Board
As CEO, Managing Partner, and Chairman, Jürgen Blickle has overall responsibility. Reporting directly to the CEO is Dr. Jörg Hermes, COO and Managing Director Innovation Mechanics. He also has overall responsibility for the departments under Managing Director Production Christian Mayer and Managing Director Innovation Mechatronics Dr. Hans Krattenmacher.

Jürgen Blickle
CEO

Dr. Jörg Hermes
COO

Christian Mayer
Managing Director
Production

Dr. Jörg Hermes
Managing Director
Innovation Mechanics

Dr. Hans Krattenmacher
Managing Director
Innovation Mechatronics

Jürgen Blickle
CFO, CSO

Strategy and sustainability

+ Fields of activity and strategy
+ The basis of our business activities
+ Sustainability organization
+ Double materiality analysis
+ Focal points
+ Roadmap

Fields of activity and strategy

SEW-EURODRIVE is a responsible family-owned business, and sustainability is an integral part of our DNA. From a social, economic, and ecological perspective, we always endeavor to use resources within the limits of their natural regeneration capacity. As part of our long-term sustainability initiative, we aim to optimize our entire value chain, and also to cut CO_2 emissions and live up to our social responsibility by minimizing our use of resources.

To implement our sustainability@SEW initiative, we compared our value chain against the 17 SDGs defined by the United Nations. This resulted in three key areas of focus – supply and raw material chains, production and business processes, and products and services.

Aspects of sustainability – ecology, society, and economy + quality

All three aspects of sustainability as it is generally understood – its ecological, social, and economic dimensions – make up the very bedrock of our commercial operations. All three are also covered by another key trait of SEW-EURODRIVE as a manufacturer of motors, gear units, and inverter technology worldwide – quality. By providing products that are durable and have minimal service outlay, we are helping safeguard the planet's resources. We aim to monitor and continuously re-evaluate the ways our actions across all sectors and departments impact the environment. Our goal is to ensure the company is managed on as sustainable a basis as possible.

3

focus topics as the basis of our business activities

As a family-owned company, we feel we have a responsibility to future generations, too. Furthermore, as a company that operates internationally, we seek to ensure our approach is as wide-ranging and all-encompassing as possible. To satisfy the international requirements placed on our products and our customer structure, we also aim to actively incorporate our external partners into our sustainability process.

SDG and areas of activity

Highly developed, industrialized countries must set an example when it comes to fighting climate change. That means that we in Germany, over the coming years and decades, will need to join others in giving up habits we have become fond of. However, climate change also presents us with an opportunity to gradually establish a new way of living and a new philosophy of life that are in harmony with our planet.

It was in this spirit that the United Nations defined 17 global sustainable development goals (SDGs) in 2015 as part of its Sustainable Development Agenda.

To implement our sustainability@SEW initiative, we compared our activities against these 17 SDGs. This resulted in three key areas of activity – supply and raw material chains, production and business processes, and products and services.

17

global sustainable development goals

Since individuals and what they do are always at the start of our value chain, "people" is our fourth area of activity.

Our focus topics are rounded off by a fifth – the "ethics and governance" category, in which all overarching sustainability measures are anchored. In particular, this covers legal requirements and ethical principles.

The following double-page spread sets out the focus topics and how they relate to the SDG categories that are relevant to SEW-EURODRIVE.

The basis of our business activities

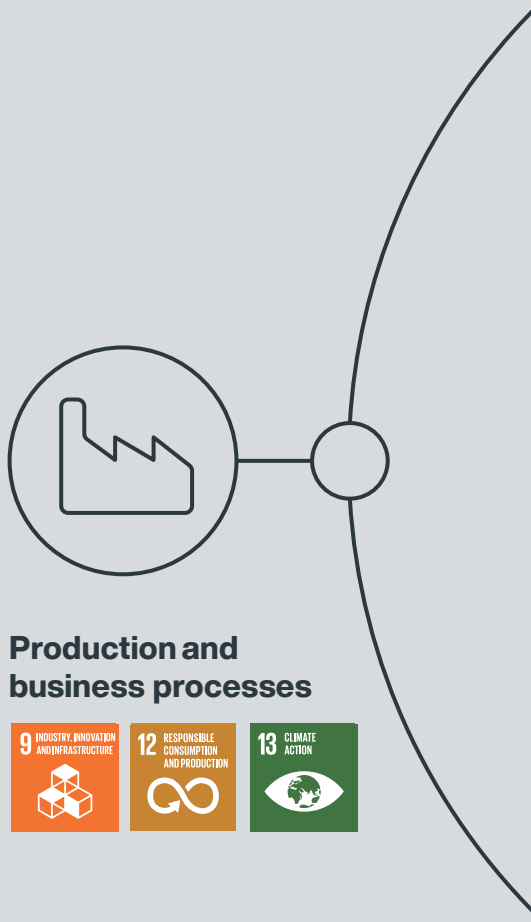
→ **Ethics and governance**
+ Risk management
+ Legal compliance
+ Social commitment
+ Information security

→ **People**
+ Workforce
+ Health and safety management
+ Qualifications, support, and knowledge transfer
+ Being an attractive employer
+ Diversity and equal opportunities

→ **Products and services**
+ Circular economy and circular processes
+ Sustainable product development
+ Resource-efficient products
+ Digital products and services
+ Product carbon footprint

→ **Supply and raw material chains**
+ Collaborative supplier management
+ Resource-friendly raw material sourcing

→ **Production and business processes**
+ Resource-friendly production
+ Buildings and infrastructure
+ Logistics and mobility



→ **Production and business processes**


→ Ethics and governance
10 REDUCED INEQUALITIES
8 DECENT WORK AND ECONOMIC GROWTH
→ People
4 QUALITY EDUCATION
5 GENDER EQUALITY
10 REDUCED INEQUALITIES
3 GOOD HEALTH AND WELL-BEING
Ecology
Society
Economy
Quality
→ Products and services
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
→ Supply and raw material chains
13 CLIMATE ACTION
17 PARTNERSHIPS FOR THE GOALS
8 DECENT WORK AND ECONOMIC GROWTH

Sustainability organization

Being well organized is half the battle – the Sustainability Committee at SEW-EURODRIVE
We will only be able to permanently establish "sustainability" as an additional corporate aim and implement practical steps successfully if we work to that end every day, every week, and every month. This is the only way we can ensure that every individual at every level is able to play their part in delivering sustainable change, thus making sure it works for our entire company. If all the associated concrete targets are to be met, responsibilities will need to be clearly allocated within SEW-EURODRIVE.
A Sustainability Committee was established in 2022 to do precisely that.

Structure and functions of the Sustainability Committee at SEW-EURODRIVE
By creating the Sustainability Committee, we are emphasizing the huge importance our company attaches to sustainable development. The organizational chart on the right shows how the importance of the issue is reflected in our organization. The Sustainability Committee (SC) comes under the umbrella of quality and sustainability management and reports directly to the SEW-EURODRIVE Management Board.

One of the most important tasks for the SC is to keep the Management Board informed and provide a basis for making decisions. Further key tasks include formulating and developing the SEW-EURODRIVE sustainability strategy and consolidating the programs, targets, and measures associated with that strategy. Finally, all the SC's activities are geared toward continuously promoting the various sustainability issues and projects within the five areas of activity. This also includes regularly carrying out certifications and audits.

↑
Organizational chart for the Sustainability Committee at SEW-EURODRIVE

Overarching responsibility ensures a holistic approach
The field of activity of the Sustainability Committee covers the entire company, from research and development and sales to the plants and procurement. The primary focal points are advising and assisting individual divisions and departments and supporting external consultants when it comes to rolling out sustainable projects. As part of this approach, working groups and a central project organization have been established to drive forward specific activities and projects with as much focus as possible. This means that individual managers and executives have responsibility for the activities aimed at achieving targets and for implementing standards. They are also tasked with coordinating the individual working groups.

Composition and remit of working groups
At operational level, staff are organized into project teams or working groups based on the requirements of the relevant topic areas.

Employees have been appointed to positions of responsibility in the relevant units.

A project team led jointly by the financial and sustainability management departments has been created for first-time implementation of the Corporate Sustainability Reporting Directive (CSRD). This project involves evaluating how the organization is impacting the environment and people, and assessing the opportunities and risks for the company. Reviews and updates are being carried out on a regular basis.

There are several working groups for the focal point of the circular economy, with members from both innovation and production departments. In addition to this, information is regularly shared with the sites outside Germany.

This focal point is being expanded internationally in a step-by-step process. We are currently directing our attention toward our European subsidiaries. When developing solutions, we work together as equals and apply the best-practice principle. For some activities, such as reporting, our headquarters has defined specifications for our sites outside Germany. Sites outside Europe are being involved as part of preparations for the first CSRD report.

The Sustainability Committee at SEW-EURODRIVE

Claus-Peter Sieber
Head of
Quality Management
Sustainability Officer

Oliver Bollian
Head of
International Markets 1 (Europe)

Alexander Partheymüller
Head of Product Support
and Release Management

Heiko Roos
Head of
Financial Accounting

Daniela Schmid
Head of
Corporate Organization
Development

Dr. Wolfgang Weis
Head of
Graben-Neudorf Production Plant

Bernd Kohring
Head of
Procurement

Double materiality analysis

Stakeholder groups

The interest in sustainable business practices and sustainable products has grown strongly in recent years – not just among individuals, but also in political and economic circles. As part of the work to implement the CSRD Directive, SEW-EURODRIVE has identified which groups have an interest in the company's activities.

Stakeholder groups	Forms of dialog
Employees	Internal and external communication channels, works meetings, employee review meetings
Partners	Regular management reporting
Trade unions	Works Council committees, works meeting
Suppliers	Supplier discussions and audits, sustainable supplier development
Customers	External communication channels, consulting, training, satisfaction surveys
Local communities	Dialog with towns/cities and communities
Nature/environment	Silent stakeholder

Process to determine material topics
As a future-focused company, SEW-EURODRIVE regards sustainability as an integral part of its business operations. With a view to initiating productive activities in this context, a double materiality analysis was carried out in accordance with the requirements of the CSRD Directive. This also satisfies the requirements of the Global Reporting Initiative (GRI)*.

The material topics were formulated under consideration of the different stakeholder interests and by asking our experts about major impacts in terms of the environment and society (inside-out perspective) as well as the opportunities and risks for the company that are associated with sustainability-relevant influences (outside-in perspective).

The double materiality analysis stipulates that a topic must be included in reporting when it has been identified as a material topic under at least one of these two perspectives.

IROs (impacts, risks, opportunities) were scored according to the criteria laid down by the ESRS (European Sustainability Reporting Standard) in terms of their scale, scope, irremediable character of the impact, and likelihood. Assessments were also carried out to determine which part of the value chain these impacts come from and/or which part of the value chain the risks and opportunities affect.

An impact was judged to be material if it was found to have a significant influence on society or the environment. Opportunities and risks were evaluated based on the financial consequences for SEW-EURODRIVE. These could take the form of a drop in sales or increase in costs, for example. The IROs that were identified are to be integrated into the company's risk management going forward.

* The Global Reporting Initiative (GRI) is committed to the sustainability reporting of organizations worldwide and provides appropriate guidelines. The GRI aims to support the sustainability reporting of all organizations.

In preparation for CSRD reporting, material data points were collated based on the ESRS. To enable international comparisons, the GRI content index at the end of this report sets out the equivalent data points under the GRI.

ESRS	Topic	Subtopic	Area of activity
E1	Climate change	Climate change adaptation	Production and business processes
		Climate change mitigation	Production and business processes
		Energy	Production and business processes
E2	Pollution	Pollution of air	Production and business processes
E5	Resource use and circular economy	Resource inflows	Supply and raw material chains
		Resource outflows	Products and services
		Waste	Production and business processes
S1	Own workforce	Working conditions	People
		Equal treatment and opportunities for all	People
G1	Business conduct	Protection of whistle-blowers	Ethics and governance
		Corporate culture	Ethics and governance
		Corruption and bribery	Ethics and governance

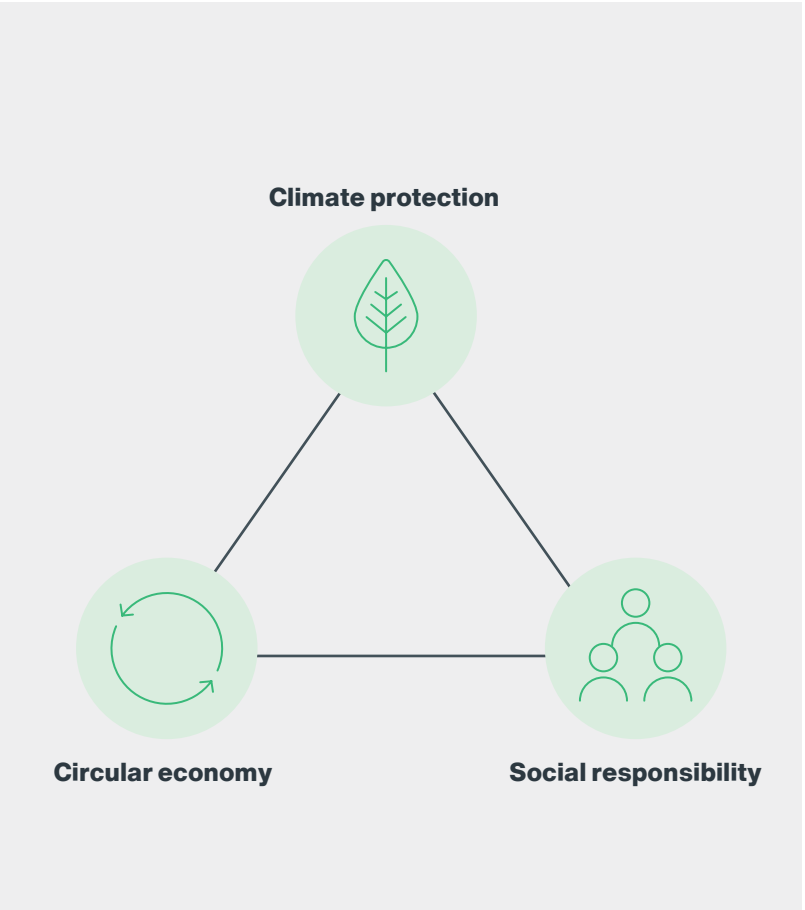
Focal points

Our strategy involves continuously and permanently establishing "sustainability" as a value within the company and taking concrete, measurable steps to achieve it.

By analyzing and continuously improving our processes and products, we seek to permanently reduce their carbon footprint. What's more, an effective circular economy is to be established, in which the circularity of products is considered right from the development stage.

SEW-EURODRIVE attaches great importance to its social responsibility – not just toward its employees, but also toward people involved in upstream or downstream processes or indirectly affected by the company's activities.

The double materiality analysis resulted in three key areas that SEW-EURODRIVE is focusing on.



As a first step in becoming a truly sustainable company, the formulation of these focal points has led to the development of a vision that SEW-EURODRIVE will turn into reality through a gradual but continuous process.

Focal point	Topic	Measures/activities
Climate protection	CO_2 reduction* SEW-EURODRIVE (Scopes 1 and 2)	– Switching to green electricity – Substituting fossil energy sources – Electrification – Extending carbon accounting to all sites worldwide
	CO_2 reduction* Upstream (Scope 3)	– Identifying essential Scope-3 categories – Carbon footprint for significant product groups of purchased goods
	Saving energy	– Utilizing process heat – Measures to increase energy efficiency – Drawing up recommendations for international subsidiaries
	PCF calculation (product carbon footprint)	– Calculation method – Scenario for operation phase – Automating the calculation method
	Mobility	– Guidelines for sustainable travel – Purchase of e-vehicles for the fleet
Circular economy	Circular economy topics Products	– Identifying potential projects – Developing a business model – Developing the necessary processes
	Circular economy topics Packaging and containers	– Packaging loops + concepts – Overall concept and responsibility
	Eco-design	– Eco-Design Guideline – Voluntary commitment in product development
Social responsibility	Equal opportunities	– Formulating guidelines
	Occupational health and safety	– Fulfilling legal obligations and other requirements as well as the obligation to eliminate avoidable hazards and minimize risks
	Human rights	– Supply Chain Due Diligence Act, Code of Conduct: obligating business partners to respect human rights by requiring them to establish appropriate due diligence processes – Ad hoc auditing – Expanding the Whistleblower Hotline

*Reduction of 80% in CO_2 emissions from German sites (Scope 1/2). In relation to base year 2022; without offsetting.

Roadmap

Our sustainability roadmap – the most important steps and milestones
While gradually rolling out carbon accounting at more plants and sites and introducing additional measures to achieve a circular economy, we have put together a special roadmap that sets out the key milestones for our journey toward greater sustainability by 2028.

2024

Q1 / 2024

Site-specific carbon accounting CCF – for the defined countries of the SEW-EURODRIVE Group – Scope 1/2 accounting

Sourcing of green electricity for German sites

Q2 / 2024

Voluntary commitment to the Ecodesign Regulation in the product development process and launch of eco-design training for development staff

Q3 / 2024

Publication of the Sustainability Report 2023 in line with GRI Standards

Q4 / 2024

Start of "eco-screening" development service for the ecological evaluation of design decisions

2025

Q1 / 2025

Project launch: automatic calculation of product carbon footprint (PCF)

Q2 / 2025

Publication of the 2024 Sustainability Report in line with GRI and ESRS standards

Q3 / 2025

Decision-making on the scope and structure of implementing product carbon footprint calculation

Q4 / 2025

Certification of a department for circular processes in line with WEEE

Verification in line with SMETA. 4-pillar audit in the areas of labor standards, health and safety, environment, and business ethics

2026

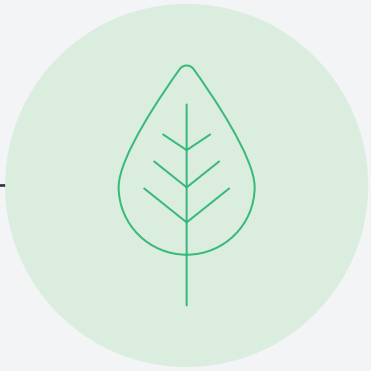
Q1 / 2026

Site-specific carbon accounting CCF, for defined countries of the SEW Group: Scopes 1, 2 and key categories of Scope 3

Q4 / 2026

CO_2 reduction of > 80% at German sites (Scope 1/2)*

*In relation to base year of 2022; without offsetting



Q1 / 2027

Implementation of the measures necessary for CBAM

Q2 / 2027

Reporting pursuant to the European Corporate Sustainability Due Diligence Directive (CS3D)

Q2 / 2028

Reporting in line with European Supply Chain Directive (CS3D)

Ethics and governance

+ Risk management
+ Legal compliance
+ Social commitment
+ Information security


→ Ethics and governance
→ People
Ecology
Society
Economy
Quality
→ Production and business processes
→ Products and services
→ Supply and raw material chains

Ethics and governance: the highest standards for maximum integrity

Our most fundamental corporate principles
The high quality of our products and solutions is matched by a high benchmark in ethical guidelines and standards. We believe that ethics and governance are about more than just abiding by applicable laws and global human rights. For us, ethics and governance are about actively managing sustainability and pursuing our company's core values of freedom, reliability, and humanity.

As one of the world's leading manufacturers of drive technology, we attach great importance to these standards, whether in terms of occupational health and safety, a corporate code of conduct, or functional safety.

Risk management

Conserving resources with supplier-related risk management
By involving our suppliers in our processes and value chain at an early stage, we ensure that risks relating to unethical practices or the use of materials, among other things, are manageable during ongoing operations and remain that way. The basis for this predictive risk management and the proactive implementation of measures is the ongoing monitoring of all our suppliers using a critical supplier watchlist. In return, our suppliers benefit from professional support and goal-oriented solutions. We want to be proactive, focusing on teamwork and results. Through open communication and a respectful approach, we assume social responsibility as part of a growing partnership.

Keeping track with enterprise risk management
We use our enterprise risk management system to record and evaluate all ESG-relevant opportunities and risks and present these to the decision-makers. In this way, we incorporate an overview of sustainability issues at managerial level and help ensure that these issues are taken into account when strategic decisions are being made at SEW-EURODRIVE. By integrating this system into our existing risk management process, we create an efficient control tool and avoid setting up parallel structures.

Guidelines for clear labeling and packaging

The example of our delivery and labeling requirements is a good illustration of how we use a clearly defined set of rules to make the packaging of goods and products delivered to us as efficient and sustainable as possible. This also applies to upstream and downstream processes.

Among other things, these rules precisely define the size of individual packaging items and forbid the use of prohibited packaging materials. To optimize handling processes, there are also detailed guidelines for how to structure labels and delivery notes. This clear labeling system saves energy by ensuring packages are not sent on wasteful journeys to the wrong warehouse or rack, for example.

Naturally, this same principle of maximum resource conservation through clear regulations for packaging and processes is also applied to the delivery of our own products to customers and partners.

The entire process for designing the packaging is described in detail in our comprehensive packaging manual. This includes the definition of various base carriers such as a Euro pallet and the packaging unit in the form of conductive or non-conductive carrying containers, SEW-EURODRIVE boxes, or reusable load carriers, to name just a few examples.

The design specifications for the packaging also cover factors such as internal securing elements and filling materials, the arrangement of goods, and the precise definition of the packaging material, which must, for example, be recyclable and comply with European environmental and material legislation.

The content and attachment of the goods tag, which sets out the necessary information on the contents of the delivery, are also precisely defined. Furthermore, the packaging manual also describes the proper handling of individual load carriers, which are divided into load carriers that can be exchanged in a pool and reusable load carriers that are specific to SEW-EURODRIVE.

Having in-house packaging instructions in place ensures, for example, that the materials utilized are highly reusable.

The packaging requirements

1. **Label must be attached to the smallest packaging unit.**
   Helps clearly identify the goods. Reduces errors in the goods receipt process. Saves time when identifying the goods.

2. **Large packaging units (usually Euro pallets) must be provided with a VDA label.**
   Simple and secure retrieval of required information thanks to standardized label structure.

3. **Packages (> 18 kg) must be suitable for handling with a gripper or suction lifter.**
   Optimizes the ergonomics of workstations and, as a result, occupational health and safety.

4. **Specification of delivery time to the day**
   Leads to even distribution of work volume and workload.

5. **Prohibited packaging materials must not be used.**
   Prevents extra costs for disposal and additional work. Compliance with statutory provisions.

6. **Delivery note is attached to the "large" packaging unit in a shipping bag and is clearly visible.**

7. **Adequate transport and corrosion protection must be ensured.**
   Prevents production downtimes and additional outlay.

Risk management

The systematic categorization of all suppliers creates clarity
Based on these results, all suppliers are systematically classified in a three-stage process.

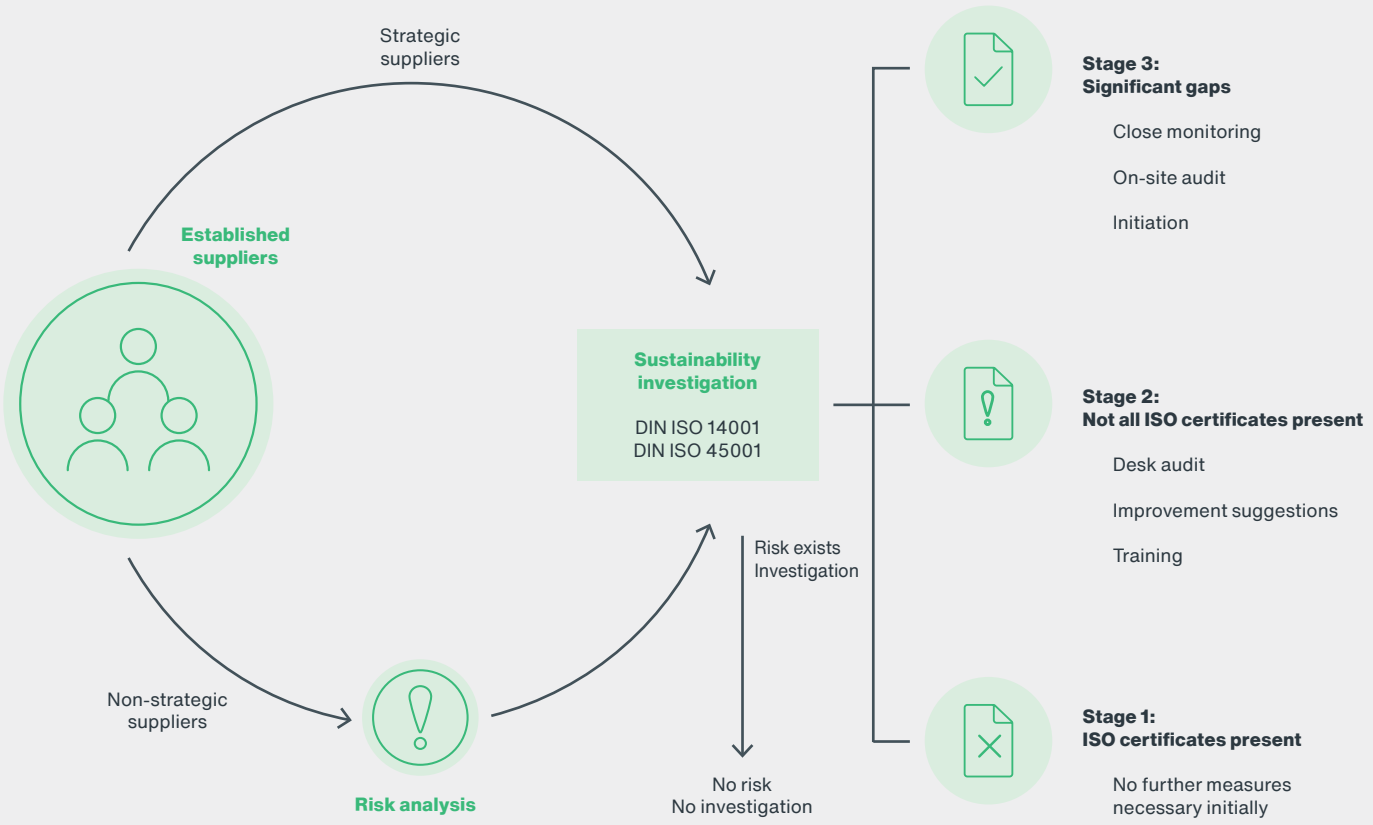
Stage 1
If all ISO certificates are present, no further measures will be implemented at first.

Stage 2
If not all ISO certificates are present, escalation action will be taken and prevention measures will be implemented.

Stage 3
If there are considerable gaps, the supplier will be closely monitored with an on-site audit and the initiation of a continuous improvement process.

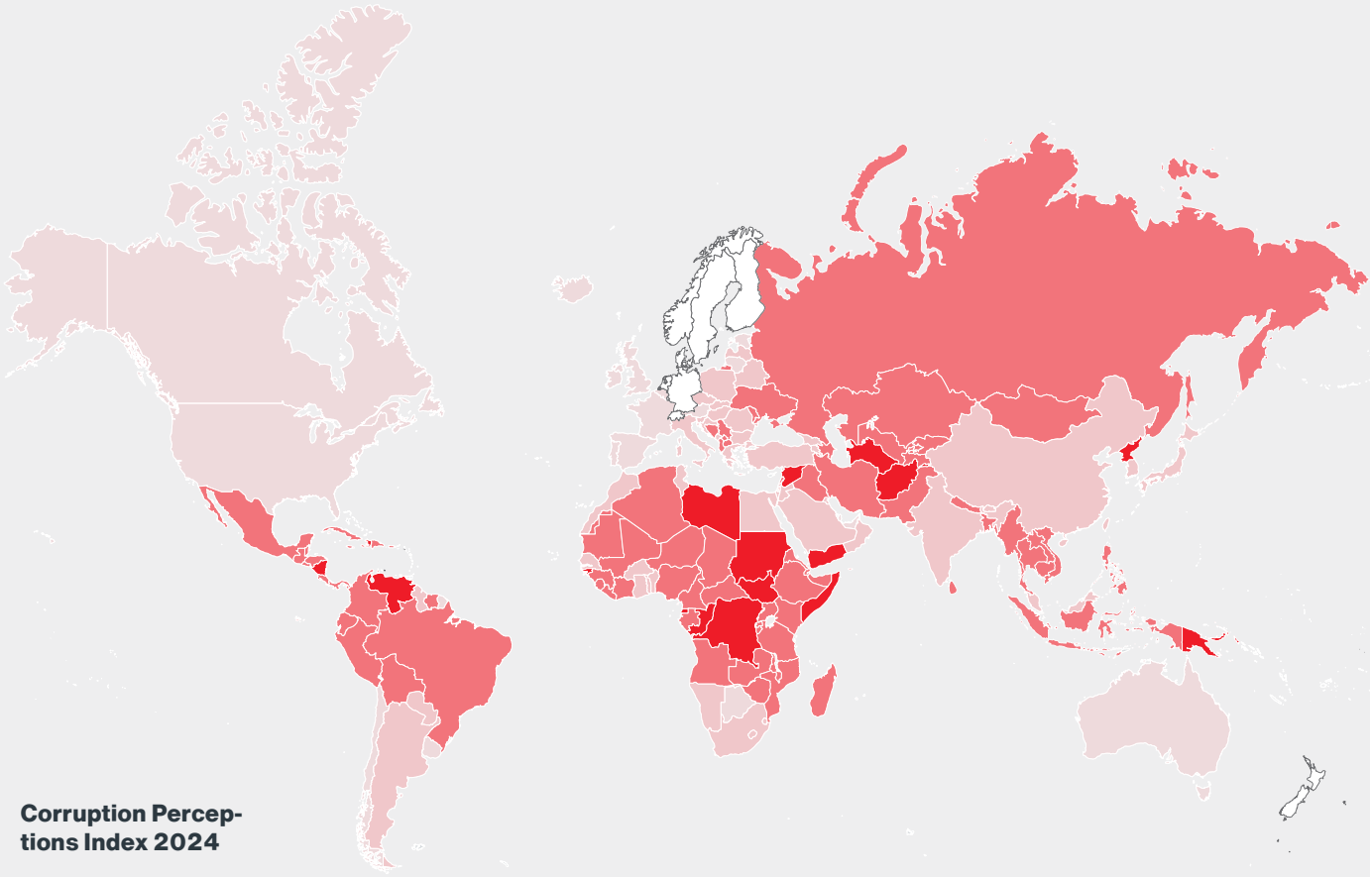
The risk analysis is conducted based on the geographical location of the supplier in relation to various studies and indexes, such as the Corruption Perceptions Index maintained by Transparency International. During the risk analysis, we also take into account special sector-specific considerations. For example, some sectors, such as the textile industry and raw material mines, are subject to special labor law risks, while others, such as the steel industry and raw material mines, are particularly impacted by environmental risks.

Systematic approach to dealing with suppliers



Risk analysis based on the geographical location of the supplier

2024



Dependable data protection based on the GDPR and Data Protection Officers

As a company based in Germany, we naturally observe and abide by all provisions and regulations in the General Data Protection Regulation (GDPR), which entered into force in 2018. We have appointed in-house Data Protection Officers for this purpose.

Overview of all certificates and product compliance regulations

We comply with the applicable international standards for quality management, environmental management, and energy management in addition to other ISO standards on occupational health and safety and on information security. A full overview of all the standards, regulations, and product compliance directives that we abide by can be found on our website.

Certificates and product compliance

The risk analysis is conducted based on the geographical location of the supplier and a sector-specific risk factor. The Corruption Perceptions Index maintained by Transparency International is a useful source of information for conducting risk evaluations on our suppliers. During the risk analysis, we also take into account special sector-specific considerations.

The risk analysis is conducted based on the geographical location of the supplier in relation to the Corruption Perceptions Index maintained by Transparency International. During the risk analysis, we also take into account special sector-specific considerations.

Legal compliance

The high quality of our products is matched by high ethical standards
This claim is firmly anchored on both a structural and organizational level at SEW-EURODRIVE by our corporate governance, by a compliance management system that has been rolled out across Germany and worldwide, and by an integrated management system for quality and energy management, environmental protection, and occupational health and safety. The same applies to the responsible handling of conflict materials and dual-use goods, as well as IT security and data protection. Within the framework of this compliance organization, we put in place monitoring to ensure laws are followed and that in-house regulations such as our Code of Conduct, guideline on gifts, and signature procedures are observed. As part of our response to the German Supply Chain Due Diligence Act (LkSG), we are expanding our Code of Conduct with an additional passage on human rights and environmental protection in the supply chain.

We also provide support in contractual negotiations with business partners, as far as assessing other legal questions in business relationships with third parties, and we take account of the legal implications when establishing or changing in-house business processes or business models.

Added to this are further measures within the framework of a regular internal audit:

Continuously monitoring the internal stipulations of our managing partners and Management Board as well as business processes, reporting, and compliance with laws, regulations, and directives.

Identifying new and as-yet unknown risks for all units and functions in the company is one of our tasks.

Our whistleblower tool is open to the public.

Auditing processes such as the sales process – starting with the request for a quotation and ending with accounting, including auditing operational and administrative steps and checks that are implemented throughout the core process.

Communicating audit results directly to the Audit Committee, which consists of managing partners and Management Board members, and providing regular instruction to employees.

Whistleblower Hotline
We have also successfully launched a publicly accessible whistleblower tool in more than 90 languages on our website. The company's employees and external third parties such as suppliers can use this tool to submit anonymous tip-offs. Most importantly, the tool provides a channel of communication with the source of information, without that source having to reveal their identity.

We also undergo external audits, with regular verification by EcoVadis, SEDEX, Integrity Next, and Supplier Assurance.

Last but not least, we encourage social engagement around the world by supporting social institutes and organizations located close to SEW-EURODRIVE sites with donations and sponsorships. In Germany specifically, our interest is focused on helping the company's workforce engage in volunteering activities and develop their contributions to society and their empathy.

Code of Conduct – the ethical guidelines for our day-to-day activities

Our Code of Conduct guides our everyday work. Through this code, we make a commitment to abide by all applicable laws and the core values of our company, namely freedom, reliability, and humanity. At the same time, the Code of Conduct helps us acknowledge our responsibility as an international family business with a history that stretches back more than 90 years.

Our Code of Conduct applies to every single member of staff, whether a senior executive or trainee, and to all hierarchy levels across all our branches and business units worldwide. Misconduct that violates the Code of Conduct may be harmful to SEW-EURODRIVE and will not be tolerated.

Our actions are governed by eight key principles

1

Abiding by the law

We always act in accordance with the applicable laws of the country.

2

Management culture

Our managers have a special responsibility and pay particularly close attention to the regulations of the Code of Conduct.

3

Human rights / ban on child labor / forced labor

We reject child labor and forced labor, and we are vigilant with regard to any human rights violations.

4

Workers' rights

We respect the labor rights that apply in any given circumstance and support their enforcement.

5

Occupational health and safety

We place major emphasis on the health and safety of our employees and support the continuous further development of safety measures.

6

Working together and the prohibition of discrimination

We respect each other and reject any form of discrimination.

7

Environmental protection

We always consciously endeavor to minimize our impact on the environment and to conserve resources.

8

Tax compliance

We meet our tax and contribution obligations and provide constructive assistance to the relevant authorities.

Our Code of Conduct also contains detailed rules for how to handle business relationships. For example, we reject any form of preferential treatment or bribery as part of our business dealings. We also have a proactive policy regulating the giving and receiving of gifts. Any form of gratuity must not under any circumstances influence a business decision. Gifts and invitations that exceed a set upper value of 50 euros per individual gift or 150 euros per person, per financial year, must be reported and seamlessly documented.

Any agreements that are anti-competitive are also prohibited. We avoid any semblance of a conflict of interest, as it is in our own business interest to do so. We also handle information with care, and always ensure that the appropriate level of confidentiality is assured. We place a strong emphasis on the protection of personal data.

You can find the full text of our Code of Conduct, plus a detailed description of all principles and regulations, here:

Incidents, complaints, and severe human rights impacts

S1.103a	Total number of discrimination incidents (including harassment) reported during the reporting period	5	incidents
S1.103b	Number of complaints filed through channels used by in-house staff to raise concerns	5	complaints
S1.103c	Sum total of fines, penalties, and compensation for damages as a result of incidents and complaints	0	euros
S1.104a	Number of serious human rights incidents connected with in-house staff during the reporting period	0	incidents
S1.104a	Number of incidents infringing the United Nations Guiding Principles, the ILO Declaration on Fundamental Principles and Rights at Work, or the OECD Guidelines for Multinational Enterprises	0	incidents

Legal compliance

Expanding our Code of Conduct in response to the Supply Chain Due Diligence Act
The Supply Chain Due Diligence Act came into force in 2023, and we are therefore expanding our Code of Conduct with additional passages setting out our commitment to protect human rights on the basis of various internationally applicable standards such as the UN's Universal Declaration of Human Rights and the OECD Guidelines for Multinational Enterprises. Based on our international and wide-ranging business model, we are emphasizing the local responsibility of the individual regions and countries. At the same time, we believe it is our duty to champion human rights and environmental standards even where the local understanding of these may diverge, for instance in relation to occupational health and safety regulations. To better ensure that human rights are respected, we have also appointed a Human Rights Officer.

The international rollout of our Code of Conduct has already begun in Europe. As part of our decentralized approach, each Management Board is being instructed to appoint a local compliance officer and arrange training for local staff. A local Code of Conduct is also to be implemented. The roll-out in other continents outside Europe is already being planned.

768

employees classed as being relevant to compliance have received in-person training since 2016.

Following the Code of Conduct in everyday working life
A Code of Conduct is only worth having if it is actually put into practice on a daily basis. That is why we regularly train our staff in how to apply our Code of Conduct. For example, all staff who are classed as being relevant to compliance have been given in-person training. This amounts to 768 employees since 2016. Other staff with access to a PC have completed an e-learning course.

We obtain corresponding contractual commitments from our suppliers, particularly to the effect that they undertake to comply with our Code of Conduct. Furthermore, we carry out audits to check whether suppliers are abiding by the commitments they have made, doing so both on a regular basis and as required by circumstances.

We have defined clear internal responsibilities for recognizing and complying with our due diligence obligations with regard to human rights. The Human Rights Officer is appointed directly by the Management Board.

We also involve relevant departments such as HR, Data Protection, and Procurement in the implementation of our Code of Conduct. These units are responsible for the necessary steps that are taken within their sphere of responsibility.

SEW-EURODRIVE receives its second gold medal.

SEW-EURODRIVE GmbH & Co KG has been registered with EcoVadis for the third year in a row and has been awarded another gold medal.

EcoVadis assesses private and public companies on their social, ethical, and environmental impact. EcoVadis has evaluated over 1.3 million companies to date and published scorecards for over 200 000 companies.
It acts as an evidence-based platform for ensuring transparency across the entire supply chain, providing supplier sustainability assessments and enabling companies to evaluate their global suppliers through a paid rating.

The EcoVadis due diligence process covers four main categories: environment, labor and human rights, ethics, and sustainable procurement. Surveyed companies are asked around 300 questions, all of which must be answered based on facts. Every year, the standards are raised to ensure participating companies continuously improve their performance.

In the last evaluation, SEW-EURODRIVE GmbH & Co KG achieved an average score of 72% in all categories. This puts us in the top 5% of the 200 000 companies evaluated.

Additional commitment
SEW-EURODRIVE is registered with the following ratings platforms:

Further certifications:

Supply Chain Due Diligence Act – heightening awareness internationally
To ensure human rights and the environment are better protected within the global economy, the German Federal Government passed a new supply chain law in 2021. Starting in 2023, all companies with 3000 or more employees in Germany need to do more to meet their global responsibility regarding the observance of human rights and environmental standards across the entire supply chain. Since January 1, 2024, this law has also applied to German companies with more than 1000 employees. Moreover, a European directive – the Corporate Sustainability Due Diligence Directive (CSDDD) – was published in 2024, with the aim of making supply chains more sustainable.

For example, we carry out a risk analysis on all direct suppliers based on protected legal rights and environmental risks. This includes protecting employees, safeguarding people's livelihoods, and preventing the misuse of private or public security services for commercial aims.

2021

saw the German Bundestag pass a new supply chain law.

Furthermore, we audit breaches of environmental protection obligations. Reasonable precautions must be taken to protect people and the environment and to prevent such breaches.

Our suppliers undergo a multi-stage risk analysis process. This can be divided into an abstract risk analysis and a concrete risk analysis. Once the abstract risk analysis has been completed, suppliers exhibiting a definite risk are scrutinized in greater detail – and so too are strategically important suppliers, irrespective of their risk rating. The concrete risk analysis involves examining, assessing, and monitoring a whole range of sustainability criteria. If anomalies are found or if there are any grounds for suspicion, preventive measures are initiated. The Supply Chain Due Diligence Act process is supported by Integrity Next software.

01 Risk exposure analysis
Analyzing all suppliers on the basis of sustainability-related key figures for specific countries and sectors.

02 ESG risk analysis
Evaluating the ability of suppliers to identify and prevent ESG risks. Standardized assessments are used for this purpose.

03 Impact analysis
Assessing the impact and opportunities SEW-EURODRIVE has in terms of influencing the supplier's sustainability.

04 Preventive and corrective measures
Measures to improve suppliers' abilities to detect and prevent ESG risks.

05 CSR report
GRI-certified key figures and diagrams for supplementing sustainability reporting with supply chain data.

Social commitment

From a long-standing foundation to individual campaigns and the "MINT Minded Company" – our social commitment is as multi-faceted as our modular concept. It's also part of our DNA.

The SEW-EURODRIVE Foundation: the magic three of research, efficacy, and responsibility
The SEW-EURODRIVE Foundation promotes scientific work, fundamental research, and the further development of scientific knowledge in the areas of technology and commerce. The foundation's contributions include multiple donations and grants for various institutions and educational facilities, the presentation of academic prizes, the awarding of scholarships to students, the provision of support for guest professorships, and, most importantly, the conferral of the Ernst Blickle Award. When presenting this award, we primarily celebrate initiative, innovation, and genuine scientific spirit. The research work eligible for the prize is carefully selected by a panel of judges.

Prof. Hermann J. Stadtfeld, vice president of the Gleason Corporation in Rochester, New York, was presented with the ERNST-BLICKLE AWARD 2023 in recognition of his

outstanding achievements relating to research into bevel gear technologies, the application of these technologies, and the design of drive systems. Presented every two years, this award comes with prize money of 100 000 euros, making it one of the biggest and most prestigious awards worldwide. At the joint award ceremony, 17 carefully selected university graduates from Germany, Austria, and Switzerland also received Graduate Awards in recognition of their excellent bachelor's and master's theses. Graduate Awards are presented each year by the SEW-EURODRIVE Foundation and are each worth 2500 euros.

B2Run – running together
The B2Run company run, which is held at 17 sites across Germany, is all about fun, team spirit, employee motivation, and the emotion of crossing the finishing line. We share the experience of a memorable sporting event in a fantastic atmosphere – all based on the "Get off your office chair and put on your sneakers" slogan.

2604

km in more than 744 laps in 2024

The Bruchsal Run for Hope – the journey is the destination
It's the taking part that counts. The Olympic creed rings all the more true for the Bruchsal Run for Hope, which is open to all interested runners. Participants can run, walk, or take a leisurely stroll along the 3.5 km route through Bruchsal city center and the baroque palace gardens. The more participants run their laps, the better – each completed lap earns money for social projects in Bruchsal, with even the entry fee going toward good causes.

The Bruchsal Run for Hope attracts over 100 participants from SEW-EURODRIVE every year. In 2024, there were 249 registrations.

249

registered runners in 2024

Maintaining a healthy and active lifestyle
Each year, one of our big events is our Health Day – an entire day dedicated to our staff's health. It offers participants a full program of exciting events relating to health, fitness, and much more besides. The options on offer include fascinating talks, keynote speeches, and presentations – and, above all, plenty of activities to get involved in and quick health check-ups.

1050

participants in Health Day 2024

215

donors in the spring

142

donors in the fall

Give blood and save lives
Every year, we organize a blood donation day, when all employees are invited to get involved and give blood to help those who need it. Without blood donors, millions of seriously injured and chronically ill patients would have no chance of survival.

119

participants in 2024

31 569

kilometers cycled

4640

kg of CO_2 emissions avoided

CITY CYCLING
CITY CYCLING is an inter-municipality event run throughout Germany, with the aim of protecting the environment and promoting cycling. The goal is to cover as many kilometers as possible by bicycle – for work and leisure – over the course of 21 consecutive days, which benefits both the environment and the health of participants. Bruchsal is one of the municipalities that signs up each year. As in the previous year, SEW-EURODRIVE was again represented by many of its employees.

Charity cyclists at SEW-EURODRIVE

The SEW-EURODRIVE charity cyclists Rainer Hassfeld, Christian Richling, and Matthias Beyer have been completing a yearly bicycle tour fundraiser since 1999 –

A year that marked the start of a remarkable journey.
When they first came up with their idea of a joint bicycle tour, the three cyclists thought about who they wanted to raise funds for. "We thought about little Kira, about leukemia, and about the tests we'd had done the previous year to register as potential stem cell donors," Beyer recalls. The three cyclists therefore decided to raise funds for the little cancer patient from Russheim that first summer.

"First, though, we needed to ask Freundeskreis Leukämiekranker – a charity supporting leukemia patients – whether that was something they would welcome. Elke Jordan, the charity's chairperson, greeted the idea with enthusiasm. The next step was to find a sponsor – but that was easier said than done." Beyer explains: "We were turned down by all the companies in the region we wrote to. We were on the verge of abandoning the idea when our FG1 production manager Otto Steinbach asked us if we'd tried putting our request to SEW-EURODRIVE.

He offered to speak up for us. And, sure enough, it wasn't long before our boss, Mr. Blickle, promised sponsorship of a thousand German Marks. We were over the moon."

Once that first hurdle of finding a sponsor had been overcome, it was time to decide on a destination for the fundraising tour. "We'll cycle north until the land meets the water," was the final decision, and so Bremen was chosen as the destination for the first tour. Ever since then, the cyclists have combined their tours with a visit to one of our SEW-EURODRIVE sites.

Even as they were returning home by train from their first tour, they decided to cycle to Budapest the following year. And that was the start of a wave of euphoria that continues to this day.

In 2024, the charity cycling trio handed over the impressive sum of 31 111 euros to the Förderverein zur Unterstützung der onkologischen Abteilung der Kinderklinik Karlsruhe, which supports the work of the oncology department at Karlsruhe Children's Hospital. In so doing, they not only reached their cumulative total target of 325 000 euros, but actually exceeded it.

In November 2024, Sparkasse Kraichgau awarded the three charity cyclists the citizens' prize in the "life's work" category in recognition of their outstanding dedication and their tireless efforts for the common good over the course of more than 25 years. Thanks to their commitment, a project has been brought into being that is now firmly established in the region and has a sustainable impact there.

"Another important point is that we see where the money goes and what it's used for."

Christian Richling

Social commitment

Vital campaign in December 2024 – "The Gift of Giving!"
As part of our Vital campaign, we give gifts to children and young people from local educational facilities as well as to senior citizens in our region. Under the motto "The Gift of Giving", we not only make children, young people, and senior citizens happy, but also ourselves. The aim of the Vital campaign was to collect as many gifts as possible. In 2024, the campaign distributed 347 gifts.

347

gifts were distributed in 2024.

Official recognition as a volunteer-friendly company
Without the active support of their employer, many people would find it very difficult to engage in volunteer work. To reward this support and positive attitude from companies, and thereby to indirectly support the idea of volunteering, the Minister of the Interior of Baden-Württemberg, Thomas Strobl, has recognized SEW-EURODRIVE, among other businesses, as a volunteer-friendly company.

This deep commitment *"spreads throughout colleagues in the company and makes our interactions with each other at work much warmer. This ripple effect (...) also has a positive effect on our society. This is truly a win-win situation that ultimately benefits us all."*

Joining together for a summer fairytale in Bruchsal
SEW-EURODRIVE became a sponsor of the Bruchsal summer of culture for the first time in 2024. This event, which was being held for the fifth time, took place in the Bürgerpark public park and Bruchsal atrium from June 14 to July 14, 2024, combining live music with the screening of soccer matches.

"SEW-EURODRIVE has been based in Bruchsal for more than 90 years, so it has deep roots in this region. We are very much looking forward to getting together with people locally and enjoying a convivial, colorful and, hopefully, peaceful summer of culture – and maybe even another soccer summer fairytale," commented Martina Wegerich, head of Corporate Communications at SEW-EURODRIVE, speaking about the commitment shown by our globally successful family business.

The men's UEFA European Soccer Championship, which was hosted by Germany in 2024, provided the framework for the summer of culture. The first event on the program was a fan party to celebrate the opening match between Germany and Scotland, while the final of the major sporting tournament also brought the summer of culture to a close. Other key matches were screened live at the EM-Café, including all the ones in which Germany was playing. The program also saw plenty of musical acts perform live on stage in the atrium and incorporated after-work events with a DJ.

Information security

SEW-EURODRIVE has an information security management system (ISMS) in place that is certified to ISO/IEC 27001, ensuring both transparency and an appropriate level of information security. Through this ISMS, we make certain that our information security complies with the state of the art and that our corporate data is not exposed to any disproportionate risk. As in the case of data protection, the security objectives of confidentiality, integrity, and continuous availability are our top priorities when it comes to information security, too. The SEW-EURODRIVE Security Policy sets out and describes requirements relating to the following key issues:

+ **Organizational measures:**
These stipulate responsibilities for information security, for conducting risk analyses, and for defining and communicating security guidelines. Examples of key elements include the completion of preventive documentation duties, such as contingency plans, and the response to security incidents.

+ **Technological measures:**
These include secure authentication, adequate encryption, network security, and verifying that all systems and applications are developed and run securely.

+ **Physical measures:**
These safeguard access restrictions, both on site and in relation to remote working, as well as video surveillance, protection against environmental influences such as fire and water, and the secure disposal of old devices and data carriers.

+ **HR measures:**
These particularly include annual security training, insider threat management, and clear specifications about responsibilities and required conduct when dealing with commercial or confidential information.

Dependable data protection based on the GDPR and Data Protection Officers
As a company based in Germany, we observe and abide by all provisions and regulations in the General Data Protection Regulation (GDPR), which entered into force in 2018. We have appointed in-house Data Protection Officers for this purpose.

All measures comply with international standard ISO/IEC 27001.

People

+ Workforce
+ Qualifications, support, and knowledge transfer
+ Health and safety management
+ Being an attractive employer
+ Diversity and equal opportunities


→ Ethics and governance
→ People
Ecology
Society
Economy
Quality
→ Production and business processes
→ Products and services
→ Supply and raw material chains

People make the difference

As our mission statement makes clear, it is the satisfaction of each and every individual member of staff that forms the all-important basis for our sustained corporate success.

We apply a whole raft of measures to incorporate and actively promote this mindset in our employees' day-to-day lives. These measures include everything from corporate health and safety management and the ongoing development of infrastructure for life-long learning to a wide range of policies that support a good work-life balance and promote diversity and equal opportunities.

Workforce

Our corporate culture is steeped in mutual trust, respect, and appreciation. A trusting and inclusive approach ensures the shared collective success of the company and nurtures a high level of job satisfaction among the workforce.

SEW-EURODRIVE has a variety of different programs to anchor these values into everyday workflows and continuously revitalize them. They ensure our employees can enjoy equal opportunities, express their diversity, receive targeted training, and keep fit with the help of comprehensive health management.

The overarching goal is to offer our employees a framework in which they can maximize their strengths while also having the space to work on their weaknesses and grow by taking on challenges. Another essential part of this framework is a healthy work-life balance, which allows us to offer maximum flexibility even in times of personal difficulty.

Yearly discussions are held with all employees to assess performance and professional development.

Driving the future together through innovation
We believe it is perfectly natural to give our employees the freedom they desire, and our corporate culture offers the necessary scope for self-improvement. Wherever possible, we support staff who are looking to change their area of work. We believe that freedom also means flexibility.

7

innovation groups in our research section are driving forward the technological developments of tomorrow.

93%

In Germany, 93% of our workforce is covered by a collective bargaining agreement.
7% are employed outside collective bargaining agreements.

50

nationalities are represented in our company.

Research and development are top priorities for us. We aim to continuously drive the world with new ideas and approaches and help make our economy as sustainable as possible.
With this in mind, we employ around 1400 engineers and computer scientists in Germany alone, as well as 800 staff in research and development. With 190 technical and 41 IT and commercial trainees, 96 students on two types of cooperative study program (Cooperative State University degree program and StudiumPLUS), and 10 master's students, we get to benefit from countless new ideas from the youngest generation. Based in the Karlsruhe Technology Region, we have an excellent infrastructure at our disposal, as well as internationally renowned research institutions – all in an environment that is brimming with entrepreneurial spirit and innovation.

Our employees generally stay with the company for a very long time. For example, in 2024, a total of 121 long-serving employees marked a notable work anniversary. During the yearly anniversary celebration, which is always a special highlight in the calendar, staff are honored for their many years of service. This year, there were two members of staff who celebrated half a century of working at SEW-EURODRIVE.

Number of employees by gender, broken down by country*

	Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Male	5245	1520	135	164	41	46	129	145	7425
Female	1205	389	31	57	18	14	26	43	1783
Other	0	0	0	0	0	0	0	0	0
Not disclosed	0	0	0	0	0	0	0	0	0
Total	6450	1909	166	221	59	60	155	188	9208

Number of employees by employment type, broken down by gender*

	Male	Female	Total
Full time	7200	1273	8473
Part time	225	510	735
Permanent	6934	1670	8604
Temporary	491	113	604

* Numbers are from German sites and the countries covered in this report: France, Austria, Italy, Portugal, Denmark, the Netherlands, and Poland.

Number of employees by employment type, broken down by country*

	Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Full time	5757	1909	155	213	59	57	135	188	8473
Part time	693	0	11	8	0	3	20	0	735
Permanent	6161	1766	146	200	54	44	75	158	8604
Temporary	289	143	20	21	5	16	80	30	604

Qualifications, support, and knowledge transfer

23%

of our workforce are engineers and computer scientists from a wide range
of technical disciplines and specialist areas. Over 1400 of them are based in Germany.

On course from the very start – personal and professional development
There is a lot to learn when starting a career at SEW-EURODRIVE. To ensure new employees feel comfortable and find their bearings right from the start, we support them with induction training that is tailored precisely to their particular field or area of responsibility, along with seminars and product training. As part of a systematic process that goes into exactly the depth they need for their position, participants are put into learning groups in our DriveAcademy® and learn all the key details about products, technologies, and the company, as well as valuable know-how for their role.

Diverse prospects at every career level
We also offer our employees a wide range of development opportunities as their careers progress at SEW-EURODRIVE. Our continuing training programs play a key part in the personal and professional development of every individual, delivering added value for the entire company. In addition to giving our staff the opportunity to attend training at our in-house academy, we naturally also enable them to participate in external training and conferences so they can keep their know-how up to date. Fruitful dialog with colleagues results in new insights and experiences. Another element in our comprehensive range of training measures is our development program for managers at all levels as part of our Leadership and Management Excellence program.

Strategically filling key positions
Systematically sourcing talent, creating talent pools, and developing succession plans to find the perfect fit for key positions are all crucial steps in retaining high-potential, high-performing employees and thus securing core skills and specific expertise for SEW-EURODRIVE. All plans and pools are regularly reviewed and updated.

Encouraging talent
Another measure is the structured support of talent to prepare them for progression to a key position. The starting point for each individual development journey is usually a 360° feedback session, in which the talented employee in question receives honest feedback on their skills and conduct from people in their the work environment. This feedback is then used to define subsequent development measures. HR development oversees this development journey in close cooperation with the relevant manager.

Ensuring knowledge transfer
By observing general trends in demographics, it is clear that steps need to be taken to ensure key knowledge and SEW-EURODRIVE-specific expertise is not lost from the company, particularly in the coming years, when large numbers of staff will enter retirement. To avoid a critical loss of knowledge, HR development conducts knowledge transfer workshops to ensure that knowledge relevant to the company's success is identified among key personnel, documented in knowledge maps, and shared with future successors.

1825

Number of in-house training offerings
in our DriveAcademy®. These and 498 external training offerings were available to our staff in 2024.

Qualifications, support, and knowledge transfer

The success of our company starts in our employees' heads. Whether in production, research, or service – at SEW-EURODRIVE, people are at the heart of everything. The expertise of our workforce is essential if we are to survive and thrive in the market on a long-term, sustainable basis.

Basic and further training are crucially important to us, which is why we have created a dedicated SEW-EURODRIVE brand for it – the DriveAcademy®. This brand stands for a culture of lifelong learning based on innovative learning and teaching methods and an infrastructure that is growing and developing all the time. It creates the ideal framework for focused, technically grounded seminars and training courses as well as other methodological issues and topics relevant to management. By continuously updating our offerings, we stay at the cutting edge of technological progress and thus ensure we always have the very latest expertise in areas such as energy efficiency and resource consumption at our disposal. The training content we offer makes it possible for both the company and its customers to get the best out of SEW-EURODRIVE drives and systems, so as to achieve the optimum balance between economic and ecological interests.

Facts and figures for the DriveAcademy® in 2024

29 561

The number of times our staff took part in training in 2024

512

The number of digital learning materials available, such as videos and e-learning courses

3.8

On average, our employees attend 3.8 training courses per year

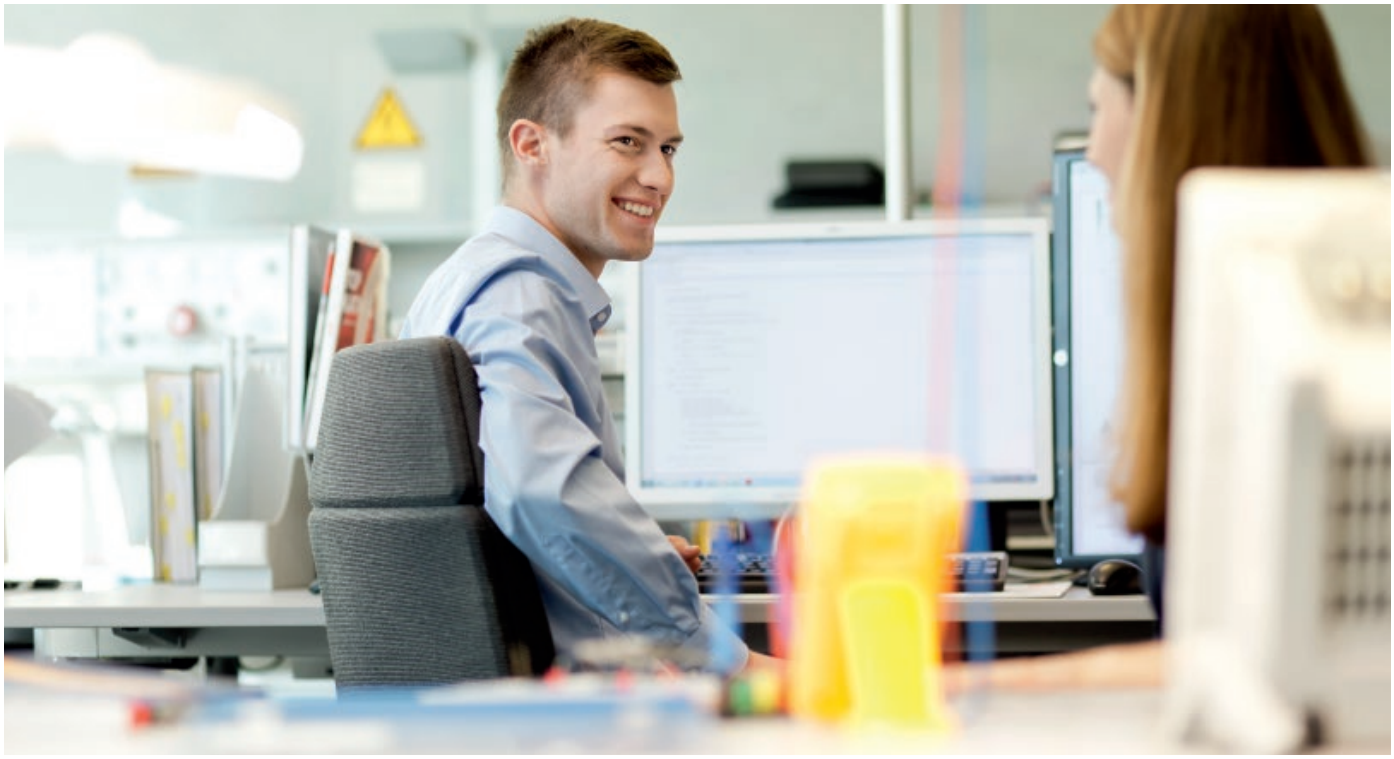
When it comes to designing our training offerings, we are always learning

The broad portfolio of extremely practical units we offer is geared toward the needs of both our staff and our customers and distributors. Content ranges from specific product and application training to personal development, and features practical aspects of sustainability, such as using the right drive technology to save energy. We keep content as relevant as possible to the needs of participants, making the whole experience beneficial, enriching, and fascinating. All our training staff are themselves continuously studying new educational and presentational techniques so that we can provide training to a consistently high standard on an interpersonal level.

Headquartered in Bruchsal and with ten further sites, our DriveAcademy® has a regional presence throughout the whole of Germany and is always in easy reach. Besides being convenient, keeping journey times short for participants also helps reduce the CO_2 emissions generated by traveling to and from training courses. The ever-growing number of online courses and seminars is also helping to shrink this carbon footprint.

Training and skills development

Average hours of training per employee	44



The future of learning is here
Digitalization, process management, energy efficiency – in a globally networked world, the requirements in terms of modern training and on continuously updating the associated techniques and content are only growing. Built in 1989, our training center in Graben-Neudorf has reached its limits. By building a new training center, we are aiming to create what will be the perfect surroundings for lifelong learning of the highest caliber.

Scheduled for completion in fall 2025, a brand new training facility comprising areas for technical, commercial, and IT training, cooperative study programs, offices, laboratories, and social areas is being built on a 9230 m² site directly adjacent to our production and logistics plant in Graben-Neudorf, which is our largest worldwide. The concept behind the new site focuses primarily on flexibility, new technologies, and the incorporation of forward-looking working models such as agile working. The site offers plenty of space to shape the changes that are coming.

The new training center will enable us to complete the "work-life circle", which runs from getting children excited about technology, through providing basic and specialist training for skilled workers, all the way to passing on knowledge and life experience in formats such as a "generational workshop". The center is to be a place for experiencing, learning, and sharing knowledge and skills.

The new training center is organized around three clusters.

9230

A completely new training center on a 9230 m² site featuring technical training facilities, offices, laboratories, and social areas is to be completed by 2025.

1

Introduction
This cluster is primarily about getting children and young people interested in technology and giving participants in workshops, seminars, and presentations a genuine experience of the diverse world of technology. Participants can be parents, teachers, and schools.

2

Training
This cluster is focused on conventional basic or initial vocational training for skilled workers, as well as hands-on training for high-school students and other interested parties. This is also where training collaborations will be based as we seek to boost and safeguard our regional economy.

3

Specialization
This cluster is all about extending the expertise and skills of individual specialists in their particular area of activity. The topics covered are based around all the aspects of production and logistics technologies specific to SEW-EURODRIVE.

All three clusters are closely intertwined in terms of both the subject matter covered and organizational considerations. Multi-professional training units will meet the needs of the future world of work and its (technological) challenges.

The success of our company starts in our employees' heads. Whether in production, research, or service – at SEW-EURODRIVE, people are at the heart of everything.

Health and safety management

Reliable and verifiable health and safety management
Feeling safe at your own workplace is one of the key requirements for remaining relaxed and as focused as possible while working. All employees need the certainty of knowing they are protected as reliably as possible from workplace injuries, and that support is readily available if they get sick.
With this in mind, SEW-EURODRIVE places a high premium on health and safety in the workplace. Our policies and practices on this subject closely align with ISO 45001 (management systems for health and safety at work). Using this as a basis, we can systematically prevent work-related injuries and illnesses and provide safe and healthy workplaces for staff to perform their respective duties.

Occupational health and safety is a top priority at SEW-EURODRIVE
Overall responsibility and accountability for compliance with the relevant requirements lies with company management, which highlights the major significance of occupational health and safety at SEW-EURODRIVE. The managers of the respective organizational units are obligated to implement requirements relating to their individual departments on their own responsibility. This includes meeting legal obligations and other requirements as well as the obligation to eliminate avoidable hazards and minimize risks.

32

We offer a total of 32 health and safety training courses.

The process of identifying work-related hazards and assessing risks is described in detail in our internal health and safety guidelines. These guidelines also regulate the process for reporting work-related hazards and dangerous situations as well as reporting any workplace incidents.

Company medical service and company nurses
Modern occupational health and safety focuses on all aspects of wellbeing – physical, psychological, and social. Several company physicians and two company nurses are tasked with implementing measures at SEW-EURODRIVE. In addition to occupational health and safety concerns, they are also responsible for regular preventive occupational health checks.

Another area where our company medical service is active concerns ergonomic workplace design. Since the introduction of remote working, more and more consultations are also taking place over the phone to improve the ergonomic conditions of home offices. To better organize first aid, inspections were carried out at all the workshops in Bruchsal in 2024, and the equipment in all areas underwent a standardized overhaul.

Another key focal point is integrating people with disabilities into the work process and reintegrating people who have health problems. Our company medical service is supported by volunteer first aiders, company paramedics, and addiction counselors.

By offering a professional social support service to our workforce, we give them the opportunity to reflect on and work through professional and private challenges and conflicts, as well as psychological and psychosomatic stress at an early stage.

Health and safety

	Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Number of fatalities as a result of work-related injuries and work-related illnesses among workers who are in-house employees	0	0	0	0	0	0	0	0	0
Number of fatalities as a result of work-related injuries and work-related illnesses among workers who are not in-house employees but are working at the site	0	0	0	0	0	0	0	0	0
Number of reportable work-related injuries among workers who are in-house employees	102	28	2	2	0	2	7	4	104
Number of hours worked by affected workers from the in-house workforce	8 571 282	3 016 308	241 225	396 276	104 563	105 600	249 418	316 505	9 774 705
Rate of work-related injuries based on 1 million working hours	11.9	9.3	8.3	5.0	0.0	18.9	28.1	12.6	10.6

Employee health brochure for information and guidance
Our detailed health brochure clearly outlines to our employees the importance of health protection. Among other things, it explains the role and responsibilities of the company medical service, while also highlighting the scope and importance of personal protective equipment. First aid and the individual steps to be taken in the event of a workplace accident or fire are also described in detail.

Other sections of the brochure include the integration of people with disabilities, employee reintegration management after long periods of illness, parental leave, and addiction counseling. The brochure also highlights special health offerings at SEW-EURODRIVE, such as health seminars and various tips for health and fitness, nutrition, and ergonomic workplace design.

Functional safety and product safety
The functional safety of our products and system solutions for drive technology is essential for protecting our staff and customers. As these products are increasingly being used in direct proximity to people, SEW-EURODRIVE develops, manufactures, and distributes products and solutions with integrated safety features. We also offer services such as technical data sheets and project consulting.
Our Functional Safety Management consistently satisfies all requirements set out in the IEC 61508 and IEC 61511 standards. These include the seamless documentation of all relevant processes and the provision of essential documents. A Corporate Safety Guideline also summarizes all management activities that are required for the implementation of functional safety. During the development process for new products and services, specialist and project-specific teams monitor compliance with these safety requirements. A focused training program ensures our employees have the qualifications they need.

Product security is inextricably linked to functional safety and is ensured throughout the entire product life cycle. All safety-relevant products from SEW-EURODRIVE and bought-in components are reviewed in line with the requirements of the IEC 62443 series of standards. A certified product security management system helps our staff to meet requirements relating to product security and monitors compliance with relevant processes and qualifications.

An overview of standards
The IEC 61508 and IEC 61511 standards set out the safety requirements for electrical, electronic, and programmable electronic (E/E/PE) systems. They are used to evaluate the reliability of safety-critical functions. The IEC 62443 international series of standards covers various safety areas and specifies maturity levels for processes, technical requirements, and aspects of industrial cybersecurity.

Health and safety management

Vital 360° – healthy from head to toe. The health of our staff is priceless to us. As part of our "vital360°" occupational health management program, we run a wide range of activities and campaigns to support the health and fitness of our staff. Our top priority is to very specifically raise awareness of just how important it is to keep moving, regardless of whether your work is mostly done sitting at a desk or on your feet in production.

By keeping active and making use of health-boosting measures, our staff can improve their ability to cope with stressful situations and demonstrate their flexibility every day.

Vital 360° is very deliberately built around the health of every individual employee, but we also see our company as a living organism in its own right, with every individual being part of something bigger. When individuals feel healthy and are mindful, they radiate more positive energy, and help create an altogether positive working environment and boost motivation within their team.

vital360°

is a brand that stands for all things related to preventive healthcare.

1000

Over 1000 participants attended Health Day.

80

More than 80 health scouts spread the word about occupational health management.

Well organized: That is how we help our staff look after their health

\+
Health managers, who are responsible for occupational health management, coordinate measures and campaigns as part of a working group known as a "Vital Circle".

\+
A Vital Circle is where the strategic planning and coordination of all health management activities take place. This is where we pool specialist expertise and pass it on to the relevant units. This ensures that all the relevant sections and departments at the company are involved.

\+
Volunteer health scouts form a network within the company and act as the first point of contact for staff. They help to spread the word about the campaigns in the various units, coordinate any feedback, and act as the interface with the Vital Circles.

Number of employees covered by the health and safety management system

	Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Number	6450	1909	159	221	59	60	155	188	9208
Percentage rate	100%	100%	96%	100%	100%	100%	100%	100%	97%

The individual activities – an overview

- Regular events such as a yearly Health Day
- Recipe book with healthy recipes by employees, for employees.
- Attractive partner offers with gyms
- Social support and addiction prevention
- Leisure program including e.g. sports and cooking courses
- Health seminars, e.g. for stress management
- Operational integration management
- Training for managers

Sustainable canteen management for health and balanced nutrition

Sustainability is also a key consideration for us when it comes to food. The same applies to our catering partner Eurest, which prioritizes sustainability when sourcing its produce. The company is prudent in its use of resources, keeps transport routes short, and sources as many products as it can locally. This helps us both protect the environment and support regional producers.

Further sustainability traits at Eurest include choosing suppliers with great care, avoiding food waste, and clearly labeling environmentally friendly food in its app and in our staff restaurants.

The following points show that sustainability comes first for Eurest

+
Focusing on animal welfare when creating recipes, for instance Powered by Plants, Better Green, and chicken from the most ethical sources.

+
Preparing for exclusive certification to the "360° für Morgen" standard (sustainable company restaurant).

+
Participating in numerous organizations such as the Global Coalition of Animal Welfare, the European Better Chicken Commitment, founding member of United Against Waste, etc.

+
Using Trim Trax software in our kitchens to track all waste transparently and make savings.

+
Carrying out regular training for Eurest staff on the subject of using resources sustainably.

+
Sourcing work clothing made from environmentally friendly materials.

+
Making a commitment to achieving carbon neutrality with regard to scope 1 & 2 and hitting the net-zero emissions target worldwide by 2050.

Being an attractive employer

Promoting a healthy work-life balance
Managing family and career, fully pursuing hobbies, and being there for others: As a family business, striking a balance between home and work life is crucial to our success. Our employees can only be expected to fully concentrate on their work if they have a clear head. To make this easier, we offer them a wide range of financial and organizational benefits.

2023

SEW-EURODRIVE has been a JobRad Employer since 2023.

Financial benefits

+ Subsidies for meals in our company restaurant
+ Above-average pension benefits
+ Collectively agreed special payments and profit-sharing
+ Anniversary bonuses
+ Special payment for births/wedding and gift
+ Flexitime accounts to compensate for overtime
+ Low-interest employer loan to help when buying a home
+ Company medical service and company nurses for optimum occupational healthcare
+ Work clothing for commercial roles
+ Free state-of-the-art parking facilities at large company sites

Work-life balance benefits

+ A variety of working time models for part-time or flexible working hours
+ Attractive model for remote working
+ Flexible parental leave arrangements, including clear prospects for returning to work
+ Company daycare center "Morgentau" for 100 children (including 30 crèche spaces), with a comprehensive and sophisticated care concept for learning through play
+ Comprehensive sports and leisure program
+ Framework agreements with three gyms
+ Convenient leasing options for e-bikes and bicycles (JobRad)
+ ubiMaster homework support and tutoring for high school students, to ease the burden on parents
+ Variety of employee discounts for shopping, travel, etc.
+ Water dispensers in all buildings

Awards and recognition

+ Top JobRad Employer 2023
+ Named an "Outstanding employer for engineers" multiple times by TÜV Rheinland and the Association of German Engineers (VDI)
+ Declared a "Fair Company" in terms of working conditions and career development prospects for young people
+ Awarded the title of "Best recruiter"

Number of employees by age group, broken down by gender and country

	Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total	Total by age group
< 30 years										
Female	147	31	4	4	0	0	3	6	195	1047
Male	621	166	20	5	8	1	17	14	852	
30 – 50 years										
Female	388	173	12	23	6	5	14	9	630	3006
Male	1651	507	37	63	12	26	58	22	2376	
> 50 years										
Female	670	185	15	30	12	9	9	28	958	5155
Male	2973	847	78	96	21	19	54	109	4197	

Diversity and equal opportunities

The network for women at SEW-EURODRIVE

As an international company, SEW-EURODRIVE has sites in 57 countries worldwide. Our employees also come from a whole range of nations, backgrounds, and cultures. One important aspect of diversity at SEW-EURODRIVE is our women's network SEWWOMEN.

SEWWOMEN was launched in October 2022. The core team is made up of women from all departments, representing a wide variety of technical, professional, and personal backgrounds. The network works to raise the profile of women in the company. Areas of activity include targeted employee marketing for women, enhancing family-friendly working conditions, and raising awareness of gender issues. The network maintains a continuous dialog with the management team and the relevant specialist departments.

20 %

The percentage of women in the workforce as a whole.

Percentage of employees by position, broken down by gender and age group

	Male	Female	Proportion
Management Board	5	0	0%
Executive employees	33	1	3%
Workforce as a whole	7425	1783	20%

Integrating people with disabilities

Stronger together
In Germany, there are around 10 million people living with a disability. Businesses have a special responsibility to support the integration of these people by creating suitable jobs. SEW-EURODRIVE is playing its part through a longstanding collaboration with Lebenshilfe Bruchsal. This partnership is part of our comprehensive inclusion strategy that we implement all across Germany. In total, 29 people with special needs are employed in a number of Germany's federal states.

For example, five of our decentralized sites operate a partnership with sheltered workshops. Specific activities, which are assigned based on the motor skills of individual workers, include tasks typically performed by a workshop assistant, such as keeping things clean and tidy, undertaking logistics activities, replenishing materials, auxiliary materials, and operating supplies, and carrying out duties set by headquarters.

Our representative body for disabled workers promotes the integration of disabled people in the workplace, represents their interests to the employer, and offers them advice and assistance.

Valuable contribution to the entire value chain
The 15 employees in the electronics department in Bruchsal work on approximately ten products in assembly and packaging, making an essential contribution to the entire value chain at SEW-EURODRIVE. Under this initiative, they work under the same kind of conditions found on the general labor market.

Accompanied by two group leaders and a federal volunteer, they receive training tailored to their interests and abilities. The various activities also differ in terms of their complexity. One of the most recent activities, for example, is the assembly of wheels for planetary gear units.

The sense of job satisfaction that comes from feeling appreciated is also something the employees have expressed themselves: "I've been here at Lebenshilfe for 25 years and at SEW-EURODRIVE for 16 years – and I really enjoy the work here," says Elvira R. And there is certainly no shortage of motivation: "We are definitely challenged, too – and that's a good thing," adds another employee. This long-term success is also recognized throughout the company, with new opportunities to expand the collaboration currently being explored. For example, the employees have been assessed and put to work inspecting and servicing the in-house bicycles at the Bruchsal site.

After a trial internship of two to four weeks, employees progress to a long-term internship lasting six months, before moving on to their respective work area.

20 years

A very special anniversary
This year, we celebrated 20 years of collaboration with Lebenshilfe Bruchsal.

"...disability should no longer be seen as a deficit, but rather as a challenge for life and for the non-disabled world."

Ina Stein, former Disability Officer of the Bavarian state government

Products and services

+ Circular economy and circular processes
+ Resource-efficient products
+ Sustainable product development
+ Digital products and services
+ Product carbon footprint


→ Ethics and governance
→ People
Ecology
Society
Economy
Quality
→ Production and business processes
→ Products and services
→ Supply and raw material chains

It all started with the modular system – sustainability across the entire value chain

The modular system behind our products has been a core starting point for the success we have enjoyed over many decades. It is a concept that is by its very nature resource friendly and therefore sustainable. Starting from that concept, and working closely with our customers and partners, we take steps to ensure that processes throughout the entire value chain are progressively geared toward using energy and materials as efficiently and sustainably as possible – from product development right through to disposal.

Circular economy and circular processes

Using resources responsibly lies at the very heart of a sustainable approach. Designing processes to be as sustainable as possible throughout the value chain is a particularly big challenge for industrial manufacturing companies that use large amounts of energy and materials. This is where the circular economy approach comes into play.

This production model keeps existing materials and products in circulation for as long as possible by repairing, refurbishing, remanufacturing, reusing, and recycling them. Resources are therefore used more efficiently, while waste volumes, energy consumption, and the associated emissions are reduced to a minimum.

Brief video: Circular economy and eco-design at SEW-EURODRIVE

We apply the circular economy principle at SEW-EURODRIVE, too, and are working on incorporating the 9R strategies (see diagram) into our value creation processes. Our objective is to extend product life cycles and to process product components after they have been used for their original purpose, thereby making our production as energy-efficient and resource-friendly as possible.

Our 9R approach

Refuse
Dispensing with a product or replacing a function with a different product, e.g. a digital product or service.

Rethink
Re-evaluating an application to make more extensive use of the product, e.g. through shared use (sharing models) or multifunctionality.

Reduce (by design)
Implementing concepts, solutions, product designs, and production processes that can help to boost production, energy, material, and resource efficiency.

Reuse
Reusing canceled and/or returned products or product components that have been classified as "as-new" based on the SEW-EURODRIVE quality criteria so they can fulfill their original function.

Repair
Repairing a particular defect and/or replacing defective and/or worn components of a product to restore its functionality on an order-specific basis and as part of a service.

Refurbish
Restoring or enhancing the performance and/or functionality of a product that has already been used by the customer, doing so on an order-specific basis and as part of a service. Through prior inspection and subsequent maintenance and/or repair, the product is brought up to a specified level of quality that may not need to match that of a new product.

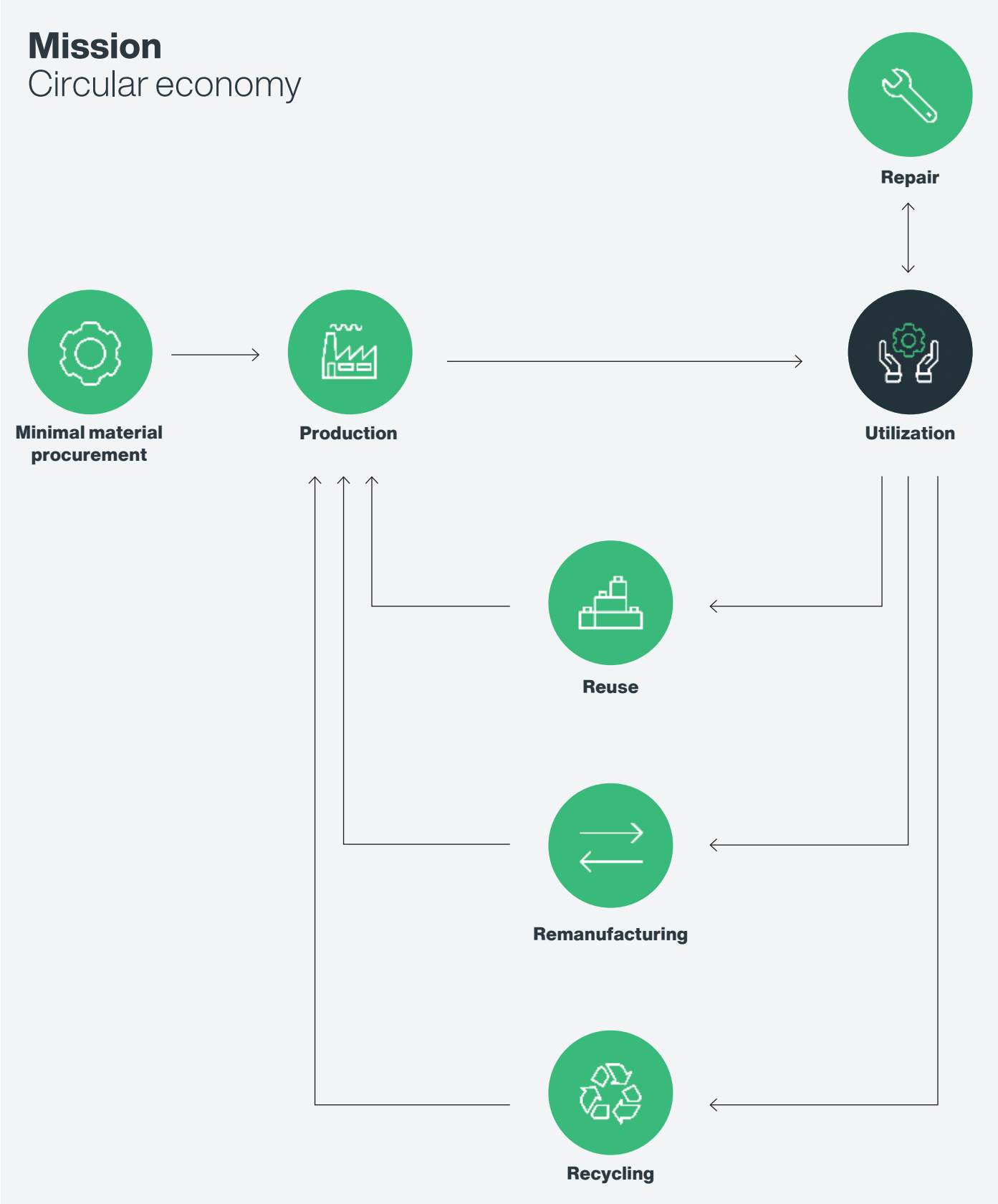
Remanufacturing
Disassembling specific components in a product and carrying out technical processes to put them into an as-new or improved condition so they can be reused in a new product with the same function.

Repurpose
Processing and reusing withdrawn products or product components for a different purpose in a new product.

Recycle
Carrying out a process to recover materials from waste products with the aim of reusing these materials for their original purpose or for different purposes in new products.

Recover
Recovering energy from waste products that are unsuitable for material recycling.

Our vision for developing sustainable products and circular processes



Circular economy and circular processes

Circular management for returned parts
Efforts to protect the climate, the environment, and resources will play a major part in shaping the coming decades, and will bring about radical change globally. For SEW-EURODRIVE, the circular management of returned parts will become a key focus so as to both reduce the carbon footprint of SEW-EURODRIVE products and safeguard resources that are becoming ever scarcer.

Remanufacturing magnet bodies
The development and company-wide establishment of a circular process for magnet bodies that are used in spring-loaded brakes can be seen as a successful example of a "Circular Economy@SEW-EURODRIVE". This process

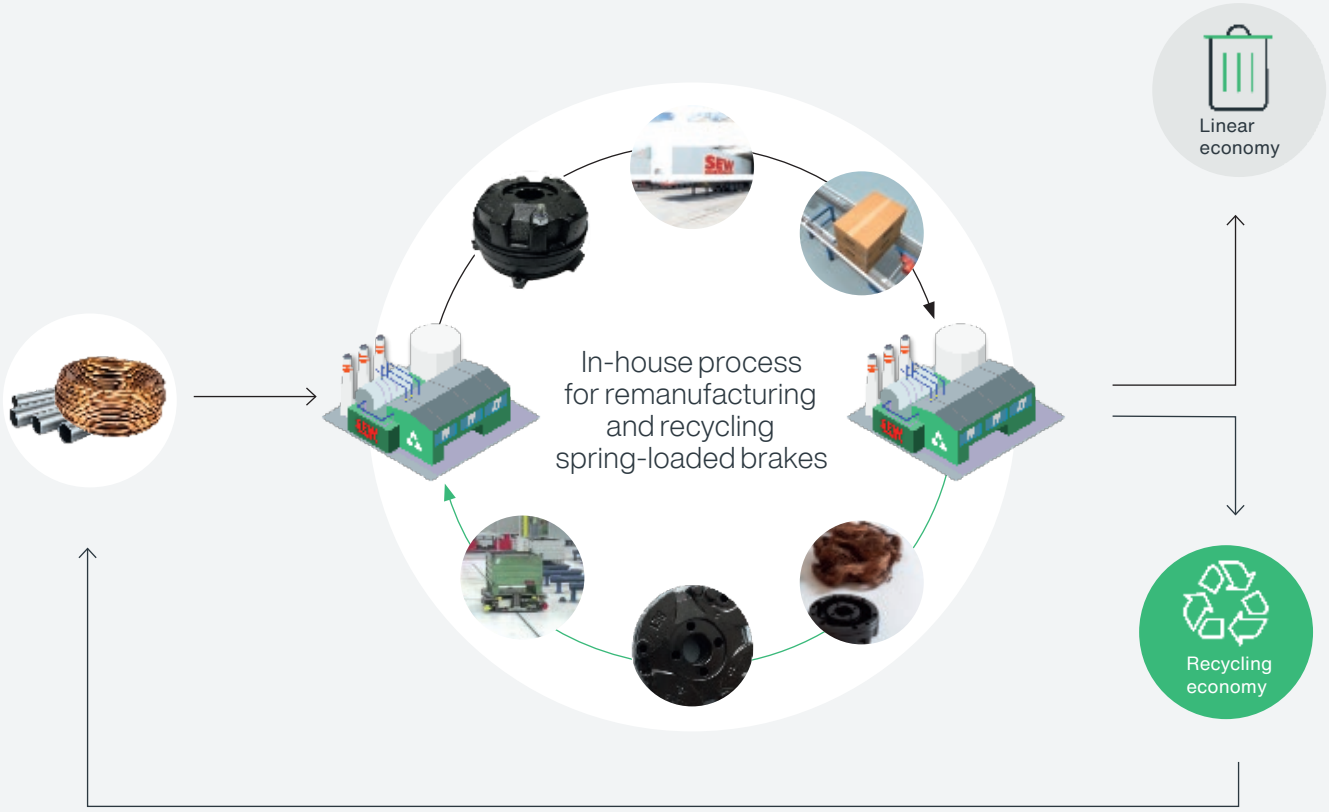
Since
2019

we have been working on in-house circular processes

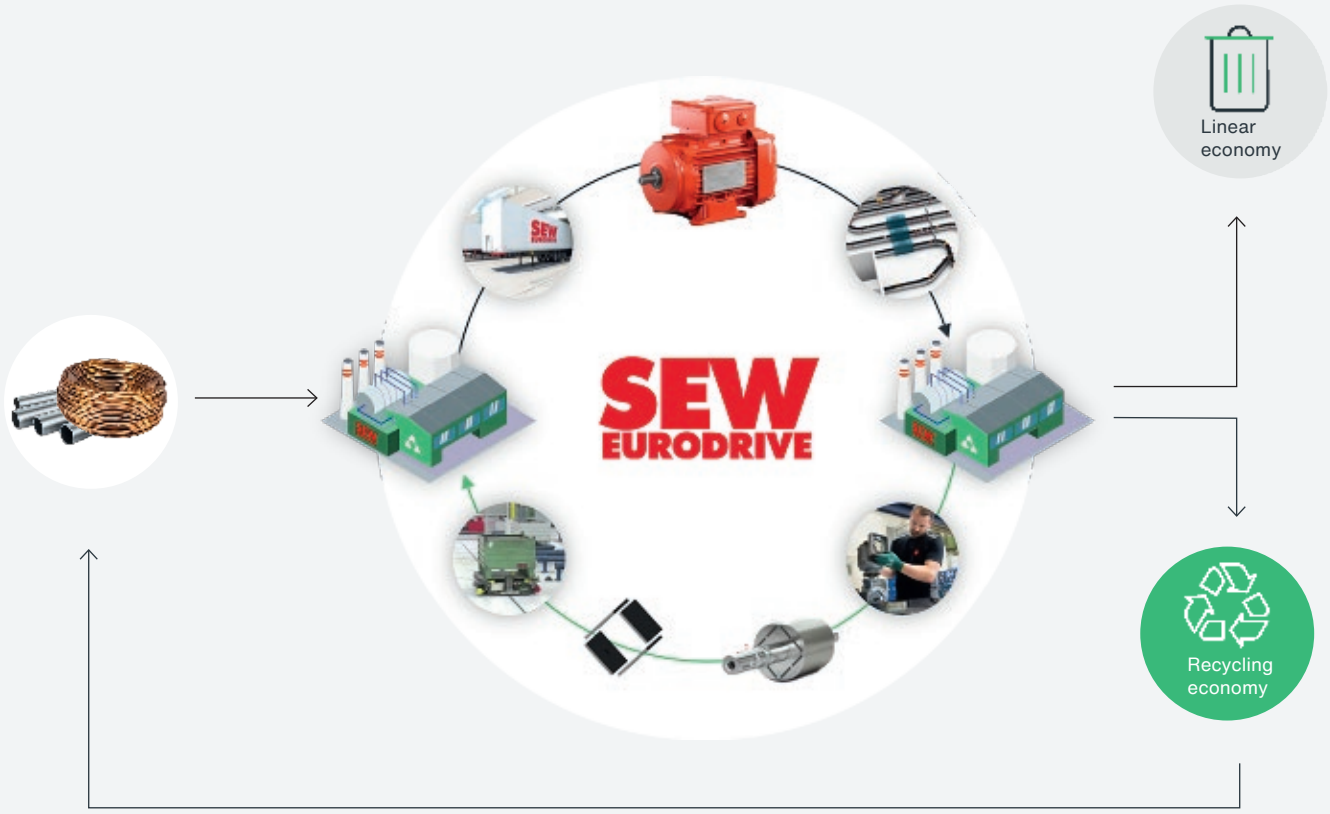
came into effect for internal material in 2020 and replaces disposal via mixed scrap, which is when the copper and cast iron portions undergo material recycling by external scrap companies and melting shops. Instead, the circular process at SEW-EURODRIVE utilizes process engineering to separate the magnet bodies installed in the brakes from the copper coils embedded in the casting resin. As a result, the magnet body can be fully remanufactured and fed back into the in-house production process.

Once separated, the copper wire is delivered to partner smelting companies, where it is melted down. The figure below illustrates the circular process for magnet bodies at SEW-EURODRIVE.

Example
In-house remanufacturing and recycling of spring-loaded brakes



Example
In-house remanufacturing of rare-earth magnets from IE5 solutions: DR2C.. synchronous motors



Remanufacturing rare-earth magnets
As part of another project, an internal process was developed for the circular management of the rare-earth magnets installed in rotors of the DR2C..A synchronous motor (energy efficiency class IE5 in a comparatively small design). Process engineering techniques are used to separate the magnets from the rotors and check them to ensure they are intact. Once they have passed a quality inspection that is equivalent to that performed on a new part, the magnets can be fed back into the in-house production process.

Outlook: Feasibility study on further R processes
Besides the above examples, there are more components that are in the final stages of selection for independent circular process development. Technical condition and material composition are the key selection criteria.

Find out more about eco-design at SEW-EURODRIVE here

The key objectives
We aim to achieve the following goals by putting in place in-house circular management processes for returned parts:

+ Avoiding waste as a component of sustainable industrial production
+ Improving resource efficiency and environmental protection
+ Retaining the value that was incorporated into the product right at the start in the form of material and energy
+ Proactively preparing for potential future regulatory requirements (see the EU Critical Raw Materials Act in relation to rare-earth magnets, for example)
+ Enhancing security of supply
+ Implementing cost assurance

Resource-efficient products

Why our modular system is so sustainable
The modular concept behind our products is one of the most important reasons for their success and also contributes significantly to sustainability. So, what is it that makes this concept especially sustainable? Although the following points apply to lots of our product series, the new PxG® series precision planetary gear unit is a particularly good example to use in answer to this question.

The sustainability of our modular gear units is principally based on the general idea of creating as many variants as possible from as few individual parts as possible. A good example of this is using the same gear set for multiple purposes. For instance, we take the gear wheel used for the last gear unit stage in one gear unit size and use it again for the preliminary stage in the next size. This means we can scale up the production of this particular gear wheel quite considerably, thereby making production more resource-efficient.

Since all components are compatible, the end result is greater variation. This in turn enables us to build solutions that are tailored as closely as possible to specific customer requirements. As a consequence, our production is very much geared to the market and we are therefore wasting almost zero resources on products that the market does not need or that do not work efficiently because they have not been optimally designed.

↑
A K-series gear unit

When overhauling the PxG® precision planetary gear unit, we focused very much on what our customers want and need from the product. This meant we could ensure from the very start that customers would want the series and that we would therefore be manufacturing to meet demand.

At the same time, when developing product concepts, we always work to minimize friction and maximize efficiency. We were able to achieve this to particularly good effect with the new PxG® precision planetary gear unit.

Thanks to virtual product simulation based on a digital twin, the previously standard practice of building several prototypes in order to validate specific parameters has been rendered obsolete.

↓
PxG® precision planetary gear units

Our modular system illustrated using the PxG® precision planetary gear unit

All the components in the gear unit have been designed for minimum wear and a long service life.

Maximum efficiency: Overall efficiency of up to 94%, due in part to the use of our friction-optimized Premium Sine Seal oil seals, which extend the replacement interval for seals by 100% and reduce sealing losses by 45% compared to conventional sealing systems.

Smallest possible rotating mass for energy-efficient acceleration.

Energy-optimized design thanks to the use of different programming solutions to increase efficiency from 93.4% to 94.3% and reduce gear unit losses by 14%.

Lubrication for life eliminates the need to change lubricant.

All PxG® gear units are supplied uncoated to ensure optimum suitability for material circulation. Instead of being coated, they are given a special heat treatment for consistent corrosion protection. We can avoid the use of coatings on many other aluminum product series.

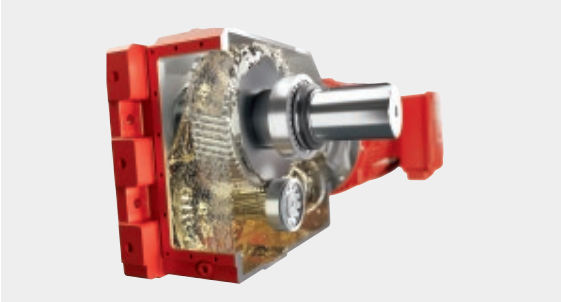
Thanks to its use of GearOil by SEW-EURODRIVE, which incorporates cutting-edge additives, the PxG® precision planetary gear unit exhibits excellent aging resistance and ensures maximum wear protection for gearing and bearing parts.

Every product has a digital twin. This virtual version of the product documents both the product in its as-supplied condition and other relevant details that facilitate optimum, resource-conserving service monitoring.

Extremely low noise emission levels.

Resource-efficient products

Driving down CO_2 emissions by 84% – GearFluid is a high-end premium lubricant made from high-quality biomass



The challenge – developing a sustainable gear unit lubricant
Any company that, like SEW-EURODRIVE, has been building and developing gear units for all sorts of uses for over 90 years will have considerable expertise in tribology, which is the study of friction, lubrication, and wear on interacting surfaces in relative motion.

In April 2022, we launched GearFluid Poly 220 E1, a product that draws on this expertise to provide the first CO_2-reduced gear unit lubricant made from sustainable biomass.

The implementation – a gear unit oil based on sustainable biomass
What makes our GearFluid sustainable gear unit oil really stand out from other industrial gear unit lubricants is the raw materials it is made from. Instead of utilizing petroleum or some other fossil raw material, as is usually the case, GearFluid is made from sustainable biomass. This improves the carbon footprint of GearFluid by an impressive 84% compared to petroleum-based polyglycol base oils. However, there are many more benefits both for the environment and for our customers.

One important aspect of the biomass we have developed is that it does not need to be specially produced for us and does not take up any additional agricultural land. Instead, our biomass comes from green cuttings and food waste, which is readily available and can now be very easily recycled.

This biowaste undergoes a complex synthesis process that transforms it into a high-quality base oil. The biomass used for this purpose complies with the EU Commission's Renewable Energy Directive. We have even thought carefully about the packaging, with the canisters made with 25% recycled plastic.

84

According to information from our oil manufacturer/supplier, the carbon footprint of GearFluid is 84% better than that of petroleum-based polyglycol base oils.

The customer benefits: less lubricant, lower CO_2 emissions, higher efficiency

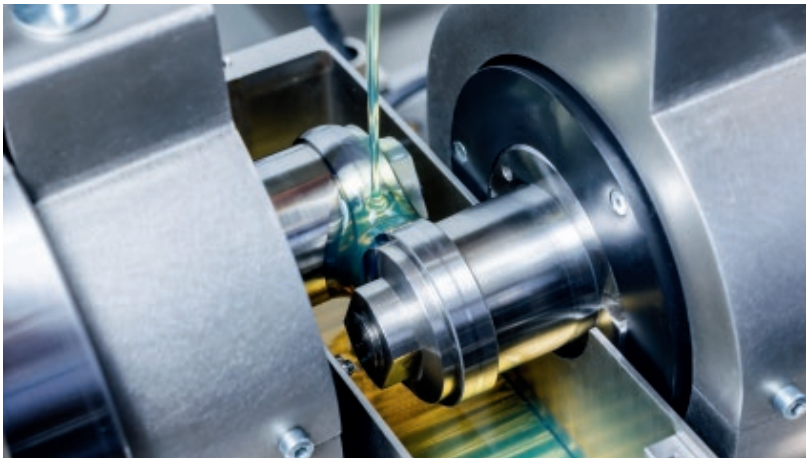
Outstanding potential
Switching all polyglycol lubricant in VG220 at SEW-EURODRIVE (approx. 250 000 liters) over to GearFluid would save 545 metric tons of CO_2 per year.

Better efficiency
A service life that is up to 50% longer than conventional polyglycol oils and up to three times longer than mineral oils.

As high-quality as always
Low friction coefficients, high thermal and mechanical stability, and maximum wear protection for the gearing and rolling bearings combine to reduce the risk of failures.

Carefully tested
GearFluid satisfies the stringent quality requirements of SEW-EURODRIVE testing specification No. 07 004 03 13.

Ecological standard
Suitable as an initial fill for many standard gear units and standard gearmotors as well as for servo gear units and servo gearmotors.




GearFluid
Poly 220 E1

Resource-efficient products

Better energy efficiency across the entire system

For many years, our product development work has focused on delivering energy efficiency and thus safeguarding resources to the fullest extent possible.

By maximizing energy efficiency at the concept development stage, we aim to make our drive solutions as economical as we can. One good example for this is the inverters in the latest generation of our MOVI-C® modular automation system. All the variants and products in this range satisfy the IE2 standard for inverter efficiency. Thanks to a compact product concept, we are using less aluminum, and we have also cut down on the use of potting compound, opting instead for separate assemblies, which simplifies repair work. Regenerative units, energy storage devices, a standby mode, energy-saving functions, and energy-efficient brake management help us achieve further savings. Another contributing factor to these savings is the use of simulation software when developing parts that are relevant to heat dissipation.

The key to making energy savings in the near future lies in the application. A paper issued by the European Committee of Manufacturers of Electrical Machines and Power Electronics (CEMEP) refers to potential energy savings of up to 40% when using speed-controlled systems.

This means that, despite the additional losses brought by a frequency inverter, the amount of energy required to complete a motion task can be reduced by 40%. We believe that this, combined with other benefits of frequency inverter-controlled systems (for instance, being able to control drives dynamically in line with the application and incorporate the asset digitally), will see the proportion of inverter-controlled motors rise from 30% today to at least 80% in ten years.

The synchronous motors of the DR2C.. series satisfy the highest standard-based efficiency class IE5 for adjustable-speed electric motors. This makes them yet another sustainable and energy-saving motor variant. Switching from line-operated motors that run on an inverter or line-commutated motors to motors that have been developed for purely inverter operation offers major potential for additional energy efficiency gains. This is clear even from the stipulations set out in the relevant technical standards. For instance, while Part 30-1 of IEC 60034 stipulates that the highest possible efficiency class for line-operated motors (whether they run on an inverter or not) is IE4, Part 30-2 of the IEC/TS 60034 standard sets the highest class for inverter motors at IE5. The biggest savings are achieved when the potential for speed control that these IE5 motors offer is consistently and effectively utilized in systems and machinery.

40

The energy consumption for a motion task can be reduced by 40%.

When combined with efficient gear units and intelligent frequency inverters, they produce energy-saving drive solutions that home in on losses in the widest range of applications. Addressing the interplay of components as part of a predictive approach to running systems helps achieve bigger energy savings than simply boosting the efficiency of a single component.

From a systems perspective, the IE5 motors from SEW-EURODRIVE offer further benefits. Designed as synchronous motors, their rotational speeds are not load-dependent. Daisy-chained system parts can thus be designed with connections that are mechanically locked rather than friction-based. Another key advantage of the synchronous motor technology is the virtually loss-free rotor and the resulting low thermal load. Cooler motors have longer service lives.

Combined with the full potential offered by the frequency inverters of the MOVI-C® modular automation system from SEW-EURODRIVE, it is possible to create energy-optimized drive solutions. Efficient components and controlled systems together have a positive impact on carbon footprints. Realizing the potential that exists with regard to energy performance is a socially responsible way of shaping the future.

Making good use of energy – with Power and Energy Solutions

Power and Energy Solutions make up a system with an intelligent approach to managing power and energy for industrial drives. The technology recovers energy and quickly and temporarily stores it in capacitors.

This approach means stored energy can be continuously fed back into the system and, if there is a power outage, the system can be shut down safely. As a result, spikes in the power drawn from the grid are significantly reduced. Power and Energy Solutions help increase system availability, cut energy consumption and costs, and reduce strain on the electrical power supply.

In particular, Power and Energy Solutions are used in machines and systems that often accelerate or decelerate very dynamically, thereby generating losses due to braking energy and causing high energy spikes in startup scenarios due to the loads involved. The new power and energy management system compensates for such peaks by temporarily storing the braking energy generated by the machine or system and making it available again as required. The result for the grid supply is that the energy flow becomes consistent and energy spikes are reduced. Consequently, systems no longer need to be designed around power peaks and can instead be designed in line with their average power rating. This means a system's electrics can be dimensioned to be more compact, lightweight, and resource-efficient, both in the control cabinet and in terms of their line connection.

If a DC grid is available on site, the DC link can be connected to external DC supply grids in a bidirectional arrangement via a DC/DC converter. That on-site grid could be a battery, for example, or a DC grid with direct infeed from regenerative sources.

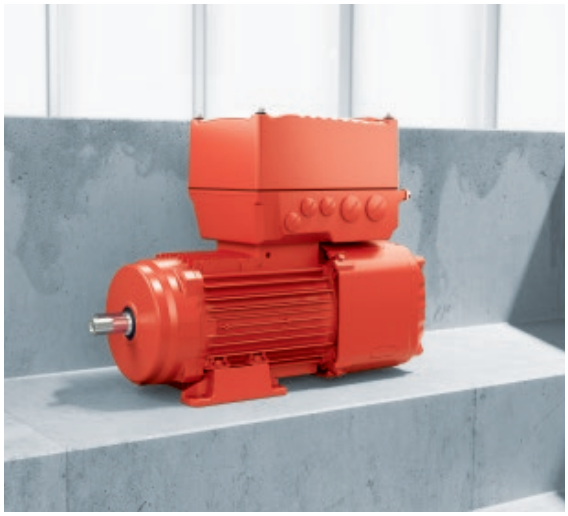
In this arrangement, the energy in the storage capacitor serves as an uninterruptible power supply (UPS) for the system. It supplies the drives, motor brakes, and 24 V level (PLC and safety circuits). Power outages no longer lead to system malfunctions, damaged products, or tedious restarts, and – in regions that experience frequent power failures – follow-up costs are considerably reduced.

The power supply module measures performance data and provides energy meter readings. These can be integrated into ISO 50001 energy management systems.

MOVIDRIVE® modular application inverters paired with intelligently connected storage capacitors and a DC link coupling.

Resource-efficient products

Due to its standardized housing concept, gear unit compatibility, and electrical interfaces, the MOVIMOT® advanced drive unit offers a simple solution for switching from IE3 to IE5.
The MOVIMOT® advanced drive unit is one of a range of products in the MOVI-C® modular automation system. MOVIMOT® advanced com-



bines a motor with a frequency inverter to create a decentralized drive unit. As a result, it offers a great deal of flexibility, since it can be used with any of the standard gear units from SEW-EURODRIVE and makes any installation scenario possible, whether directly on the shaft or below the material handling system.

Integrating the new DR2C.. synchronous motor turns MOVIMOT® advanced into a highly efficient IE5 drive unit. This new motor has a high overload capacity but is also very space-saving. As a result, whatever the energy efficiency requirements are for an application, SEW-EURODRIVE offers the ideal solution, whether that's a DRN.. motor in IE3, DRU.. motor in IE4, or a highly efficient DR2C.. motor in IE5.

The new IE5 synchronous motors of the DR2C.. series from SEW-EURODRIVE reduce power consumption enormously. Operators can cut their energy consumption by 30% or even more.

Mobile materials handling technology for resource-friendly logistics
Our solutions for mobile materials handling technology, MOVITRANS® line and MOVITRANS® spot, offer completely new options for handling intralogistics transport tasks with ease, even when longer routes are involved. Based on the principle of an inductive power supply, energy is transferred via an air gap in a contactless system. This transfer is quiet, wear-free, and low-maintenance.

In the case of MOVITRANS® line, a line cable is laid along the pre-planned route. The route layout can be configured in any way necessary and flexibly adapted to suit new conditions. This makes the complex and expensive process of laying contact conductor and drag cable systems and other fixed floor installations a thing of the past.

Alternatively, MOVITRANS® spot provides the option of point-based energy transfer for even more peak power. With this option, vehicles can move around completely freely and autonomously, and are fully independent of fixed routes or line cables.

The magnetic field used is equipped with a unique safety function for reliable shutdown. Consequently, the technology can be used not only in industrial environments, but also in urban applications, such as a miniature railway that takes theme park visitors from A to B in a low-emissions solution.

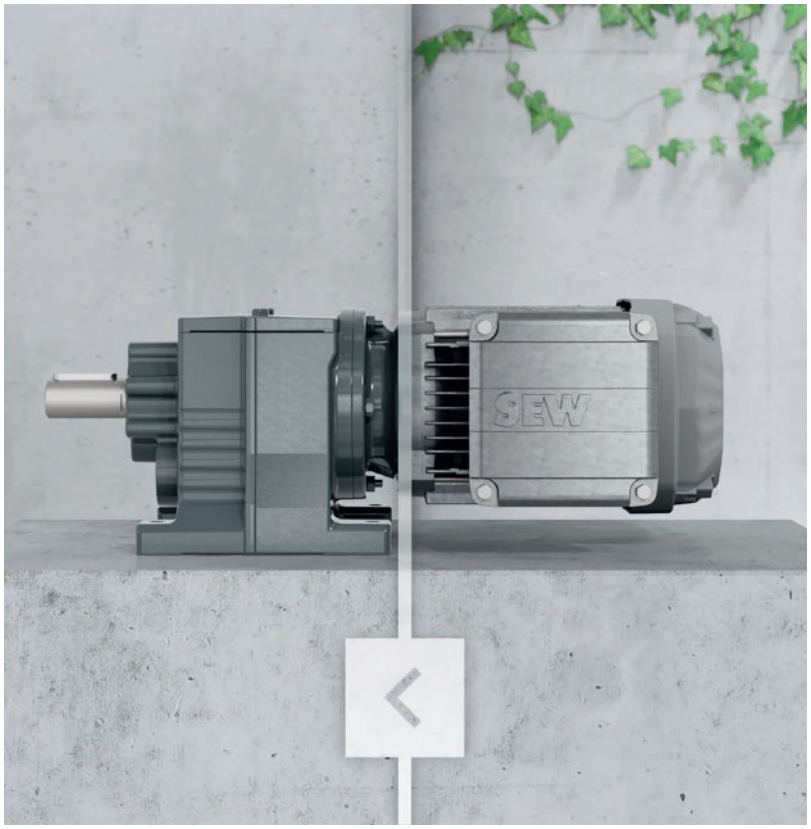
Below:
Components from our solution for mobile materials handling technology – MOVITRANS®

MOVITRANS® – more sustainability for less material usage and energy
Straightforward integration into existing systems, much less maintenance compared to conventional solutions with fixed floor installations, lower material consumption, and utilization of the latest component technologies – all these features safeguard resources and allow for greater energy efficiency. MOVI-DPS® (Drive Power Solution) also helps boost energy efficiency. Comprising a variety of components and suitable for use with both MOVITRANS® solutions, MOVI-DPS® facilitates intelligent power and energy management in mobile and stationary applications. For example, this smart drive solution can be used to reduce the connected load of storage/retrieval systems by up to 80%.

Our Power and Energy Solutions make another important contribution to state-of-the-art energy management. Above all, load spikes are reduced, thereby saving energy and reducing costs. Combining MOVITRANS® and Power and Energy Solutions makes the vision of an "active factory" a real prospect. Similarly to active residential houses, an active factory would not merely consume energy, but would also generate energy across its footprint.

ECO2 – no coating. Brilliant for the environment.
The idea for ECO2 came from the coating-free design of very small drives dating from earlier years. Made largely from aluminum, these drives have proved very successful in straightforward ambient conditions. The ECO2 initiative extended this approach to the aluminum gearmotor portfolio and has since taken it gradually further.

Kinder on the environment – and on costs
These coating-free drives are setting new standards in relation to sustainability and environmental protection. By eliminating the energy-intensive coating process and therefore saving on raw materials such as coatings and solvents, they have a better ecological footprint. The metallic surfaces of the ECO2 gearmotors are predominantly aluminum, which is not prone to corrosion under normal conditions. Aluminum reacts with oxygen to form a thin protective layer



Left:
Example application – the guest train at Europa-Park in Rust

The abbreviation ECO2 stands for a double sustainability benefit – ECO2 is both ECOlogical and ECOnomical. At the end of their life cycle, non-coated components can also be incorporated into a circular process more easily.

Last but not least, by opting not to coat these products, we can also achieve a significant reduction in costs – and we pass this saving directly on to our customers.

Support for switching to our coating-free design
To ensure the ECO2 design can be used to its full advantage, SEW-EURODRIVE offers the right process for every requirement, from order placement through to maintenance.

ECO2 as a global standard.
In 2024, SEW-EURODRIVE began switching the worldwide manufacturing process for its gearmotors to coating-free ECO2 versions. This applies to all the gearmotors included in the ECO2 portfolio that are to be used inside buildings and are not exposed to humidity or moisture.

Resource-efficient products

Comprehensively sustainable service concept and excellent maintainability

It is part of SEW-EURODRIVE's DNA that its products should always be designed to be as easily maintainable and repair-friendly as possible. For example, our gear units and gearmotors can be disassembled non-destructively and then reassembled again once faulty or worn parts have been replaced. In addition, all individual components are available worldwide for decades.
This means we can extend the service life of our existing products and services and avoid using unnecessary resources.

Our Life Cycle Services represent the next logical step in this approach. They are based on the concept of a holistic and carefully thought-through closed loop that covers the entire service lifespan of a product while it is in use with the customer.

1
Guidance in the form of personal advice on trends, issues that will arise in the future, application and industry know-how, regulations, and specifications

2
Planning and engineering, such as concept development, variant management, and energy consulting

3
Procurement and supply, such as via electronic data exchange, delivery services, and electronic dispatch notifications

4
Installation and startup, including advice on installing and programming the application

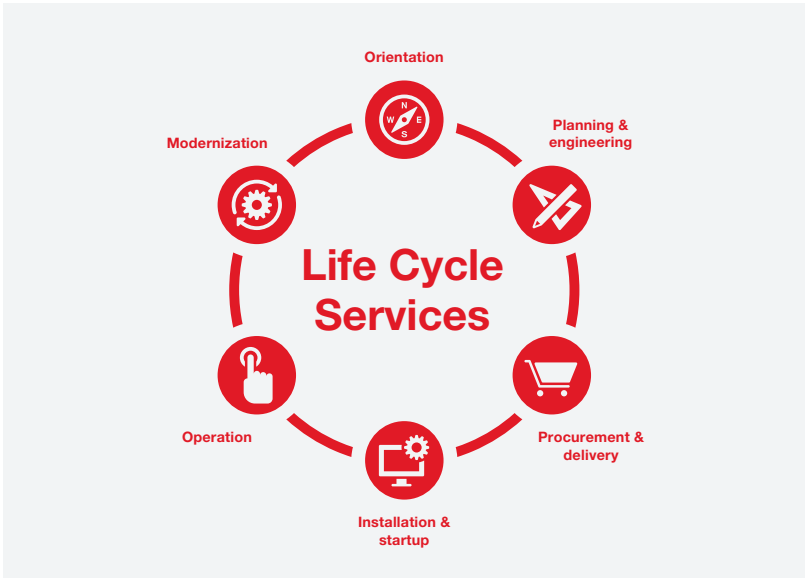
5
Operation at the customer's premises, including product monitoring via remote services, repairs, servicing, maintenance, Spare Parts Service, and energy efficiency tools

6
Modernization through retrofitting

Inspection and Maintenance, thermography

Thanks to this service from a single source, which is provided by a dedicated contact, our customers can rest assured that they are getting the best possible expertise and advice for their drive technology.

Example – the maintenance-friendly connection between gear unit and motor
The connection between the gear unit and motor on all our standard gearmotors offers a good example of just how maintenance friendly our solutions are. It is made via a pinion shaft that has a key and a mounted pinion with a corresponding slot. Unlike on crimped pinions, this connection can be disassembled without destroying the parts. Any necessary repairs can be carried out at the customer's premises or in one of our service centers.



We ensure that our customers get precisely the solution they need – we manufacture with precision and to suit the market.

How our Life Cycle Services are sustainable

By providing personal consulting and working in partnership to plan customized drive and automation solutions, we ensure our customers always get precisely the solution they really need. In other words, we always manufacture with precision and to suit the market.

As we continue to digitalize our supply chain, we are continuously driving down the amount of paper we use while simultaneously maximizing transparency.

Together, a preliminary in-house check and startup support ensure that our gearmotors run as smoothly and efficiently as possible from the outset.

Thanks to our remote services, we can leverage predictive maintenance to reduce repair outlay and therefore the associated production of spare parts.

A customized and broad-based spare parts production system that satisfies the highest standards in technology and quality helps us maximize flexibility while minimizing costly and energy-hungry downtime and extending the dependable service life of our components.

By providing our Pick-Up Boxes for mechanical drive components as part of our Pick-Up and Delivery Service, we are optimizing the logistics outlay.

Our retrofitting and modernization concept ensures that every system can be kept up to date and in the best possible energy-efficient state.

Our 800 sales and service experts provide 30 services at 33 sites directly and rapidly, thereby enabling us to reduce the energy use and resource consumption otherwise associated with long journey times.

Expert energy consulting for designing systems to be more energy-efficient

The development of our new DR2C.. series of motors was no fluke. We put a great deal of effort into effiDRIVE® – a tried-and-tested concept that our customers have been using for many years now to save energy and, therefore, reduce CO_2 emissions. A major part of effiDRIVE® and our Life Cycle Services is energy consulting in order to optimize the energy efficiency of our customers' systems.

The ideal basis for optimizing our customers' energy consumption is direct, on-site consultancy provided by our specialists, who work with the responsible contact people to analyze the system and identify energy-saving factors. Thanks to this comprehensive analysis, we can ensure an energy-efficient solution – after all, it is important to consider the entire process and not just a single component.
We support our customers every step of the way, from basic consulting and data capture through to energy efficiency analysis and success monitoring.

Three interrelated modules ensure a systematic methodology

Our energy consulting starts with basic consulting. During this phase, we explain the basics of state-of-the-art energy management as well as key energy-saving principles in drive and automation technology. Practical sample calculations and reference projects are used to identify specific savings potential. We also explain all the main normative and legal conditions.

Data is captured either by SEW-EURODRIVE customers using standardized and application-specific query forms, or by SEW-EURODRIVE specialists. In the latter case, this service is scalable. Depending on the customer's preference, it can contain up to three steps – an optional performance assessment, identification of additional energy-saving potential, and a recommendation as regards the prioritization of measures.

In the final energy-efficiency analysis, an optimization concept is drawn up as way to specify the precise savings potential and level of investment and calculate cost-effectiveness. The results of the consulting exercise are comprehensively documented in an energy report, which then also serves as the basis for selecting the appropriate drive technology.

Sustainable product development

Consistently sustainable from the very start:
our in-house Eco-Design Guideline

The basis at SEW-EURODRIVE is the "Eco-Design Guideline", or "EcoDG", which is broadly aligned with the new EU "Ecodesign for Sustainable Products Regulation (ESPR)" (EC, 2024). It sets out the internal and external requirements, complemented by best-practice examples to inspire ideas. Thanks to the increased energy efficiency and recyclability of SEW-EURODRIVE solutions, the following negative effects will be continuously reduced:

1. Environmental impact and resource consumption
2. Greenhouse gas emissions
3. Dependence on suppliers, especially when it comes to procuring critical raw materials.

A new chapter in product development
We aim to open a completely new chapter in product development with this sustainable product design concept. Thanks to our unwavering commitment to high-quality sustainability, we have already built up considerable expertise. Our in-house Eco-Design Guideline brings together this know-how and our experience and makes it available to our product developers in the form of specific design recommendations. This results in a new, extended system for product qualification that will become a key benchmark for product development under the product development process (PEP) at SEW-EURODRIVE. An Eco-Passport will be issued that will list key data in the context of product sustainability and circularity and enable the setting of an internal benchmark against predecessor products.

Brief video about the Eco-Design Guideline

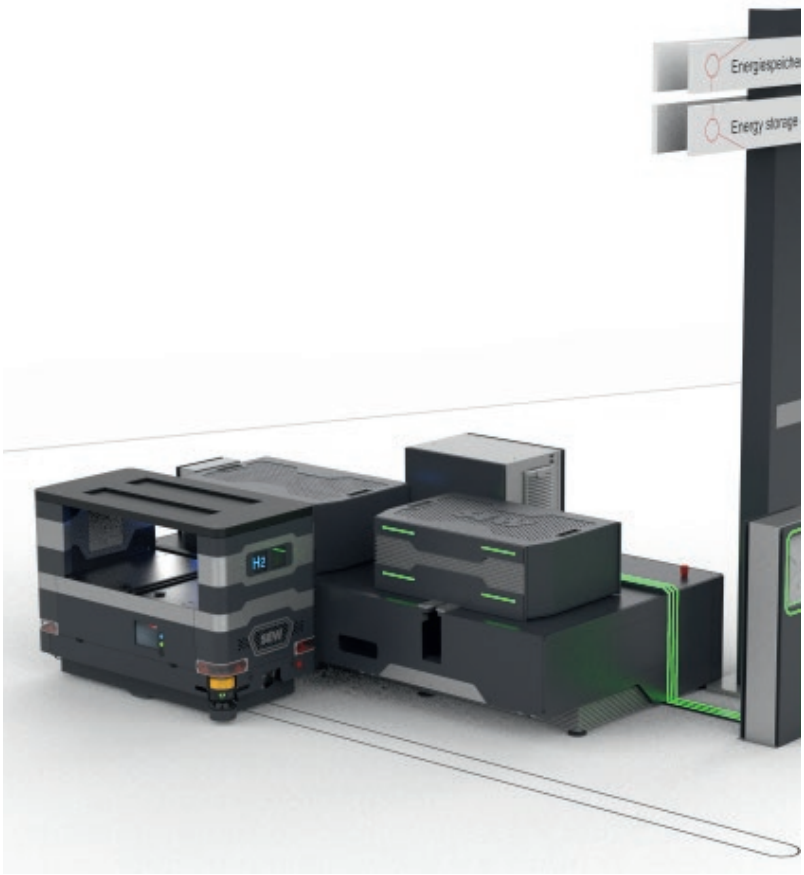
In-house training courses on eco-design
To ensure our development staff understand the new Eco-Design Guideline, we have developed comprehensive in-house training that more than 100 employees have already taken. Step by step, eco-design is becoming standard day-to-day practice at SEW-EURODRIVE.

Eco-design based on the example of the DR2C.. synchronous motor
DR2C.. motors are extremely energy efficient (energy efficiency class IE5) while being comparatively small. This combination is made possible by permanent-magnet-excited rotors. Since these products use rare earths that have the highest supply risk classification under the EU Critical Raw Materials Act, the rotors have been designed so that the corresponding rare-earth magnets can be detached during end-of-use processing and returned to high-quality material loops. For further information on the topic of "Circular economy and circular processes", see pages 66 – 69.
For further information about the DR2C.. synchronous motor, see page 74.

Eco-design criteria throughout the product life cycle, as per the ESPR

Concept study for extremely energy-efficient AGV and AMR systems

When it comes to a sustainable product carbon footprint, the transportation of products also plays an important role. We have taken an important step forward here with our concept study for automated guided vehicles (AGVs) and autonomous mobile robots (AMRs) – a study that we presented at HANNOVER MESSE 2023.



What makes this AGV/AMR concept study really stand out is the flexibility of the drive, since the application can switch fully automatically from battery mode to fuel cell mode as required and without coming to a stop. Fuel cell mode is particularly recommended for longer routes, and the fuel cells in our AGVs/AMRs use green methanol as fuel.

Whether operated by battery or fuel cell, both energy modules ensure an environmentally friendly drive. The tried-and-tested MOVITRANS® technology transfers the energy to the energy storage units of the AGV/AMR in a process that is contactless and, therefore, especially efficient. Highly robust double-layer capacitors are used for the energy storage units, as they can be charged and discharged more or less as often as required.

Added energy efficiency from virtualization and digitalization

The ever-growing opportunities associated with virtual simulations and digital models can play an important role in helping save energy during product development stages. They can also provide valuable insights into how a product will actually be used and thus help developers focus on what really matters.

Generally speaking, preliminary simulations that are run during development projects help to deliver important findings at an earlier stage. As a result, far fewer practical experiments and specially built models or prototypes are needed, which can save a lot of resources.

One specific example of this is a virtual simulation of oil flows, which helps eliminate the need to carry out experiments in a test center. Reducing the number of prototypes and experiments means less material is used and less CO_2 emitted.

Simulations can also support analyses to establish potential reductions in power losses. This results in higher operational efficiency standards and thus much lower current consumption. Once again, oil flow simulations offer a good example for this. The same applies to oil level optimizations during operation.

Shortening the test run times for XS.e

In another project, we succeeded in reducing the testing time for installed units from the XS.e series. Specifically, this meant being able to tell after just 15 minutes whether the temperature sensor was in line with the approximate progression forecast. As a result, the development team was able to reduce the overall testing time for each unit from 2 hours (one hour each for counterclockwise and clockwise rotation) to 30 minutes, which equates to a total yearly saving of approximately 4500 hours.

We intend to roll out this model for all single-piece housings and additional sizes.

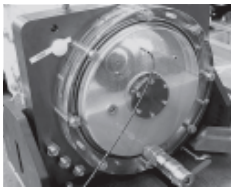


Fig. 1
The real thing in the test center

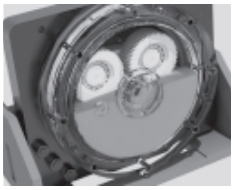


Fig. 2
A digital simulation
When it comes to development projects, advance simulations offer great opportunities by providing early insights, lowering costs, and reducing the number of experiments required.

Digital products and services

Thanks to condition monitoring and DriveRadar®, we know today what will happen tomorrow.

Sustainability through intelligent maintenance – how our customers can safeguard resources and boost efficiency with condition monitoring. As a midsize mechanical engineering company that supplies cutting-edge technology, we help our customers strike the perfect balance between sustainability and cost efficiency. Our DriveRadar® condition monitoring system supports businesses when it comes to making maintenance processes more efficient, plannable, and resource friendly.

Predictive maintenance for added sustainability
By continuously capturing and analyzing data, we create a sound basis that helps our customers achieve precise condition monitoring. Sensors measure critical parameters such as the temperature, speed, oil level, and vibration behavior of their gear units. This data flows into our secure cloud platform, where it is evaluated.

Efficient use of resources thanks to smart forecasts
The data that is collected helps our customers accurately predict the maintenance requirements of their machines. This means they can minimize downtime and avoid expensive emergency works. Targeted maintenance measures extend the service life of machine components and considerably reduce resource consumption.

Automated processes for enhanced environmental protection
Automated systems for capturing, evaluating, and analyzing data help our customers to optimize their processes. They can then manage valuable resources such as oil and spare parts efficiently. Thanks to our customizable cloud solutions, we can ensure low-outlay insights that help deliver targeted measures.

DriveRadar®:
Sustainability in practice
Our DriveRadar® system has been used to good effect in many different applications, including by a leading manufacturer of EPDM sealing products. Sensors at the company provide real-time monitoring for critical machine parameters such as:
+ Oil temperature and fill level
+ Ambient temperature
+ Torque and speed
+ Vibration behavior of rolling bearings and gearing

Since customers are able to plan the replacement of components and manage the stocking of spare parts accordingly, they can lower their material consumption and avoid unnecessary logistics outlay. Use-dependent analyses also help extend the gaps between oil changes.

Reliable forecasts and resource-friendly maintenance
A traffic light system in our DriveRadar® IoT Suite ensures that potential problems are identified and signaled at an early stage. A precise data analysis gives our customers fully automated, concrete evidence about the condition of their machines, makes it possible to forecast the remaining service life, and helps to optimize the planning of maintenance intervals. That's how to make maintenance efficient.

How we help conserve resources
In these solutions, we are combining technological excellence with ecological responsibility – for a sustainable future in mechanical engineering.

MOVIKIT® software modules: parameterization instead of programming
Operating data, including data that is collected during condition monitoring, is also used to preconfigure drive solutions and therefore simplify their startup. Our prefabricated MOVIKIT® software modules make the essential configuration steps much easier, because users simply enter individual parameters in the user-friendly and graphically optimized interface of our MOVISUITE® engineering tool. A large proportion of our software modules can be started up via this simple parameterization process. The MOVIKIT® portfolio ranges from simple drive functions, such as speed control and positioning, to complex motion sequences and motion control functions. The MOVIKIT® software modules can also still be freely programmed if the application calls for this.

This is where the software modules in the "Power and Energy Solutions" category deserve a special mention. These modules ensure that energy is managed intelligently and that

↓
DriveRadar® IG

energy is used appropriately during the recovery phase. The end result is fewer power peaks, fewer components in the system as a whole, and more energy savings. The MOVIKIT® solutions in this category have earned accolades from the trade press.

Industry 4.0 for more flexibility and decentralization in production

Cloud solutions for decentralized access to software solutions (Internet of Services), networking of individual machines and systems with the Internet (also known as the Internet of Things), and networking of these machines with one another as part of a cyber-physical system – SEW-EURODRIVE is also exploring these Industry 4.0 topics within the context of a smart factory. These cyber-physical systems can make decentralized decisions on the basis of digital information and are therefore potentially capable of learning. They can be used right across the production chain, from assembly operations to logistics assistants and assembly assistants, and all the way through to logistics and handling.

The basic aim of the smart factory developed as part of Industry 4.0 is to create the perfect symbiosis of people and technology and/or of people and machinery, thereby relieving the strain on individual workers and optimizing processes. This can result in a lower error rate and, therefore, fewer production rejects, for example. Another example is a mobile assembly assistant, which contains all the information about a job order and can specifically communicate special designs or customer requirements to the fitter.

AGVs and AMRs

Whether it's a case of a smart factory, Industry 4.0, or human-machine interaction – when digitalizing our production processes, our top priority is always to put people and staff at the heart of what we do.

Augmented reality for smart order management

In the context of Industry 4.0, digitalization also means using augmented reality to give individual people or employees a much broader perspective. This includes using a smart order to support a production process, for example. This user interface mask contains all the assembly, manufacturing, and logistics information for a product. For example, a smart order helps users identify at a glance the availability of the machinery for the next step. A smart order can also use machine-to-machine communication to coordinate the equipment and systems and combine them with one another to fulfill the order.

Other options and concepts within the context of augmented reality include smart work. This involves staff being given ergonomic support, e.g. through gesture control during assembly work, to relieve the physical strain on them. These assistance systems can be requested to suit specific requirements and tasks. One particular long-term benefit is that they improve concentration.

A smart director can also support the detailed planning of day-to-day production sequences. With predictive order simulation, the available resources can be used optimally, flexibly, and with a clear focus on the desired outcome. This also means that energy consumption can be reduced in the medium to long-term.

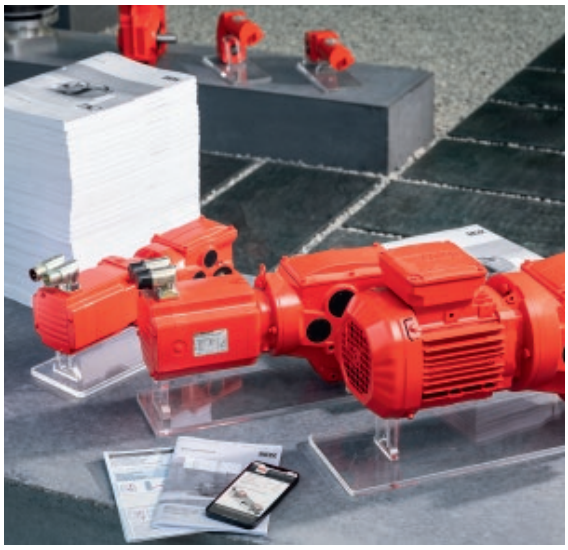
Digital products and services

Digital documentation – legally compliant document management benefits customers and the environment alike

The International Services Technical Communication (IST) department at SEW-EURODRIVE decided it was time to move away from paper and embrace a legally watertight, customer-focused document management system.

In the past, if a customer ordered 100 identical drives (such as ATEX gearmotors), they would, in the worst-case scenario, also take delivery of 100 packages, each containing several sets of operating instructions (motor, gear unit, accessories) and even DVDs. Not only did 99 out of the 100 document packages usually end up in the garbage, but so too did the DVDs, since modern laptops don't tend to have a DVD drive anymore. This is why, even before the launch of the current sustainability campaign, the management team asked the IST department to think about a solution that would be legally compliant, customer-focused, and fit for the future.

It proved to be an extremely challenging project. Besides factoring in the very different legal requirements that apply in different countries, the team also needed to explore the technical options for providing previously printed documentation and information via an online channel. The IST department has therefore drawn up and implemented a three-step plan of action that takes account of all aspects.



Fewer stacks of paper thanks to reduced delivery volumes, operating instructions that have been optimized for their actual usage, and digital documentation.

"It's not about taking something away from the customer or even about simply reducing the use of paper. We also want to optimize accessibility and offer our customers genuine added value by introducing a state-of-the-art and, above all, consolidated document management system."

Marc Kögel, head of ISTS
(Innovation Services Technical Communication / Standardization).

60%

fewer items of documentation for gearmotors with functional safety (example)

40%

fewer items of docu-mentation for ATEX gearmotors

0%

plastic thanks to avoidance of DVDs and cases

70%

less paper by reducing to compact operating instructions

Step 1: Reduce
The first step involves reducing the minimum number of printouts that need to be included in product deliveries, and also limiting the proportion of additional copies. A lawyer specializing in technical communication was brought in to explore the legal possibilities.

The specific minimum quantity of paper documentation was determined for the relevant order and options in the order processing department. The language in which documentation must be supplied also plays a key role here, since the crucial factor is often not the delivery location, but instead the place where the product is later put into use. In the future, if customers need more than this minimum quantity, they will need to indicate this when they place their orders. Relevant instructions have been implemented in order processing.

Step 2: Eliminate
The decision to stop supplying DVDs (and the cases they come in) will also save a lot of plastic in the future. "The aim is to make the majority of the relevant information accessible via Online Support. The Machinery Regulation will offer fur-ther possibilities for reducing the amount of pa-per we use in the future," Kögel explains. How-ever, as he is also keen to emphasize, until this new regulation comes into force, there is a min-imum amount of information that will still need to be supplied in the form of paper printouts with deliveries. Optimizing both the documents themselves and the provision of information in general is a vital part of preparing for the future.

Adapting document management to the Machinery Regulation
Work has already started on further reducing paper inserts in line with the Machinery Regulation, which permits the delivery of user information via digital means. However, there is a raft of peripheral conditions that need to be checked and preconditions for paperless delivery that need to be met.

+ Checking exceptions to paperless delivery (non-EU countries, special directives)
+ Ensuring access to digital information "for the lifetime"
+ Ensuring documents can be properly reproduced by the customer
+ Implementing subsequent ordering options for customers
+ And much more besides

Step 3: Optimize
Based on the insights gained from the "reduce" and "eliminate" steps, a new, customer-focused documentation concept was then created.

One example is the legally valid version of a set of consolidated operating instructions that have been cut down in size by 74% on average, thus further reducing the scope of delivery. There are also order-neutral operating instructions in poster format specifically for simple products.

The information that is no longer included in the printed document will instead be available in a new product manual. This manual has been consolidated based on the cross-product structure and, in addition to the PDF copy, will also be available in HTML5 in online support, where a new option for accessing the document via an additional symbol has been specially set up. The digital HTML5 document format, which has been optimized for mobile devices and features convenient functions for switching language or conducting a free text search, for example, makes it easier to find more detailed information and comprehensive product knowledge faster and more directly.

Udo Marmann, market management, Eurodrive Germany
"With our new, uniform document structure, we are presenting information to users in a very focused way. When combined with digital networking and visualization, the number of documents that are supplied with products can also be reduced. Less printed documentation means less paper waste, which saves resources and is better for the environment. Thanks to the ongoing improvements being made to Online Support, customers can always access the latest versions of product information and other documents."

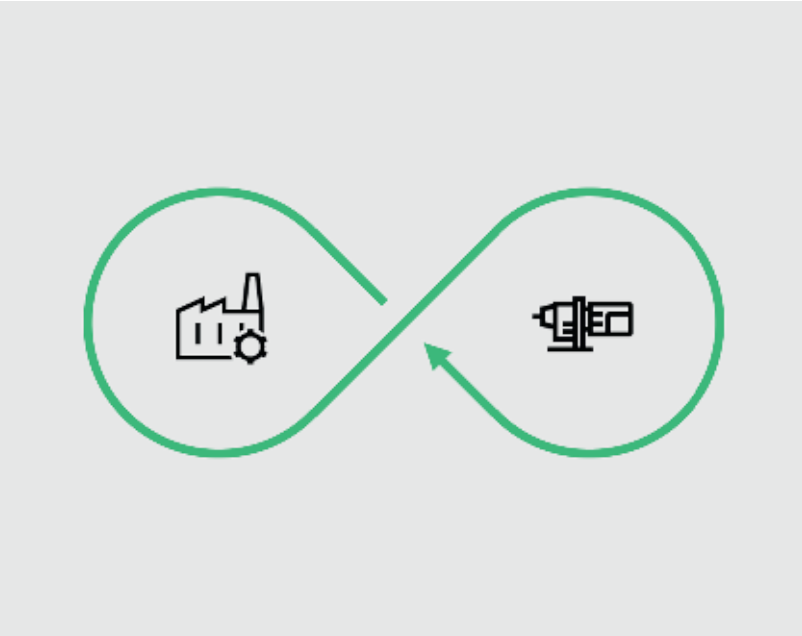
Damien Diebolt, manager of Méthodes Brumath
"Digital documentation and the significant reduction in paper printouts of operating instructions are taking a huge amount of pressure off logistics. The time needed to process customer orders is also being reduced by hours – or even by days in the most extreme cases. Moving forward, this will also ease the strain on our in-house digital printers, which have been becoming increasingly temperamental due to their high workload. It's great to see our company going to such efforts in these areas, too, setting an example and helping to save our planet."

Product carbon footprint

What kind of CO_2 emissions does a drive solution from SEW-EURODRIVE generate? Due to the modular nature of our product portfolio, that question is impossible to answer on a generic basis, since every drive solution is tailored to a customer's specific needs.

However, to approximate the specific emissions for each solution as best we can, we are working on calculating the product carbon footprints (PCFs) of our standard products. The general conditions and methods for working out PCFs are specified by ISO 14067. DIN EN 50598-3 also sets out further product-specific requirements applicable to drive technology. Initial PCF calculations have already been performed, which have given us valuable insights into the CO_2 hotspots of our products.

Across all products generally, it has become clear that the greatest influencing factor for the PCF is the product's use by our customers. Based on the applicable product category rule from DIN EN 50598-3, well over 90% of all product-related emissions are caused by customers' use of the product in the case of motors and frequency inverters. Even though the calculations are based on the specific use scenario from DIN EN 50598-3, the results make one thing clear – in the case of SEW-EURODRIVE products, which have a long service life, energy consumption during use will always have a major influence on the total CO_2 emissions. Energy efficiency will therefore continue to play an important role in the development of SEW-EURODRIVE products. In addition, we were able to use this carbon accounting process as a basis for working out potential CO_2 savings within the cradle-to-gate system boundaries, in other words, during material procurement and product manufacture. This makes it possible to improve the carbon footprint of products, particularly by integrating components and used products into a circular economy. SEW-EURODRIVE therefore already works with a particular focus on circular economy concepts right from the development stage (see the "Circular economy and circular processes" section on page 66).



Over 90%*

of our CO_2 emissions are generated by our customers' use of our products

* Based on a strict interpretation of DIN EN 50598-3.
The calculation method in the standard is currently under review.
This part of EN 50598 sets out the principles for implementing environmentally conscious product design, evaluating eco-design performance, and communicating the potential environmental impacts of drive and motor systems for applications.

Supply and raw material chains

+ Collaborative supplier management
+ Resource-friendly raw material sourcing


→ Ethics and governance
→ People
Ecology
Society
Economy
Quality
→ Production and business processes
→ Products and services
→ Supply and raw material chains

At home around the world
Keeping things local

"Think global – act local." This means thinking globally, but acting locally and taking as local an approach as possible to delivery and procurement. For many companies, this combination of globalization and localization – sometimes known as "glocalization" – has become one way of improving their carbon footprint. Given the many problems currently impacting supply chains, a large number of businesses are making concerted efforts to achieve as much flexibility as possible moving forward. They are looking to avoid overdependence on individual countries and regions.

The same applies to the supply and raw material chains of SEW-EURODRIVE. To achieve our goals related to optimizing our carbon footprint, we aim to use our global network to ensure both the procurement of raw materials and our products and solutions themselves are located as close as possible to our sites and our customers. By keeping transportation routes short in this way, we will reduce our CO_2 emissions and minimize the amount of packaging involved.

Collaborative supplier management

At SEW-EURODRIVE, procurement is shaped by a holistic approach for greater sustainability and by partnership-based supplier management. As part of our dynamic development for greater environmental awareness and a supply chain that is better overall at conserving resources, we constantly endeavor to optimize our processes and create new ways of ensuring optimal cooperation with our suppliers. To improve our standards on an ongoing basis and keep them up to date, we also cooperate closely with many trade associations and prestigious universities.

To achieve these sustainability goals, we engage in constant dialog with everyone involved, e.g. internally with all departments of the company and our procurement teams in our many branches, but also externally with our suppliers.

We also take account of our customers' wishes, such as in relation to the choice of materials and punctual deliveries.

8

steps are defined in our concept for the procurement process.

Our 360° procurement concept: our code of practice
Our holistic approach is reflected in our 360° procurement concept, which clearly defines and sets out every single step of our procurement process.

1. Procurement: We apply clearly defined standards to the selection of our suppliers, thereby ensuring that our high quality requirements are sustainably met. The transparency of global procurement markets enables us to identify opportunities and risks at an early stage and deal with these pragmatically through our decentralized procurement organization.

2. Supplier management: We use our SEW-EURODRIVE Supplier Management Toolbox to ensure reliable processes from supplier selection and assessment through to supplier development. In our Supplier Steering Committees, experts from Procurement, Development, Quality, and Logistics make decisions together.

3. Quality management: At the start of a partnership with suppliers, we ensure that everything will run smoothly by conducting feasibility studies in advance, intervening fast, and communicating directly right from the outset. As the partnership proceeds, we also apply multi-stage escalation management that is coordinated with everyone responsible to ensure rigorous follow-up.

4. Risk management: We safeguard ongoing operations by identifying supplier-related risks at an early stage and monitoring suppliers via a critical supplier watchlist.

5. Statutory provisions: We apply active, cross-functional supervision to ensure that all legal requirements, including the German Supply Chain Due Diligence Act, are understood and complied with right along the value chain.

6. Process optimization: Through our dedicated team within Procurement, we utilize digitalization to expand highly automated processes, involving both internal and external partners in the coordination of interfaces.

7. Organization: The Procurement department is directly involved in the processes of individual plants and is therefore close to production and innovation.

8. Evaluation: With flexible, ad hoc evaluations and independent analyses, we keep a close eye on our suppliers' performance – thus ensuring that we always make decisions on the basis of valid key figures.

Our procurement guidelines

Looking beyond the Supply Chain Due Diligence Act, which came into force at the start of 2023, SEW-EURODRIVE operates in line with a number of other statutory regulations and directives. These include:

- The REACH regulation, which is the European regulation on the registration, evaluation, authorization, and restriction of chemicals.
- The RoHS directive for limiting the use of certain substances in electrical and electronic devices, such as lead, mercury, and cadmium.
- The U.S. Dodd-Frank Act for keeping conflict minerals such as gold, tantalum, tin, and tungsten out of supply chains to eliminate them as a source of financing for violence and human rights violations in conflict zones and high-risk regions.
- The WEEE directive for the environmentally friendly disposal of electrical and electronic equipment and other associated provisions.
- The EU Deforestation Regulation (EUDR), in light of which we mainly opt for FSC®-certified or PEFC-certified products when purchasing paper.

These rules and regulations set out various requirements for our products that affect the substances they contain as well as the environmental friendliness of the products themselves and how resource friendly they are. All the products and materials that are supplied to us must meet these requirements. What's more, all the individual suppliers are also required to ensure these standards are met in their own supply chain. Terms and conditions of purchase make reference to the finer details of these provisions (product compliance guideline).

Terms and conditions of purchase to download:

While refining and realigning our collaborative approach to supplier management, we decided to make a major change. In the past, our priority in procurement has been to secure the best and most consistent material quality at the best possible conditions on very different markets.

However, focusing exclusively on conventional requirements such as cost reduction and risk minimization is no longer enough. Instead, procurement will need to take account of not just the origin and price of procured services and products, but also – and more especially – their use and subsequent disposal.

+ New and existing suppliers are asked about a range of issues.
+ Data is gathered and factored into the supplier selection and qualification process as well as the annual evaluation process.

The following pages provide more information on this topic.

Procurement will need to take account of not just the origin and price of products, but also – and more especially – their use and subsequent disposal.

Collaborative supplier management

Launch of a sustainability rating system

Environmental criteria are already selection criteria for every single one of our suppliers. Significant actual and potential negative environmental impacts have been identified for less than 1% of our suppliers. In these cases, concrete measures have been taken and an escalation plan developed to combat the risk.

Through our sustainability rating system, we aim to make it much easier to ensure our suppliers operate in line with sustainable criteria for the benefit of SEW-EURODRIVE and our customers in the future.

Covering seven different topics, our questionnaire comprises ecological, economic, and social criteria that can largely be checked on the basis of hard facts (e.g. certificates).

By gathering data in this way, we produce a sustainability rating that is factored into yearly strategic supplier evaluations and a one-off supplier assessment carried out at the start of the collaboration.

The sustainability information collated in Procurement comprises ecological, economic, and social criteria.

Environmental management system
ISO 14001

1 Environmental management system

2 Product carbon footprint

3 Energy management system

4 Social management system

5 Minimum age for employment

6 No minors undertaking work that poses health risks

Award for holistic eSolution supplier scouting
In 2021, the German Association for Supply Chain Management, Procurement and Logistics (BME) presented us with an award for the all-round innovative approach we have adopted in our supplier scouting activities for eSolutions. The BME was particularly impressed by the holistic supply chain management we have put in place for procuring IT solutions. As part of its "Procurement 360°– see the big picture" initiative, SEW-EURODRIVE put Procurement front and center as an interface manager. The Procurement team works with the relevant specialist departments to coordinate the approach, thereby enabling it to control the selection process efficiently and professionally to the company's advantage. Collaborating closely with an AI-supported scouting platform solution ensures suitable potential suppliers can be found in next to no time based on precisely the criteria that matter most to the company carrying out the search. These criteria include high quality standards, sustainable technologies, and much more besides. This approach helps to largely remove the need for costly and time-consuming visits to trade fairs, which in turn benefits staffing and environmental resources.

This lighthouse project has since helped the Procurement team convince other departments and units of how valuable a central procurement management system is when it comes to achieving maximum cost-efficiency and environmental friendliness in our company.

An outstanding example of digitalization and sustainability working hand in hand
Optimized and focused supplier research that incorporates a fully digitalized scouting process makes it possible to investigate and document sustainability criteria across a much broader range. The result of this innovative scouting can also be reported in unambiguous figures:

12×

AI ensures that twelve times as many suitable suppliers are scouted than is the case when using conventional supplier research processes

+70%

Some 70% more suppliers were kept in the process up to the point data was queried

75%

Some 75% less outlay for SEW-EURODRIVE compared to conventional supplier research

Resource-friendly raw material sourcing

Focusing on consistently environmentally friendly and resource-friendly product design with a minimal carbon footprint, including the procurement of suitable raw materials and the use of materials that can be recycled as easily as possible.

Extending the zero-paper strategy by fully leveraging opportunities for digital collaboration both internally and externally.

Continuously optimizing business processes to ensure the efficient and sustainable use of resources.

Reviewing global supply chains on a yearly basis, particularly to expose and tackle inhumane working conditions.

Establishing collaborative supplier relationships with a focus on mutual reliability and social responsibility.

Continuing to specifically prioritize local service providers and suppliers.

Complying with international product compliance directives in collaboration with our suppliers as a way of protecting people and the environment.

Extending due diligence measures to ensure compliance with the German Supply Chain Due Diligence Act.

Maintaining transparency in the global supplier pool so risks can be systematically analyzed and targeted measures implemented.

Using procurement to drive innovation so as to put ecological and social values on an equal footing with economic profit.

Purchased materials

Material category	Weight in metric tons
Steel	37 630
Cast bronze	769
Cast aluminum	384
Cast steel	43
Gray cast iron	32 389
Other cast materials	2 923
Copper	5 537
Plastic parts	706
Electronics components	57 286
Cardboard packaging	60 527
Paint	3 599
Lubricants	3 769
Total	205 561

Biological material from verifiably sustainable sources

Weight in metric tons	1 987

Reused or recycled components, products, and materials (including packaging)

Weight in metric tons	17 343
Percentage (%)	8,44

Professional recycling of various types of metal scrap
When it comes to conserving resources and protecting the environment, asking "how?" is often more important than focusing on "what". Thanks to the cutting-edge technologies that our recycling partners use, we can process a lot of the materials left over from production in their entirety, without leaving anything behind, and feed them back into the material cycle. An ingenious material-type management system also ensures that metals are not downcycled, an environmentally harmful process whereby metals are reduced in quality when they are recycled. As part of a holistic approach to environmental management, our recycling partners also implement noise reduction concepts to minimize their impact on nearby residents and pursue rigorous measures to protect the soil and groundwater.

Further examples of partners for optimum resource conservation
Other examples of SEW-EURODRIVE partners include an iron foundry that has a silver eco-rating from EcoVadis and a Green-Machine mechanical engineering firm. The foundry smelts down 100% of the material waste associated with the cast housings it manufactures for us, using it in the production of new parts. Meanwhile, our mechanical engineering partner manufactures machines for us on a carbon-neutral basis, meaning that when they arrive at our company, they can be put to good energy-efficient and low-emission use.

Our administrative operations are also pursuing very promising approaches to resource-friendly sourcing by procuring hardware from an eco-friendly global closed-loop system and working with a partner for office supplies that is dedicated to sustainability. Our hardware procurement partner already utilizes recycled plastic in its product design, procures 50% of its materials from recycled sources, and refurbishes used PCs and laptops. Meanwhile, our office supplies partner is aiming to make closed-loop packaging available for all products by 2025 and achieve the ambitious target of a "zero-waste workplace" by 2026.

We also take the most sustainable approach possible when it comes to reusing discarded smartphones and cellphones, thanks to usage-oriented asset life cycle management.

34%

The proportion of recycled input materials used to produce our main products and services.

100%

Green Power Steel is smelted with 100% green electricity.

Green steel with 100% green electricity
Thanks to a new collaboration initiated with Georgsmarienhütte of the GMH Gruppe in 2023, SEW-EURODRIVE can now also give the green light for the procurement of green steel. This Green Power Steel is smelted with 100% green electricity.

Other advantages of Green Power Steel include its outstanding mechanical properties, its excellent fine-grain stability during case hardening, and cost benefits thanks to an optimized alloy concept. The steel is processed further in the Plant for Large Gear Units in Bruchsal.

The project is based on intensive and collaborative product development. Plans to expand the collaboration to continue the procurement of Green Power Steel are already in the pipeline.

Total weight of materials used in Germany and France (production plants) in metric tons

	Germany	France
Non-renewable	244 048	52 988
Renewable	9010	1556

Production and business processes

+ Resource-friendly production
+ Buildings and infrastructure
+ Logistics and mobility
+ Waste management


→ Ethics and governance
→ People
Ecology
Society
Economy
Quality
→ Production and business processes
→ Products and services
→ Supply and raw material chains

Using intelligent energy management to make production and business processes more sustainable

Use less energy, conserve more resources. It sounds simple on the surface, but dig deeper and what emerges is a complex multi-layered transition. We began this transition in our building management operations many years ago now, and have invested in various solutions.

Resource-friendly production

Continuous improvement in both the finer details and the bigger picture

We aim to enhance our efficiency and added value across individual areas by ensuring our production and assembly processes are ideally coordinated, by enhancing these processes with supporting automation, and by adopting a smart approach to the digitalization of our business processes.

Our highly functional factory and office buildings, which are geared toward maximum efficiency, combine with sustainable energy concepts to play a particularly important part in helping conserve resources. We are continuously investing in the construction and renovation of our buildings to satisfy the latest energy standards, and this includes designing outdoor spaces to be sustainable and close to nature.

In terms of production operations themselves, we constantly strive to further improve workflows across all process chains and avoid waste and inefficiency. This includes, for example, optimized cooling lubricant management for extended service life and a general reduction in quantities of cooling lubricant. Other examples are using efficient heat pump technology to help dry paint that has been applied to drives at the service sites in Germany, optimized compressed air management, and the ongoing digitalization of our business processes to reduce the amount of paper being used.

What's more, some of the energy we generate and other resources can also be reused. Specific examples of this include heat recovery from production processes and the reclamation of metalworking oils.

One more, overarching activity is the ongoing expansion of our network of assembly, service, and sales sites, which is further strengthening our local presence both across Germany and worldwide. This is the only way we can continue to gradually reduce transport and travel routes.

However, we are going much further than just looking at our production and delivery processes. For instance, we are also pursuing maximum carbon neutrality in the printing of documentation at our in-house print shop.

100 %

green electricity procurement for German locations since 2024

Improved energy efficiency in Graben-Neudorf and Bruchsal

Every gram of CO_2 emissions avoided helps the environment. That is why we have been running a range of energy-saving projects at our site in Graben-Neudorf for a number of years now.

Heat recovery on compressed air systems
The compressors in a compressed air system generate a lot of waste heat during operation. Instead of simply being dissipated, this waste heat is now fed into the existing heating network through a heat recovery system. This resulted in energy savings of 391 579 kWh compared to the previous year.

Switching over to dry filter elements for paint separation
Instead of using water for paint separation, we have switched to dry filter elements in order to save valuable resources. This means 600 m³ less water and 17.2 metric tons less paint sludge. The total energy saving was 125 000 kWh compared to the previous year.

Reducing the base energy load in Graben-Neudorf at weekends
The machines and systems in the Graben-Neudorf Production Plant were analyzed to determine whether the base energy load could be reduced at weekends. Traffic signal layouts have been created for the production units. At the end of a shift, the machines/systems are to be put into statuses according to the colors displayed. This approach saves 90 000 kWh of power every weekend between the hours of 2 p.m. on Saturday and 10 p.m. on Sunday.

Energy-saving plan in inverter assembly in Bruchsal
At the end of their shift or at the weekend, staff at the Bruchsal Electronics Plant switched off the individual consumers. Three different switch-off categories were defined – "daily", "weekly", and "on instruction". These categories were color coded and displayed on a special board.

Progressing toward carbon-neutral production. Example: Graben-Neudorf site

Photovoltaic systems
for generating electricity in-house

Purchasing green electricity

Heat recovery
from in-house installations

Combined heat and power plants
for producing heat and generating electricity in-house

Roof greening / biodiversity area

Switch-off management

Absorption refrigeration units
for generating cooling energy

Feedback of surface water
via a pumping plant and infiltration pits

Energy-related renovation
of existing building stock

Heat recovery
from the production process

Use of rainwater/condensate

Preparing a connection
to deep geothermal energy / use of waste heat from the hardening shop

Resource-friendly production

Proportion of energy from renewable sources as a percentage of the total energy procurement

37,44 %

Fossil fuels

		Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Fuel consumption, natural gas	MWh	85 821	29 208	575	741	0	0	1 324	877	118 546
Fuel consumption from crude oil and petroleum products	MWh	3 648	1 963	767	1 525	230	0	301	382	8 816
Consumption from acquired electricity	MWh	118	527	0	0	0	0	0	0	645
Consumption from acquired heat	MWh	0	37 436	191	0	101	38	0	787	38 553
Total consumption of fossil fuels	MWh	0	0	0	0	0	221	18	0	240
Proportion of fossil fuel sources as a percentage of the total energy consumption	MWh	89 588	69 134	1 532	2 266	332	260	1 644	2 045	166 801
Proportion of fossil sources in total energy consumption	%	50,77	87,22	80,08	70,63	60,20	56,48	61,61	95,90	62,55

Renewable energy sources

		Germany	France	Austria	Italy	Portugal	Denmark	Netherlands	Poland	Total
Fuel consumption from renewable sources	MWh	0	0	0	0	0	0	0	0	0
Consumption from acquired electricity	MWh	83 413	10 120	235	912	86	200	899	87	95 952
Consumption from acquired heat	MWh	0	0	0	0	0	0		0	0
Consumption of renewable energy produced in-house that is not fuel	MWh	3 455	3	147	30	133	0	125	0	3 893
Total consumption of renewable energy	MWh	86 869	10 123	381	942	219	200	1 024	87	99 845
Proportion of renewable fuel sources as a percentage of the total energy consumption	%	49,22	12,77	19,91	29,36	39,79	43,51	38,38	4,09	37,44
Total energy consumption	MWh	176 457	79 257	1 913	3 208	551	460	2 669	2 132	266 647

Energy production

		From renewable sources	From fossil fuels
Energy production	MWh	4 128	3 584
Sold to third parties	MWh	154	0

Cross-site carbon reporting

How do you compile a reliable, standardized carbon report that can be used as a basis for comparisons? While we established an initial basis for determining CO_2 emissions in our 2023 Sustainability Report, we have now used these figures to develop a strategy for calculating greenhouse gas emissions and the necessary data acquisition. As with many other processes aimed at getting companies on a sustainable footing, there are also globally established standards for calculating emissions. These are summarized in the internationally recognized Global Reporting Initiative (GRI).

When it comes to the carbon reporting for our key sites, we always refer to the GRI data points for energy, emissions, and waste. We also take into account the Corporate Sustainability Reporting Directive (CSRD or Directive (EU) 2022/2464) and the associated European Sustainability Reporting Standard (ESRS).

To ensure we have a futureproof process in place, we have also developed a standardized system that we aim to extend and improve with each reporting period. Through carbon accounting, we intend to enable standardized, end-to-end process performance and ensure various different aspects of our operations can be compared.

To achieve our target of reducing Scope 1 and 2 CO_2 emissions at our German sites by 80% by 2026, we aim to record all the greenhouse gas emissions of our relevant sites so we can derive reduction targets and draw up the necessary roadmap. The first step was to analyze our large European production plants and assembly sites (Drive Technology Centers, or DTCs). These include the production facilities in Graben-Neudorf and the Bruchsal Electronics Plant.

Our objectives for the end of 2024

+ Site-specific carbon accounting for the production plants of SEW-EURODRIVE
+ Site-specific carbon accounting for the assembly plants of SEW-EURODRIVE

Further objectives for 2025 and beyond

+ Extension of the data collection methodology to other European sites
+ Creation of greater transparency regarding the carbon footprint of further branches
+ Extension of our reporting to cover other scope categories

The SEW-EURODRIVE process for carbon reporting

1. Collection of basic data and information by individual divisions and system sources

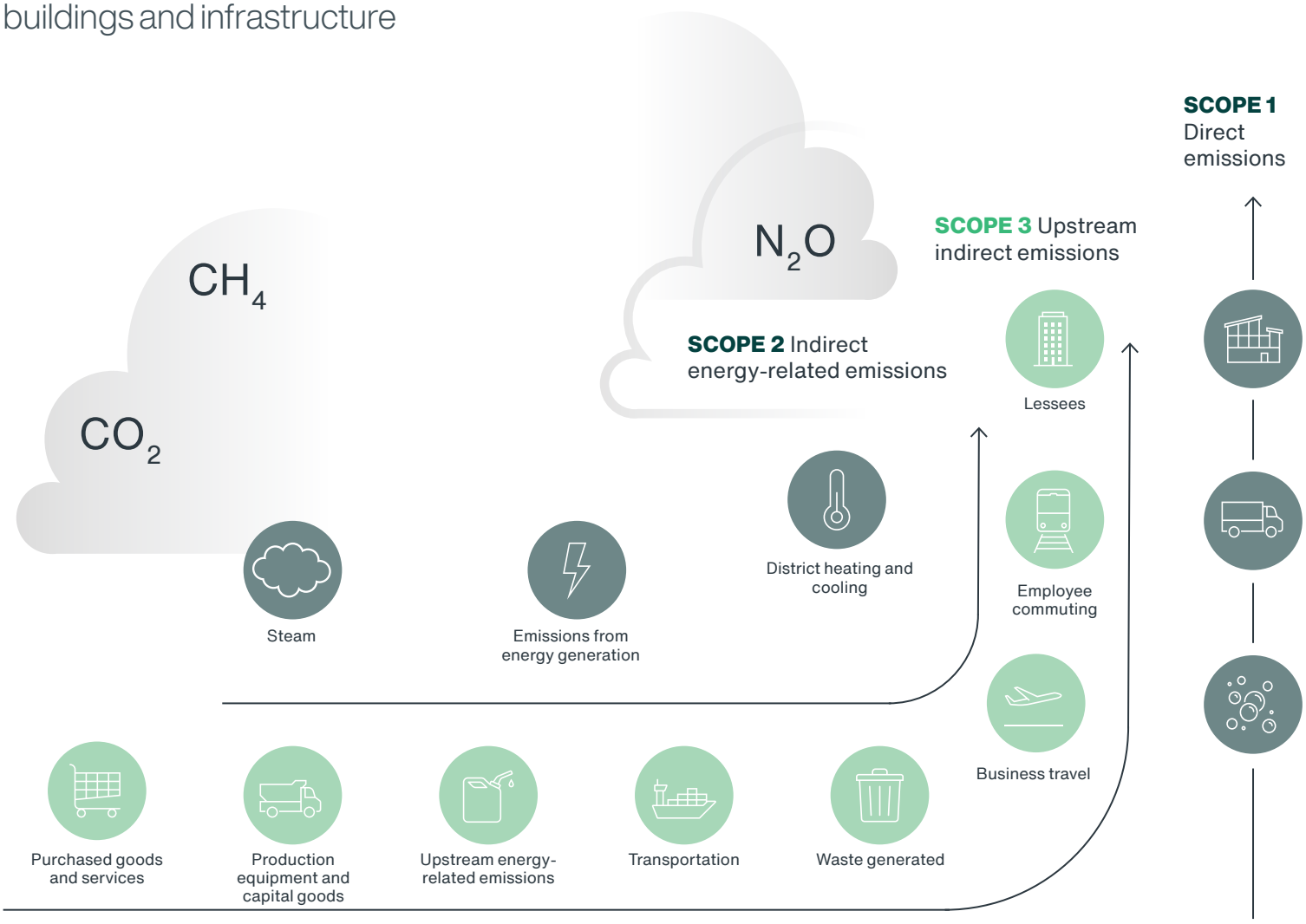
2. Calculation of greenhouse gas (GHG) emissions based on comparable systems

3. Publication of GHG emissions and derivation of further carbon reduction targets

4. Optimization and detailed development of the process to improve precision and reduce outlay

Description and application of the Greenhouse Gas Protocol

Priority for action: production and business processes – buildings and infrastructure



SCOPE 3 Upstream indirect emissions — Com

The Greenhouse Gas Protocol
The Greenhouse Gas Protocol is the global standard for greenhouse gas emissions accounting. It specifies three different scopes:

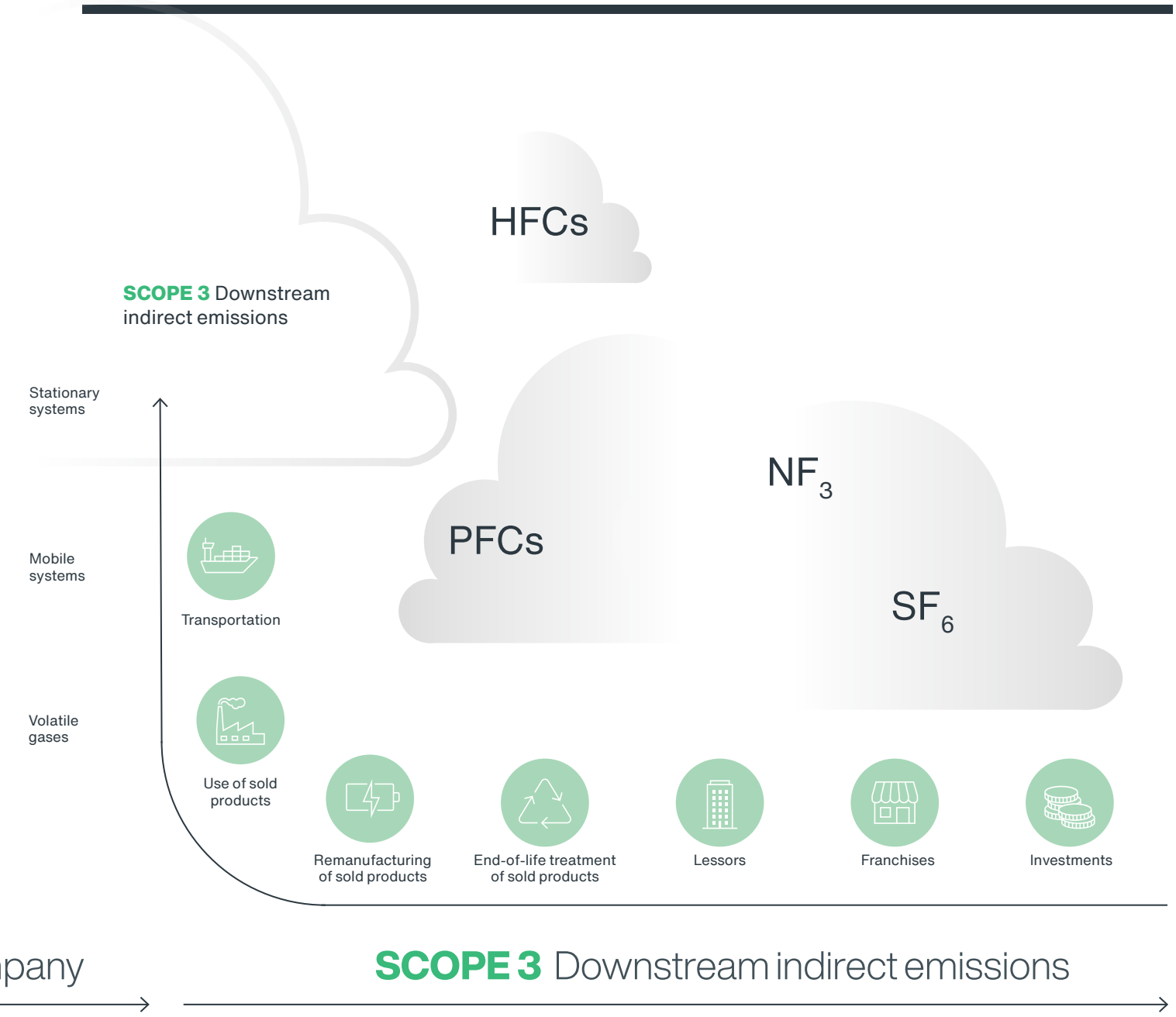
- Scope 1: CO_2 output from direct climate gas emissions such as burning natural gas, heating oil, or diesel in stationary systems (e.g. heating) and mobile systems (e.g. vehicle fleet).

- Scope 2: Indirect emissions from purchased energy, such as electricity, district heating, and district cooling. The emissions are generated by the energy supplier.

- Scope 3: All other indirect emissions that do not fall under Scope 2, such as the extraction, processing, and transportation of raw materials, the fuel consumption of rented or leased vehicles, waste and wastewater, the use of sold products by customers, and the disposal of those products.

Scope 2 differentiates between market-based and location-based emissions. This recognizes the situation whereby organizations can take out contracts for CO_2-free green energy on the market, but CO_2 emissions can still be generated due to the location-based electricity mix in the local energy network.

In terms of the carbon footprint of SEW-EURODRIVE, the use phase of sold products, i.e. our customers' use of the products, is particularly relevant in Scope 3. This accounts for more than 90% of the CO_2 emissions associated with our products. Only 0.1% of our CO_2 emissions are generated in Scope 1 and 2 and therefore in our production operations.



pany → **SCOPE 3** Downstream indirect emissions →

Process for carbon accounting

Collection
The individual Eurodrives gather the necessary data

Management
This data is managed (amalgamated, archived, and validated) via a central infrastructure Calculation

A centralized methodology is applied to calculate the greenhouse gas emissions and ensure results can be compared

Finalization
Results are made available from HQ and used as the basis for optimizations

Overview of carbon accounting at sites in Germany

Overview of individual emissions categories

The following categories have been taken into account in carbon accounting:

1.1 **Stationary systems:** e.g. a central heating system that serves the site.

1.2 **Mobile systems:** The emitters in this case are mobile systems such as the company's own vehicles.

1.3 **Volatile gases:** These are primarily refrigerant and solvent emissions.

1.4 **Emissions trading processes:** No processes have been recorded that fall under an emissions trading scheme.

2.1 **Purchased electricity:** The location-based approach is taken when determining emissions.

2.2 **Purchased district heating/cooling:** The business activities of SEW-EURODRIVE do not cause any emissions in this context.

2.3 **Purchased steam:** The business activities of SEW-EURODRIVE do not cause any emissions in this context.

3.8 **Upstream leasing:** All vehicles in the fleet are owned by SEW-EURODRIVE.

tCO_2eq	**Bruchsal** (incl. GGW)	**Graben-Neudorf**	**Rest of Germany**	**Germany overall**
Scope 1				
1.1 Stationary systems (e.g. heating)				
2023	6 439,05	12 835,94	349,39	19621,38
2024	7 250,00	16 330,31	372,40	23952,71
1.2 Mobile systems (e.g. vehicle fleet)				
2023	1.379,78	211,56	662,58	2.253,92
2024	1.147,00	146,00	0,00	1.293,00
1.3 Volatile gases (e.g. solvents)				
2023	54,41	456,29	7,75	518,45
2024	0,00	372,16	0,00	372,16
1.4 EHS processes				
2023	0,00	0,00	0,00	0,00
2024	0,00	0,00	0,00	0,00
Total 2023	**7.870,24**	**13.503,79**	**1.019,72**	**22.393,75**
Total 2024	**8.397,00**	**16.848,47**	**372,40**	**25.617,87**
Scope 2 (market-based)*				
2.1 Purchased electricity				
2023	7.286,10	15.525,58	210,00	23.021,68
2024	0,00	0,00	0,00	0,00
2.2 Purchased district heating/cooling				
2023	0,00	0,00	0,00	0,00
2022	0,00	0,00	0,00	0,00
2.3 Purchased steam				
2023	0,00	0,00	0,00	0,00
2024	0,00	0,00	0,00	0,00
Total 2023	**7.286,10**	**15.525,58**	**210,00**	**23.021,68**
Total 2024	**0,00**	**0,00**	**0,00**	**0,00**

* The following values were determined based on market-based emission factors, which are based on the actual emissions of the electricity mix that the respective energy supplier (EVU) purchases on the market and supplies to end customers.

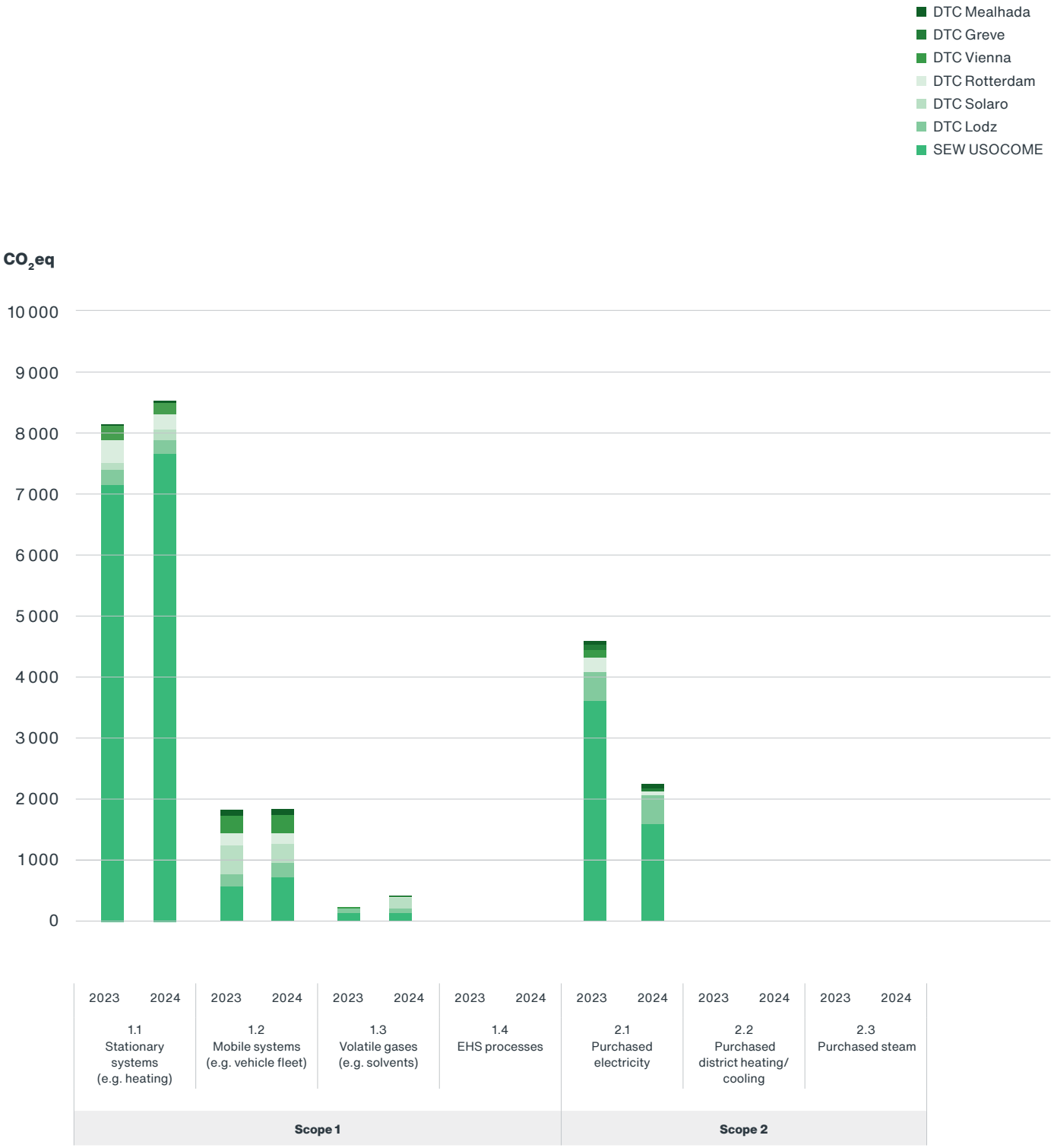
This year's carbon accounting factors in only Scope 1 and 2 emissions, particularly because they represent a key area of activity in order to meet the reduction targets set for 2026 (under both scopes). A first important step toward this goal was taken by purchasing green electricity for our German locations. A uniform strategy for carbon accounting in the Scope 3 categories is currently being developed.

Overview of carbon accounting at sites in Europe

Overview of individual emissions categories

tCO_2eq	**SEW USOCOME,** France	**DTC Lodz,** Poland	**DTC Solaro,** Italy	**DTC Rotterdam,** Netherlands	**DTC Vienna,** Austria	**DTC Greve,** Denmark	**DTC Mealhada,** Portugal
Scope 1							
1.1 Stationary systems (e.g. heating)							
2023	7.135,40	289,20	191,60	316,20	203,20	0,00	29,70
2024	7.825,80	249,00	201,90	283,80	163,30	0,00	33,40
1.2 Mobile systems (e.g. vehicle fleet)							
2023	698,70	109,80	458,10	155,00	264,80	0,00	84,30
2024	853,70	134,40	287,50	105,60	274,50	0,00	81,00
1.3 Volatile gases (e.g. solvents)							
2023	146,80	61,30	0,00	0,80	3,90	0,00	0,00
2024	152,20	75,60	176,00	1,80	4,70	0,00	0,40
1.4 EHS processes							
2023	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2024	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total 2023	**7.980,90**	**460,30**	**649,70**	**472,00**	**471,90**	**0,00**	**114,00**
Total 2024	**8.831,70**	**459,00**	**665,40**	**391,20**	**442,50**	**0,00**	**114,80**
Scope 2 (marktbezogen)*							
2.1 Purchased electricity							
2023	3.726,90	530,20	0,00	204,40	124,60	42,70	34,00
2024	1.742,50	521,80	0,00	0,00	77,40	41,20	38,40
2.2 Purchased district heating/cooling							
2023	0,00	0,00	0,00	0,00	0,00	8,40	0,00
2024	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2.3 Purchased steam							
2023	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2024	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total 2023	**3.726,90**	**530,20**	**0,00**	**204,40**	**124,60**	**51,10**	**34,00**
Total 2024	**1.742,50**	**521,80**	**0,00**	**0,00**	**77,40**	**41,20**	**38,40**

* Die nachfolgenden Werte wurden auf Grundlage der marktbezogene Emissionsfaktoren ermittelt. Dieser basiert auf den tatsächlichen Emissionen des Strommixes, den das jeweilige Energieversorgungsunternehmen (EVU) am Markt bezieht und an Endkunden liefert



This year's carbon accounting factors in only Scope 1 and 2 emissions, particularly because they represent a key area of activity when it comes to driving forward our efforts to achieve significant CO_2 reductions (under both scopes). A uniform strategy for the CO2 accounting of Scope 3 categories is currently being developed.

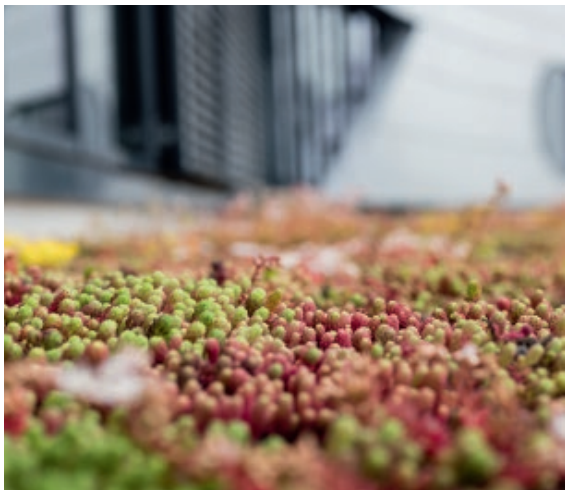
Buildings and infrastructure

Sustainable energy from photovoltaics and combined heat and power plants
Green roofs, photovoltaics, combined heat and power plants, and much more: To maximize the carbon-free performance of our building management operations, we design all our buildings to be as functional, energy-efficient, and sustainable as possible.

Green roof areas
Extensive areas of green roofs on our buildings provide a valuable habitat for plants and insects. The roofs are planted with various types of sedum that require little or no upkeep or artificial watering. Additional benefits include reduced rain runoff thanks to the natural capacity of the green roofs to store water and effective protection for roof seals.

Overview of our areas of extensive roof greening
+ SEW-EURODRIVE "Morgentau" children's daycare center, Bruchsal: 1390 m²
+ Energy center, Bruchsal: 2180 m²
+ Plant for Large Gear Units, Bruchsal: 680 m²
+ Electronics manufacturing, Bruchsal: 410 m²
+ Fire station, Bruchsal: 2590 m²
+ Customer center, Graben-Neudorf: 155 m²
+ Parking garage, Graben-Neudorf: 140 m²
+ Pumping station, Graben-Neudorf: 75 m²
+ Extension to Plant for Large Gear Units, Bruchsal: 705 m²
+ Parts Production North Hall, Graben-Neudorf: 2155 m²

Areas planned for extensive roof greening
+ TestCenter, Bruchsal: 3810 m²
+ Training center, Graben-Neudorf: 1590 m²
+ Caba Blind, Kehl: 400 m²
+ DTC West, Haan: 4655 m²
+ DC, Ulm: 510 m²



Pumping station Graben-Neudorf

Using surface water and rainwater
Our aim is to return as much precipitation water as possible to the natural water cycle via pumping plants and infiltration pits and to utilize rainwater for irrigation by storing it in reservoirs.

For example, we use a roof area measuring 5760 m² at the Plant for Large Gear Units in Bruchsal to collect rainwater in a reservoir with a capacity of 180 m³. This gives us a supply of around 1.5 million liters of water a year.

Other examples of environmentally friendly rainwater usage can be found at Motor Production, South Workshop and Parts Production, North Workshop (active roof area of 1800 m², saving around 720 000 liters of drinking water a year by using the rainwater reservoir) at the Graben-Neudorf site, the parking garage in Bruchsal (approx. 265 l/s), and the "Morgentau" children's daycare center in Bruchsal (approx. 22 l/s). Precipitation water that falls here is returned to the natural water cycle via infiltration pits and/or a pumping plant.

Wildflower meadows in Bruchsal and Graben-Neudorf
We have created two large biotopes by planting wildflower meadows based on the Bruchsaler Pflanzenliste, a list of beneficial plants for the local area. The biotopes cover 3940 m² (Bruchsal) and 2380 m² (Graben-Neudorf). They provide a valuable habitat for many plant and animal species, such as wild bees, bumblebees, butterflies, beetles, and various species of bird. The soil also helps to store carbon and the meadows do not need to be irrigated.

Generating power in-house at the Graben-Neudorf site

In a gradual process designed to make our energy generation as environmentally friendly as possible, we aim to commission more combined heat and power (CHP) plants and absorption refrigeration units at our sites and switch to district heating.

The power supply at our Graben-Neudorf site is already running on natural gas, which is more environmentally friendly than other fossil fuels. Gas is also used to generate heat there and, from the end of 2024, three CHP plants with an electrical output of approx. 2300 kW and a thermal output of approx. 2200 kW per CHP plant will also be in operation. CO_2 savings amount to 1500 metric tons per year.

Overall, we aim to increase the proportion of our overall energy consumption that we meet using in-house generation from 1.9% in 2021 to 29.4% in 2024. In achieving this increase, we will also be able to feed more than 305 000 kWh back into the public grid.

Graben-Neudorf CHP plant

32,1 %

Increase in power generated in-house at Bruchsal (not including GGW)

Generating power in-house at the Bruchsal site

The power supply at the Bruchsal site also runs on gas. Heat is generated by a gas burner and CHP plant. There is also a thermal solar plant in the GGW for generating hot water.

The combined heat and power plant in the infrastructure headquarters of the Plant for Large Gear Units in Bruchsal was commissioned in 2009. It provides an electrical power output of approx. 201 kW and a thermal output of around 303 kW. CO_2 savings amount to 485 metric tons per year. We use the waste heat from this CHP plant to run an absorption refrigeration unit for the infrastructure headquarters. This unit was commissioned in 2022 and helps us save 650 metric tons of CO_2 yearly compared to using conventional compression refrigeration units.

The CHP plant at the SEW-EURODRIVE "Morgentau" children's daycare center in Bruchsal has been in operation since 2015, providing an electrical output of approx. 6 kW and a thermal output of around 13.5 kW. CO_2 savings amount to 5 metric tons a year.

In the energy center, two further CHP plants commissioned in 2022 provide an electrical output of approx. 720 kW each and a thermal output of around 800 kW each. This saves approximately 530 metric tons of CO_2 emissions per year.

At our Plant for Large Gear Units (GGW), we have increased the share of power generated in-house from 8.72% in 2021 to 10.78% in 2024. If the GGW is removed from the figures, this increase is even more significant, rising from 7% in 2021 to 32.1% in 2024. This also impacts the volume of energy recovery, which has risen considerably from 26 399 kWh in 2021 to just under 120 000 kWh in 2024.

Buildings and infrastructure

Photovoltaics, solar thermal energy, and waste heat
By installing photovoltaic (PV) systems and solar thermal systems, we are not only helping to save the environment, we are also easing the strain on power supplies across the whole of Germany at a time of crisis by generating our own electricity.

PV system at Motor Production, South Workshop in Graben-Neudorf
+ 370.3 metric tons less CO_2 yearly
+ In use since: October 2020
+ Area: 5000 m^2
+ System size: 614.8 kWp
+ Yield per year: approx.606 982 kWh

PV system, parking garage, Graben-Neudorf
+ Approx. 276.4 metric tons less CO_2 yearly
+ In use since: June 2017
+ Area: 4900 m^2
+ System size: 505.2 kWp
+ Yield per year: approx. 473 363 kWh

PV system, training center, Graben-Neudorf (under construction)
+ Approx. 79 metric tons less CO_2 yearly
+ In use since: 2025
+ Area: 1040 m^2
+ System size: 130 kWp
+ Yield per year: approx.117 000 kWh

PV system, Parts Production North Hall, Graben-Neudorf
+ Approx. 1550 metric tons less CO_2 yearly
+ In use since: 2023
+ Area: 20 000 m^2
+ System size: approx. 2.5 MWp
+ Yield per year: approx.2 250 000 kWh

PV system, parking garage, Bruchsal
+ Approx. 334.4 metric tons less CO_2 yearly
+ In use since: July 2014
+ Area: 5000 m^2
+ System size: 625.3 kWp
+ Yield per year: approx.566 808 kWh

PV system, Plant for Large Gear Units, Bruchsal
+ Approx. 101.5 metric tons less CO_2 yearly
+ In use since: May 2009
+ Area: 1360 m^2
+ System size: 154.8 kWp
+ Yield per year: approx. 145 000 kWh

Expansion of PV system, Plant for Large Gear Units, Bruchsal
+ Approx. 428 metric tons less CO_2 yearly
+ In use since: 2024
+ Area: 4500 m^2
+ System size: 545 kWp
+ Yield per year: approx. 490 000 kWh
+ CO_2 emissions saving: approx. 326 metric tons/year

Solar thermal system, Plant for Large Gear Units, Bruchsal
+ Approx. 5 metric tons less CO_2 yearly
+ In use since: May 2009
+ Area: 37 m^2
+ Buffer capacity: approx. 3000 liters
+ Water heating capacity for washrooms and shower rooms: approx. 1250 liters

PV system, SEW-EURODRIVE "Morgentau" children's daycare center, Bruchsal
+ Approx. 2 metric tons less CO_2 yearly
+ In use since: June 2015
+ System size: 3.72 kWp
+ Yield per year: approx. 3700 kWh

PV system, Electronics Production, Bruchsal
+ Approx. 433 metric tons less CO_2 yearly
+ In use since: October 2020
+ Area: 5800 m^2
+ System size: 723.84 kWp
+ Yield per year: approx. 651 600 kWh

PV system, Spitzhalle, Bruchsal
+ Approx. 23 metric tons less CO_2 yearly
+ Area: 320 m^2
+ System size: 40 kWp
+ Yield per year: approx. 40 000 kWh
+ Direct feed into the public grid

PV system, fire station, Bruchsal
+ Approx. 61 metric tons less CO_2 yearly
+ Area: 800 m^2
+ System size: 99 kWp
+ Yield per year: approx. 90 000 kWh
+ System belonging to Bruchsal city

PV system, energy center, Bruchsal
+ Approx. 116 metric tons less CO_2 yearly
+ In use since: 2022
+ Area: 1520 m^2
+ System size: 190 kWp
+ Yield per year: approx. 171 000 kWh

PV system, E.B.I.C. Bruchsal
+ Approx. 76 metric tons less CO_2 yearly
+ In use since: 2024
+ Area: 1000 m^2
+ System size: 125 kWp
+ Yield per year: approx. 112 500 kWh
+ Direct feed into the public grid

PV system, test center, Bruchsal (under construction)
+ Approx. 458 metric tons less CO_2 yearly
+ In use since: 2025 / 2028 (in two construction phases)
+ Area: 6000 m^2
+ System size: 750 kWp
+ Yield per year: approx. 675 000 kWh

PV system, Caba Blind, Kehl
+ Approx. 312 metric tons less CO_2 yearly
+ In use since 2023
+ Area: 4000 m^2
+ System size: 511 kWp
+ Yield per year: approx. 460 000 kWh

PV system, DTC West, Haan
+ Approx. 185 metric tons less CO_2 yearly
+ In use since 2024
+ Area: 2400 m^2
+ System size: 310 kWp
+ Yield per year: approx. 280 000 kWh

PV system, DC, Ulm
+ Approx. 79 metric tons less CO_2 yearly
+ In use since 2024
+ Area: 1000 m^2
+ System size: 130 kWp
+ Yield per year: approx. 117 000 kWh

Ground-mounted PV system, Plant for Large Gear Units, Bruchsal (under construction)
+ Approx. 79 metric tons less CO_2 yearly
+ In use from 2025
+ Area: 55 0000 m^2
+ System size: 7600 kWp
+ Yield per year: approx. 7.34 GWh
+ CO_2 emissions saving: 1300 metric tons/year

Lower energy consumption thanks to consistent switch-off management

Geopolitical uncertainties over recent years have increased general awareness that we need to be more careful and economical in our use of available energy resources. Increased electricity and gas prices have also played a part in this. That is why SEW-EURODRIVE has set out to further minimize energy consumption at our production facilities and sites. One method involves using a carefully conceived switch-off plan that ensures lights in parking garages and outdoor facilities are switched off after the end of the working day, at night, and at the weekends.

We have introduced a color-coded points system to ensure this switch-off plan can be implemented as easily and effectively as possible. Systems and devices that are coded blue, such as monitors, soldering irons, and hot-glue guns, must be switched off daily. Yellow-coded devices such as testing machines, which need to heat up before they can be used, are switched off weekly. Red-coded devices can only be switched off when an instruction is issued to do so; otherwise there is a risk of production downtime.

Detailed workshop plans have been drawn up to provide a better overview.

There are many other measures through which we aim to optimize the power consumption at our plants and sites:

+ Lowering the heating to 18 °C in production workshops and 20 °C in office buildings
+ Switching off ventilation systems in production workshops and office buildings at the weekends
+ Reducing cooling output by gradually adjusting the temperatures in data centers and equipment rooms
+ Reducing and switching off external lighting and illuminated logos at the weekend
+ Switching off corridor lighting at times of day when there is sufficient daylight
+ Reducing the quantity of small devices / electrical consumers in use

Yearly savings in the individual plants:

Plant 01 (headquarters, WBE, WBP)

– 29 588 kWh/a	from switching off machinery and systems
– 143 803 kWh/a	from adjusted control temperatures
– 238 346 kWh/a	from optimized lighting
– 21 934 kWh/a	from optimized ventilation

Plant 15 (GGW)

– 12 572 kWh/a	from adjusted control temperatures
– 18 444 kWh/a	from optimized lighting

Plant 03 (WGF, WGL, WGM)

– 4160 kWh/a	from switching off machinery and systems
– 14 563 kWh/a	from adjusted control temperatures
– 8520 kWh/a	from optimized lighting

There are three different switch-off classes

Daily

Devices that start up without any problems and/or which pose a hazard (e.g. monitors, soldering irons, hot-glue guns)

Weekly

Devices that need to heat up before being used

On instruction

Devices associated with a risk of production downtime

Logistics and mobility

Energy-efficient logistics and mobility
For a global company such as SEW-EURODRIVE to achieve a comprehensive overview of its carbon footprint, it is crucial to factor in logistics and mobility. We have introduced a whole range of separate measures in order to take our first steps in doing so.

Sustainable travel guidelines
We aim to shift the focus of our previous travel guidelines by creating a concept to maximize the sustainability of business travel. Instead of focusing on cost-effectiveness, we want to establish a new focal point in the form of "sustainable travel on principle". We intend to encourage acceptance among travelers by presenting a set of "dos" rather than "don'ts". This acceptance will also be continuously tracked and assessed. The first step in this approach is to provide practical recommendations in order to raise awareness among staff on a short to medium-term basis. We want to develop and implement individual measures that are specific to each division, taking an approach that is as focused and customized as possible. We aim to define key figures for "sustainable mobility" to ensure performance can be measured.

In the long term, we are planning an overall concept for green staff mobility. A budget is to be created for this purpose and a green-mobility guideline is to be established. Guidance is also to be drawn up for business travelers and managers.

Virtual alternatives to business travel

A key element of this overall concept is to assess the added value that a business trip offers in comparison to virtual alternatives. The ratio of meeting time to travel time plays a critical role in this, particularly when it comes to travel from one SEW-EURODRIVE site to another. Checks will also be carried out to determine whether the number of participants from any one department should be limited.

The logical consequence of this is that business trips should be made possible where the added value they offer outweighs the associated environmental and economic costs. In the future, if a business trip is to take place, more effort should be made to combine appointments. The location of a meeting should also be chosen with even more regard for the distances participants will need to travel. These two considerations will help make mobility as efficient and environmentally friendly as possible.

Electrification of our vehicle fleet
Of our approximately 600 vehicles registered in Germany, 119 are currently fully electric. This means that their share of the total vehicle fleet has almost doubled within a year. The average mileage of electric vehicles is 40,000 km per year. The electrification of our vehicle fleet will continue to increase.

140 charging points for electric vehicles
Since March 2020, there have been more than 140 charging points where staff can charge their electric vehicles. The associated project was subsidized by the German state of Baden-Württemberg.

Internal logistics

Establishing sustainable container management
When an international drive technology supplier such as SEW-EURODRIVE wants to minimize its carbon footprint, it is only logical that it should scrutinize its logistics chain. That includes putting in place the most sustainable and therefore most environmentally friendly management system for transportation and load handling possible.

A key step in this process is establishing sustainable closed loops for containers, both within internal production sequences and in external dealings with customers and suppliers. The following are key areas of focus:

+ Reducing loss and depletion
+ Using multiple-compartment containers
+ Repairing containers instead of replacing them with new ones

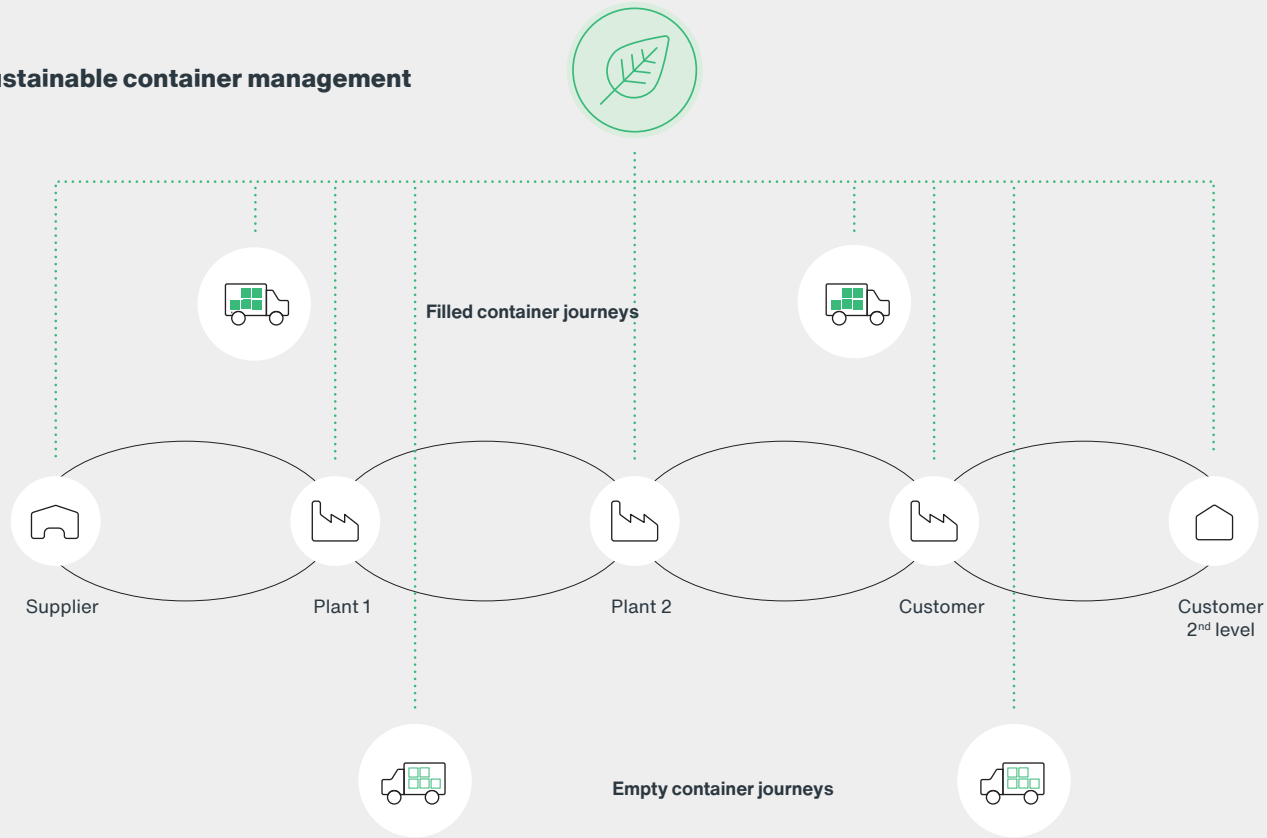
As part of this strategy, we want to do even more to avoid the environmentally harmful practice of sending out trucks empty.

For instance, cross-site transparency can be achieved for resource-friendly container management by circulating cargo containers that incorporate accurate tracking technology and gradually expanding this system to include various SEW-EURODRIVE sites. In the future, there will be digital systems for capturing all the data generated during this process. AI solutions can then leverage this data to ensure deliveries are focused as efficiently as possible and carried out on as environmentally friendly a basis as possible.

We also use reusable shuttle crates in electronics production at our Bruchsal site instead of individual packaging for internal deliveries.

External logistics
We intend to continue reducing transportation and route distances by continuously expanding our local presence around Germany and the world, adding further assembly, service, and sales sites to our global network.

Sustainable container management



Waste management

The waste material to be taken into account is generated during the manufacture of products, the disposal of packaging, and the disposal of the products themselves at the end of their life cycle. The majority of this waste comprises metallic materials that are fed back into the material loop via pre-existing recycling processes.

However, new requirements are to be introduced for manufacturing companies in the future, in the form of regulations for waste management and the recyclability of products.

Processes are established at the various sites – particularly production facilities – to manage waste volumes, applicable statutory regulations, waste-reduction measures, and the circular economy.
Sites are independently responsible for handing over waste to waste disposal companies.

Waste and packaging management
The best way to look after resources is always to avoid waste in the first place. To achieve this aim, we have rolled out a range of appropriate measures in our production operations.

Examples of measures designed to reduce waste and packaging materials
At the Graben-Neudorf plant, we are avoiding waste and inefficiency through a continuous improvement process that covers all process chains. This includes reusing packaging materials.

For example, we use reusable packaging consistently in the internal material loop and thus avoid 4.5 metric tons of special waste every year. We have also been able to save 11.9 metric tons of cardboard and 1046 liters of anti-corrosion agents each year.

Total amount of waste generated, in metric tons

Weight	44 405

Waste saved from disposal, in metric tons

	Hazardous waste	Non-hazardous waste
Preparation for reuse	96	7 906
Recycling	9 449	23 707
Other restoration processes	156	46
Total	9 701	31 659

Waste sent for disposal, in metric tons

	Hazardous waste	Non-hazardous waste
Combustion	951	945
Landfill	1	56
Other form of disposal	1 091	0
Total	2 044	1 001

Non-recycled waste

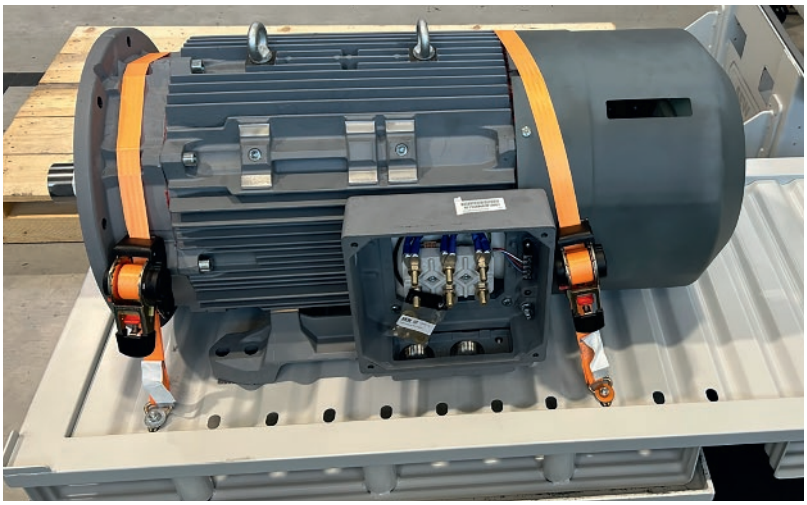
Weight	t	3 045
As a percentage of total waste	%	6,86

Material supply in shuttle crate without individual packaging

Project to reduce wood waste

Initial situation
Deliveries to the Plant for Large Gear Units in Bruchsal from the Graben-Neudorf motor plant and Graben-Neudorf logistics center generate large quantities of wood waste. Added to this is the packaging that comes to the Plant for Large Gear Units from external suppliers. What's more, the fact that the automated packaging process can only handle disposable pallets in specific dimensions makes changing the pallets at the logistics center in Graben-Neudorf more difficult. Equally, however, automation saves time and money.

Transport system already introduced between the motor production plant in Graben and the Plant for Large Gear Units in Bruchsal
In 2023, a flat steel pallet was introduced for transporting large motors within the company. Deliveries of around six to ten motors are made to the Plant for Large Gear Units roughly once or twice a day. Steel pallets have a much longer service life than wooden pallets, which offer only limited durability.



Flat steel pallet for internal transportation

New concept for a future transport system between the logistics center in Graben-Neudorf and the Plant for Large Gear Units in Bruchsal
In 2024, a solution aimed at resolving the challenges that had been identified was tested as part of an initial phase. Significant optimizations included stopping the practice of nailing squared timbers onto disposable pallets, which had previously prevented these pallets from being reused. Now, anti-slip mats, disposable pallets, wooden lids, and squared timbers are collected at the Plant for Large Gear Units and returned to Graben-Neudorf for reuse. According to the final calculation, this saved around 980 pallets a year.

Bringing on board suppliers
Suppliers often deliver parts in wood packaging that cannot be reused or returned. This inevitably leads to significant quantities of wood waste.

The main suppliers to the Plant for Large Gear Units were identified and contacted, with a view to exploring potential for optimization. The next step involved working in collaboration with the suppliers to investigate a closed-loop concept and implement it where possible. This resulted in one supplier switching over to Euro pallets, for example, while another supplier implemented a circular management concept for wooden transport protection.

Reducing waste by recycling used paper towels
Used paper towels are now being recycled to make new tissue products. During the course of 2024, the Tork PaperCircle® system was rolled out in the washrooms of several buildings at the Bruchsal site. This involved modifying the existing dispensers.

The switch to the Tork PaperCircle® system offers a number of benefits. For example, the volume of non-recyclable waste has been reduced by more than 25% and the cost efficiency of the washrooms has also been improved.

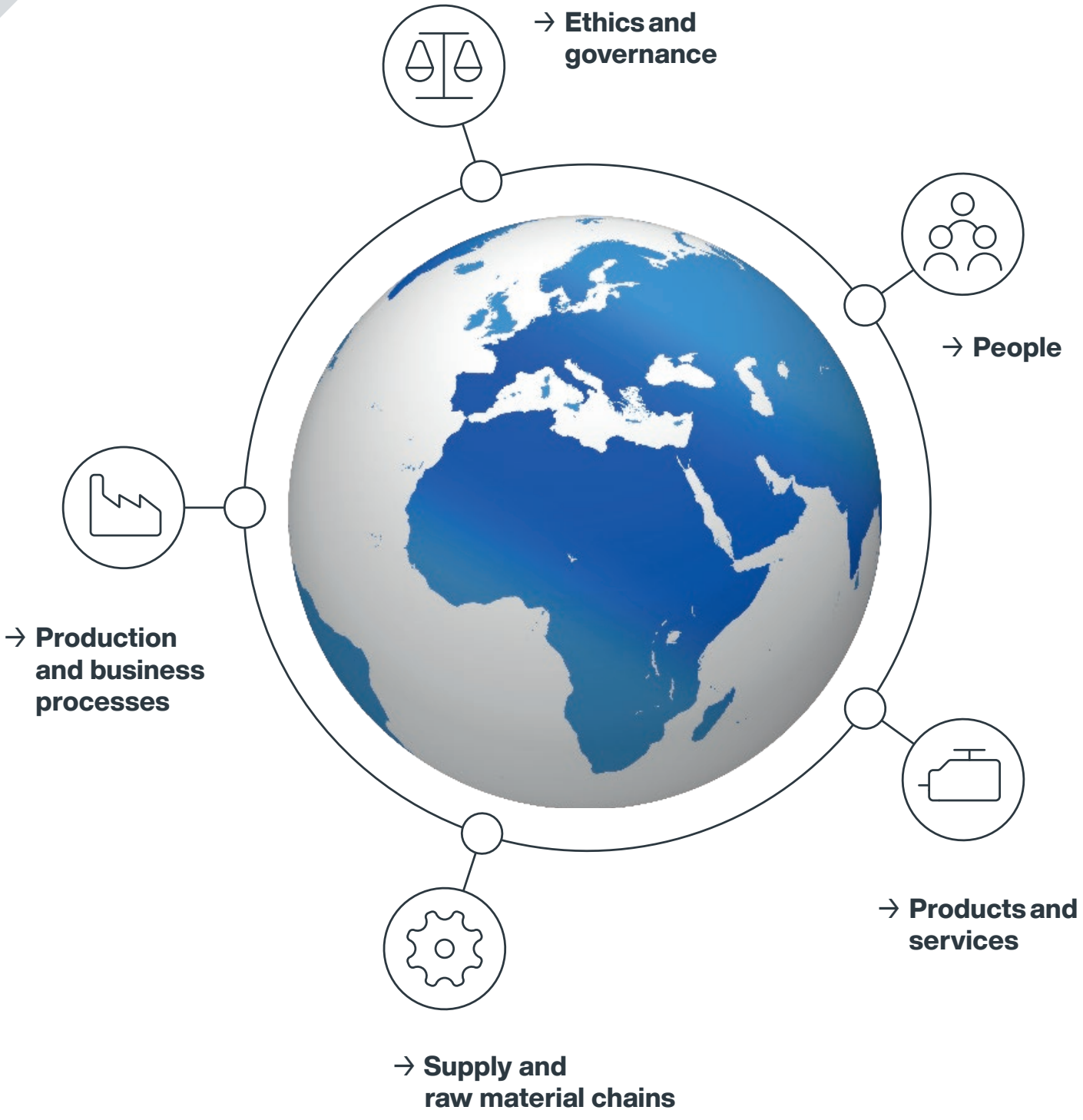
The paper towels can only be recycled if they are kept separate from other waste, so staff are asked to throw their used paper towels into specially labeled garbage cans.

These garbage cans are then emptied by the cleaning staff and their contents gathered together in a separate container. They are subsequently collected by a recycling partner and taken to a local plant, where they are turned into new paper towels and other similar products.

Last year, a total of 4.49 metric tons of paper towels were collected at the Bruchsal site and returned to Tork. This represents savings of around 4580 kg of CO_2eq (based on the 1 835 400 paper towels used during this period).

Sustainability as a global language

"We have to be where our customers are."
As the son-in-law of the founder of Süddeutsche Elektromotoren-Werke (SEW), Ernst Blickle could never have imagined just how much he would be proved right in this vision several decades later. In 1971, he ultimately renamed the company SEW-EURODRIVE, showing again just how far-sighted he was.


→ Ethics and governance
→ People
→ Products and services
→ Supply and raw material chains
→ Production and business processes

Setting the benchmark internationally

As a global Group, being close to our customers is perfectly normal for us these days. We are represented in 57 countries on five continents.

That is why it is important to us to ensure our growth is as environmentally compatible and resource-friendly as possible for everyone involved. We believe this also means viewing our commitment to sustainable transformation in an international context. Each country organizes and implements its initiatives independently, and many Eurodrives have already assessed their comprehensive measures in their own reports. This section therefore takes a brief look beyond Germany to pick out a few highlights from other European countries.

Portugal

Social responsibility – a commitment for the future
Giving something back to society is really important to us, and investing in the education and health of our young people is one of the cornerstones of social development. That is how we ensure that a new generation can overcome challenges and actively contribute to the advancement of society. It is a commitment that will ultimately benefit everyone. In 2024, we increased our support for several educational and healthcare organizations. For example, we donated 15 used drives to technical educational establishments.

SEW-EURODRIVE Portugal took part in an initiative supported by local businesses that centered on a charity art auction. Our staff were encouraged to unleash their creativity and transform a chair into a work of art. A total of 58 other companies participated in the initiative, each designing their own chair. The subsequent auction raised a total of 30 000 euros for Pedrinhas, a charity that supports seriously ill children.

At Christmas, a donation was also made to the Lions Clubs International in the name of every employee. Besides the initiatives mentioned above, we also support local sports teams, organize school visits and work experience in our facilities, and sponsor master's students.

Italy

When a business wants to contribute to society, working with its local community is a must. That is precisely what SEW-EURODRIVE encourages as it pursues a global vision that delivers added value at local level. Two major initiatives were run in 2024 with these aims in mind.

Tackling gender-based violence
As part of our aim to create a more just and inclusive socioeconomic environment, we support Fondo Seconda Stella – Mai più sola, which is part of the HARA – Ricomincio da me network.

The aims of these projects are:
+ Running support centers for women who have experienced violence
+ Making it easier to live independently
+ Providing accommodation in refuges
+ Supporting employment advice and training programs designed to make it easier for women to enter the workforce
+ Working with businesses to develop projects that promote cultural change

We have also organized events for the entire workforce, to help them recognize the signs that someone is experiencing violence and know how to deal with such situations. Cultural aspects have also been addressed, particularly language stereotypes that encourage and exacerbate gender-based violence. At the end of this initiative, our head office in Solaro staged an exhibition entitled "It Happens", which was curated by the photographer Emanuela Colombo. The exhibition sought to portray the way that women who have experienced violence see themselves.

France

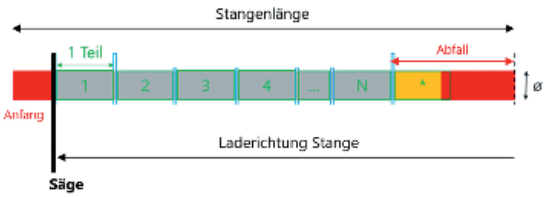
Reducing raw material waste by reusing leftover steel bars from bar turning processes

Haguenau production site

The 3-meter-long bars processed by the automated bar turning machines that manufacture DRN71/80 motor shafts are made from C60 steel. Once the last workpiece has been turned, a length of bar is left over, and this can be reused if it matches a predetermined length.

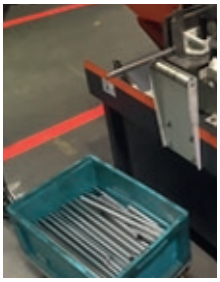
These lengths are cut off using a handheld band saw. By cutting two workpiece lengths, staff can recover a total of 2500 workpieces with diameters of Ø21 and Ø23 each month.

Savings per month:



+ 30 metric tons of steel that doesn't need to be bought in.
+ 36 000 euros per year
+ More than 2500 additional parts that can be manufactured from the same stock of raw materials.

Before



After

The Netherlands

Sustainable mobility
SEW-EURODRIVE Netherlands has set itself the target of electrifying 100% of its vehicle fleet. This means that all newly registered company cars must be electric. As a result, 74% of the vehicle fleet was already all-electric in 2024, and the 100% target is set to be achieved by 2026. Vehicles can be charged at a total of 16 charging stations that run on solar energy. All five sites in the Netherlands have charging points.

Local statutory requirements stipulate that the company must report its business travel and commuting, so appropriate settings have been introduced in the HR system to make reporting easier without compromising data security. Data is reported on an annual basis in terms of the kilometers traveled using various modes of transport.

Recreation rooms
A special area has been set up for staff to use during their regular breaks where they can play table tennis, foosball, and darts. It gives employees from all departments an opportunity to spend their free time in an informal and relaxed environment.

New reception area
In 2024, work started on building a new reception area for the DriveAcademy, which is fitted with solar panels and features a green roof. The DriveAcademy can accommodate groups of up to 60 people.

Austria

Company bicycle leasing for sustainable mobility
SEW-EURODRIVE Austria is committed to promoting environmentally friendly mobility and offers staff the opportunity to lease company bicycles under an attractive scheme. The initiative is part of the company's comprehensive sustainability strategy aimed at promoting environmentally friendly personal transport alternatives.

\+ Easy accessibility:
The company's bicycle leasing scheme is available to all staff and offers a range of options from simple bicycles to state-of-the-art e-bikes. Thanks to tax benefits and company support, staff can get their hands on a bicycle on extremely favorable terms.

\+ Great take-up:
In the first year of the program, 10.9% of the workforce leased a company bicycle. Feedback shows a high level of acceptance, with users reporting that the scheme has motivated them to cycle to work more often or go out on their bicycle in their leisure time.

\+ Objectives for the future:
Even more staff are to be encouraged to use the bicycle leasing scheme.
The aim is to achieve a participation rate of 15% by 2025, and 20% in the long term. In addition to reducing CO_2 emissions, the scheme also promotes a healthy lifestyle by helping staff build physical activity into their day-to-day life. According to feedback from staff, the bicycle leasing scheme has had a positive impact on the fitness and general wellbeing of employees. Through this initiative, SEW-EURODRIVE is making a valuable contribution to a sustainable and healthy future, both for its workforce and the environment.

The Vienna site

Poland

Volunteering day for staff
Sustainable development is more than just a strategy for us, it is a commitment to people, the environment, and future generations. That is why we launched our Sustainability Day initiative in 2023, which gives staff the opportunity to do something for the local community and the environment. The initiative also helps bring everyone at our company closer together.

Team-building
On Sustainability Day, staff are encouraged to spend time together outside of their normal working hours to strengthen a sense of community.

Added value for society and clear objectives
Our voluntary work is aimed at helping others while also setting yourself clear objectives to ensure your contribution is effective.

We organized three events last year that a total of 23 employees (almost 15% of our workforce) actively participated in.

The volunteers worked on the following projects:
- Cleaning up a badly polluted wooded area close to our headquarters that had previously developed into an illegal waste dumping ground.
- Supporting residents of the "New Starting" residential home. To meet both acute and longer-term requirements, a collection was organized for clothing, hygiene products, and cleaning products. The outdoor area was also upgraded with the addition of a canopy and garden furniture.
- Working with a home for single mothers. Our helpers built a play area and vegetable plot to create an environment of wellbeing.

Our overarching goal is to promote a sense of social responsibility both inside our company and in the wider community. That is why we intend to make Sustainability Day even bigger this year.

Denmark

Expanding the site in line with the latest Danish construction standards
In Denmark, SEW-EURODRIVE is investing in future buildings and facilities that will enable it to offer customers even better services and added value. The project is a key element in our growth strategy. The aim is to offer innovative and customized services that not only meet current requirements, but will also give the company an excellent basis for meeting future challenges.

The construction of the new Service Center in Vejle is being carried out in line with the latest Danish construction standard (BR18), which is among the strictest in the world in terms of energy consumption and sustainability.

There is a particular focus on energy-efficient solutions such as the photovoltaic systems, which cover an area of up to 468 m² and have an output of 96 kWp, as well as batteries for making optimum use of solar energy.

Key data:
Footprint: 2200 m², of which around 700 m² is for offices, a canteen, and conference facilities.
Estimated scale of self-sufficiency: 27%
Estimated CO_2 reduction: 40 844 kg/year

As part of the construction work, 12 charging points are being provided for electric vehicles. This number actually exceeds the current statutory requirements in Denmark.

The project is by far the biggest investment SEW-EURODRIVE has made in Denmark since it was established there in 1984. The aim is to safeguard the company's competitiveness and ensure it can grow in line with market requirements. Depending on when the construction permit is issued, the building is likely to be ready to move into at the end of 2025.

27%

Estimated CO_2 reduction:

GRI content index

GRI indicator	Disclosure	Location	Comments	ESRS standard
GRI 2: General disclosures				
GRI 2-1	Organizational details	SEW Management Report 2023, p 132		See requirements of Directive 2013/34/EU
GRI 2-2	Entities included in the organization's sustainability reporting	p 6		ESRS 2 BP-1
GRI 2-3	Reporting period, frequency, and contact point	p 6		ESRS 1
GRI 2-4	Restatements of information	pp 6, 25		ESRS 2 BP-2
GRI 2-5	External assurance	None		See external requirements of Directive (EU) 2022/2464
GRI 2-6	Activities, value chain, and other business relationships	p 14		ESRS 2 SBM-1
GRI 2-7	Employees	p 50 ff	Source: Global HR system	ESRS 2 SBM-1 ESRS S1 S1-6
GRI 2-8	Workers who are not employees	None		ESRS S1 S1-7
GRI 2-9	Governance structure and composition	pp 15, 25		ESRS 2 GOV-1 ESRS G1
GRI 2-11	Chair of the highest governance body	p 15		This topic is not covered by the list of sustainability matters
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	p 22		ESRS 2 GOV-1 ESRS G1
GRI 2-13	Delegation of responsibility for managing impacts	pp 22 – 23		ESRS 2 GOV-1 ESRS G1
GRI 2-14	Role of the highest governance body in sustainability reporting	p 22		ESRS 2 GOV-5
GRI 2-15	Conflicts of interest	SEW Code of Conduct		This topic is not covered by the list of sustainability matters
GRI 2-16	Communication of critical concerns	p 38		ESRS 2 GOV-2 ESRS G1
GRI 2-17	Collective knowledge of the highest governance body	p 23		ESRS 2 GOV-1
GRI 2-22	Statement on sustainable development strategy	p 5		ESRS 2 SBM-1
GRI 2-23	Policy commitments	SEW Corporate Principles, SEW Code of Conduct		ESRS 2 GOV-4 MDR-P ESRS S1 – S4 ESRS G1
GRI 2-24	Embedding policy commitments	SEW Code of Conduct		ESRS 2 GOV-2 MDR-P ESRS S1 – S4 ESRS G1
GRI 2-25	Processes to remediate negative impacts	SEW Code of Conduct		ESRS S1 – S4
GRI 2-26	Mechanisms for seeking advice and raising concerns	SEW Code of Conduct		ESRS S1 – S4 ESRS G1
GRI 2-27	Compliance with laws and regulations	SEW Code of Conduct		ESRS 2 SBM-3 ESRS E2 ESRS S1 ESRS G1
GRI 2-28	Membership associations	No disclosure	Membership of associations at national level	ESRS G1
GRI 2-29	Approach to stakeholder engagement	p 24		ESRS 2 SBM-2 ESRS S1-S4
GRI 2-30	Collective bargaining agreements	p 50		ESRS S1
GRI 3: Material topics				
GRI 3-1	Process to determine material topics	p 24		ESRS 2 BP-1
GRI 3-2	List of material topics	p 25		ESRS 2 SBM-3
GRI 3-3	Management of material topics	pp 26 – 27		ESRS 2 ESRS S1 – S4

GRI indicator	Disclosure	Location	Comments	ESRS standard
GRI 201: Economic performance				
GRI 201-2	Financial implications and other risks and opportunities due to climate change	p 25		ESRS 2 SBM-3 ESRS E1
GRI 301: Materials				
GRI 301-1	Materials used by weight or volume	p 96		ESRS E5
GRI 301-2	Recycled input materials used	p 96		ESRS E5
GRI 301-3	Reclaimed products and their packaging materials	p 96		ESRS E5
GRI 302: Energy				
GRI 302-1	Energy consumption within the organization	p 104		ESRS E1
GRI 302-4	Reduction of energy consumption	pp 104, 115		ESRS E1
GRI 302-5	Reductions in energy requirements of products and services	pp 74 – 76		ESRS E1
GRI 305: Emissions				
GRI 305-1	Direct (Scope 1) GHG emissions	pp 108 – 111		ESRS E1
GRI 305-2	Energy indirect (Scope 2) GHG emissions	pp 108 – 111		ESRS E1
GRI 305-3	Other indirect (Scope 3) GHG emissions		The first calculation is scheduled for 2025.	ESRS E1
GRI 305-5	Reduction of GHG emissions	pp 104, 114		ESRS E1
GRI 306: Waste				
GRI 306-1	Waste generation and significant waste-related impacts	p 118		ESRS E5
GRI 306-2	Management of significant waste-related impacts	pp 118 – 119		ESRS E5
GRI 306-3	Waste generated	p 118		ESRS E5
GRI 306-4	Waste diverted from disposal	p 118		ESRS E5
GRI 306-5	Waste directed to disposal	p 118		ESRS E5
GRI 308: Supplier environmental assessment				
GRI 308-1	New suppliers that were screened using environmental criteria	pp 94 – 95		ESRS G1
GRI 308-2	Negative environmental impacts in the supply chain and actions taken	pp 94 – 97		ESRS 2 SBM-3
GRI 401: Employment				
GRI 401-1	New employee hires and employee turnover	No disclosure	No disclosures are being made about employee turnover.	ESRS S1
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	p 58		ESRS S1
GRI 403: Occupational health and safety				
GRI 403-1	Occupational health and safety management system	pp 54 – 57		ESRS S1
GRI 403-2	Hazard identification, risk assessment, and incident investigation	p 54		ESRS S1
GRI 403-3	Occupational health services	p 54		ESRS S1
GRI 403-5	Worker training on occupational health and safety	p 54		ESRS S1
GRI 403-6	Promotion of worker health	p 56		ESRS S1
GRI 403-9	Work-related injuries	p 54		ESRS S1
GRI 403-10	Work-related ill health	p 54		ESRS S1
GRI 404: Training and education				
GRI 404-1	Average hours of training per year per employee	p 52		ESRS S1
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	pp 52 – 53		ESRS S1
GRI 405: Diversity and equal opportunities				
GRI 405-1	Diversity of governance bodies and employees	p 50		ESRS 2 GOV-1 ESRS S1
GRI 406: Non-discrimination				
GRI 406-1	Incidents of discrimination and corrective actions taken		No disclosures are being made about incidents of discrimination.	ESRS S1

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