



e-systems Group

# **ACTING CONSCIOUSLY**

Carbon Footprint Report 2022/23





# Table of Contents

1.	Introduction	1
2.	Results of the CO <sub>2</sub> accounting	2
2.1	Scope 1	3
2.2	Scope 2	4
2.3	Scope 3	4
3.	Method of carbon footprint accounting	5
3.1	Reporting boundaries	6
3.2	Emissions taken into account	6
3.3	Data quality	6
3.4	Verification and confirmation of the carbon footprint	6
4.	Compensation and reduction measures	6
4.1	Compensation measures	6
4.2	Promotion of regional climate protection	7
4.3	Reduction measures	7
5.	Outlook	8



# 1. Introduction

The companies of the e-systems group<sup>1</sup> support their customers<sup>2</sup> in offering and selling non-food products in a legally compliant manner. National and European legislation is subject to a permanent dynamic, which represents a major challenge for various economic players. The aim of the e-systems group<sup>3</sup> is to provide professional and targeted support to the respective parties involved in this complexity.

With an international team of around 160 employees, the e-systems companies support over 9,000 customers worldwide and offer solutions in the field of product compliance (trade-e-bility GmbH) and Extended Producer Responsibility (take-e-way GmbH). get-e-right GmbH offers the associated and necessary authorised representative service. Taking responsibility is not only a fundamental and existential part of the e-systems service, but also a fundamental and practised value of the group. Environmental awareness is not only increasing within the group. It is clearly recognisable that this is also steadily increasing among business partners and the general awareness of environmentally relevant issues within society. For this reason, we decided in 2019 to record our own CO<sub>2</sub> footprint, identify approaches to reducing greenhouse gas emissions and implement appropriate measures to minimise the impact of e-systems' business activities on the climate and the environment and take social responsibility into account.

In doing so, e-systems is always guided by the agreed climate protection guiding principle:

*„We are aware of the importance of climate protection.  
We would like to make a contribution and embarking  
on our path to climate neutrality through  
environmentally friendly business practices.“*

The slogan **acting consciously** not only demonstrates e-systems' targeted action with regard to climate protection, but also emphasises the importance and impact of conscious action. Climate change poses risks for the group, but also represents a great opportunity. Extreme weather events and their future statistical accumulation and increasing intensity are seen as a direct risk. This could jeopardise the availability or health of employees, for example. It is also considered an indirect risk that e-systems' customers could increasingly find themselves in difficulties or be directly affected due to global supply chains. On the other hand, the importance of climate-friendly corporate governance is becoming increasingly important. As a compliance partner and consulting company, this also provides the opportunity to develop new business areas and support customers in the fulfilment and implementation of increasingly demanding environmental requirements. Furthermore, climate protection efforts are also seen as an opportunity for existing and future customer and business relationships.

**This report focuses primarily on the results of the greenhouse gas emissions assessment for the years 2022 and 2023 and presents the climate protection measures taken by the e-systems group.**

1) The name e-systems or e-systems group, consisting of take-e-way GmbH, get-e-right GmbH and trade-e-bility GmbH, reflects the legal entity e-systems Holding GmbH & Co. KG

2) For reasons of better readability, gender-specific spelling is not used in the following - however, all personal designations are aimed at all people

3) In the following only referred to as e-systems





## 2. Results of the e-systems group CO<sub>2</sub> – Emissions Data

The calculation of results and the reporting of this report are based on the Greenhouse Gas Protocol<sup>4</sup>. In order to differentiate between direct and indirect emission sources and to present the results transparently, the GHG defines standardised framework conditions. Three scopes are defined in the course of data collection, analysis and reporting:

- Scope 1 considers the direct greenhouse gas emissions that come directly from the company's activities and sources.
- Scope 2 considers the indirect emissions that arise, for example, when purchasing energy.
- Scope 3 considers other indirect emissions resulting from the company's other business activities.

This report deals with the results for the reporting years 2022 and 2023, with 2022 being used as the new base year and verified by TÜV Rheinland Cert GmbH (see methodology section).

In the 2022 reporting year, e-systems generated a total of 85.07 tCO<sub>2</sub>e<sup>5</sup>. Scope 1 accounts for 25.77 tCO<sub>2</sub>e (approx. 30%) of this. 2.21 tCO<sub>2</sub>e (approx. 3%) were generated in Scope 2. 57.10 tCO<sub>2</sub>e (approx. 67%) are attributable to Scope 3.

In the 2023 reporting year, the group's total emissions amounted to 95.18 tCO<sub>2</sub>e, with emissions distributed across the scopes as follows 27.60 tCO<sub>2</sub>e (approx. 29%) were caused in Scope 1, 2.12 tCO<sub>2</sub>e (approx. 2%) in Scope 2 and 65.46 tCO<sub>2</sub>e (approx. 69%) in Scope 3. Total consumption increased by 10.11 tCO<sub>2</sub>e compared to the previous year.

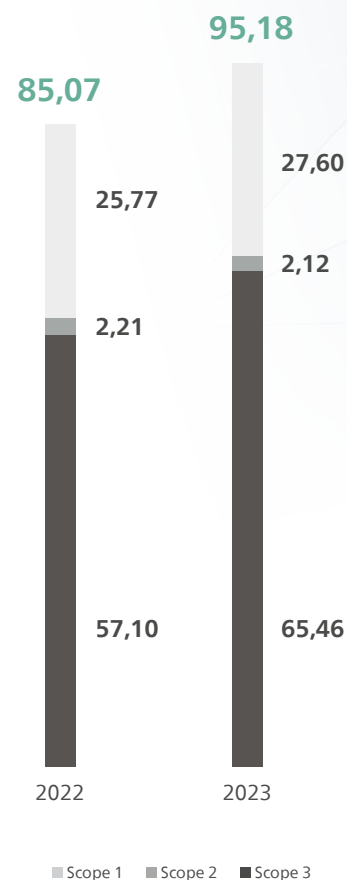


Figure 1: Comparison of CO<sub>2</sub> emissions in 2022 and 2023 in tCO<sub>2</sub>e.

<sup>4</sup>) In the following GHG

<sup>5</sup>) The CO<sub>2</sub> equivalent (CO<sub>2</sub>e) indicates how much a certain mass of a greenhouse gas contributes to global warming compared to the same mass of CO<sub>2</sub>. tCO<sub>2</sub>e represents this in tonnes.



## 2. Results of the e-systems group CO<sub>2</sub> – Emissions Data

If the group's CO<sub>2</sub> emissions are considered in relation to the number of employees, the value in the 2022 reporting year was 0.92 tCO<sub>2</sub>e. The figure was reduced in the following reporting year, resulting in 0.79 tCO<sub>2</sub>e per employee in 2023. For reasons of transparency, it should be mentioned that the reduction is essentially due to unchanged framework conditions and simultaneous company growth.

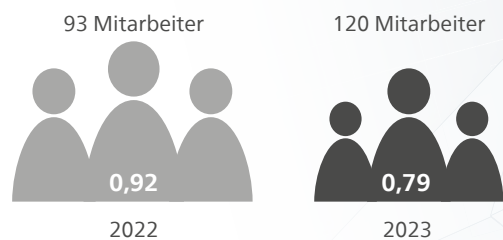


Figure 2: Emissions in 2022 and 2023 in tCO<sub>2</sub>e per employee.



## 2.1 SCOPE 1

# Mobile Equipment/ Vehicle Fleet

Scope 1 emissions are emissions that originate from sources within the company. As part of the balancing process, e-systems recognises the mobile equipment/vehicle fleet category, whereby the emissions from leased vehicles are also taken into account in addition to the GHG requirements. This decision was made deliberately in order to include the resulting emissions in the offsetting measures and also to incentivise reduction measures for leased vehicles.

In the 2022 reporting year, the group generated emissions of 25.77 tCO<sub>2</sub>e in this category. e-systems has had an almost constant vehicle fleet over the last few years; with the exception of the addition of an electric vehicle in the middle of the year, no changes were made. The electricity consumption of electric vehicles is analysed in Scope 2.

In the following year 2023, e-systems generated emissions of 27.60 tCO<sub>2</sub>e in the mobile systems/vehicle fleet category. Compared to 2022, the figure has risen by around 7.1%. The increase is mainly due to the purchase of a new car and the addition of a long-term car rental.

### Mobile equipment/vehicle fleet

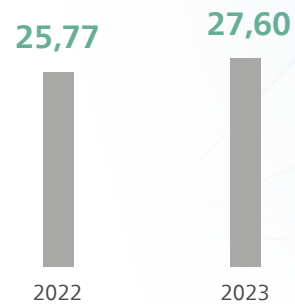


Figure 3: Scope 1 emissions of the e-systems companies in 2022 and 2023 in tCO<sub>2</sub>e.



## 2.2 SCOPE 2

# Electricity/ District Heating

Scope 2 records indirect greenhouse gas emissions from purchased energy, whereby the consideration of electrical energy (electricity consumption in office buildings and electricity consumption in electric vehicles) and heat are relevant for e-systems.

The group generated a total of 2.21 tCO<sub>2</sub>e in the 2022 reporting year. This figure is made up of electricity consumption (0.44 tCO<sub>2</sub>e) and district heating (1.77 tCO<sub>2</sub>e).

In the following year, CO<sub>2</sub> consumption fell by around 4.07%, meaning that e-systems generated a total of 2.12 tCO<sub>2</sub>e in the 2023 reporting year. As in the previous year, total consumption is made up of electricity consumption (0.90 tCO<sub>2</sub>e) and purchased district heating (1.23 tCO<sub>2</sub>e).

### Electricity/District heating

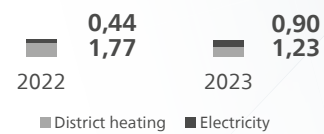


Figure 4: Scope 2 emissions of the e-systems companies in 2022 and 2023 in tCO<sub>2</sub>e.



## 2.3 SCOPE 3

# Other CO<sub>2</sub> Emissions

In order to take further indirect emissions from the value chain into account, e-systems also considers Scope 3 emissions in addition to the Scope 1 and 2 emissions listed above.

In the base year 2022, the e-systems companies caused total emissions of 57.10 tCO<sub>2</sub>e in Scope 3.

In the following reporting year, 2023, the group generated a total of 65.46 tCO<sub>2</sub>e in Scope 3. This corresponds to an increase of around 14.64 % compared to the base year.

The individual Scope 3 categories and their changes in terms of emissions are presented below.

In the **purchased goods and services category**, e-systems emitted a total of 0.17 tCO<sub>2</sub>e in the 2022 reporting year. In the following year 2023, a total of 0.69 tCO<sub>2</sub>e was emitted in this category, which corresponds to an increase of around 306%. The significant increase is mainly due to an increase in coffee consumption as a result of the rising number of employees. In the course of 2023, the purchase of Fairtrade coffee was introduced in order to promote the idea of sustainability in procurement as well. Even though only climate-neutral copy paper has been purchased since 2021.

In 2022, the affiliated companies of e-systems emitted 6.42 tCO<sub>2</sub>e in the capital goods category. In 2023, the figure fell to 4.11 tCO<sub>2</sub>e and thus corresponds to a saving of around 35.98% compared to the previous year. On the one hand, the reduction is due to the procurement of 41 steel pallet cages in 2022; on the other hand, far fewer capital goods were procured in 2023 as a result.

As expected, **business travel** increased again after the coronavirus pandemic. In 2022, a total of 11.32 tCO<sub>2</sub>e was generated. In the 2023 reporting year, e-systems generated 14.15 tCO<sub>2</sub>e in the course of business trips, which equates to an increase of around 25% compared to the base year. The creation and introduction of a travel policy did not have the desired effect until 2021 due to the coronavirus pandemic and the associated travel restrictions, meaning that the reporting years 2022 and 2023 will benefit from the measure. Despite this measure, the number of business trips has gradually increased due to rising employee numbers.

In the **employee commuting** category, e-systems' emissions increased by around 18.68% from 2022 to 2023. In the 2022 reporting year, emissions of 39.19 tCO<sub>2</sub>e were emitted and in the following year 2023, 46.51 tCO<sub>2</sub>e were emitted in this category. Although emissions per employee were presumably reduced through the introduction of a company-wide mobile office solution, total emissions in this category have nevertheless risen in line with the increase in the number of employees. It is also worth mentioning that many employees travel to work by public transport or bicycle. For reasons of transparency with regard to the methodology used, it should be emphasized that an employee survey was carried out to determine the values for their commutes to work and that an extrapolation had to be made as a result.





## 2.3 SCOPE 3

# Other CO<sub>2</sub> Emissions

### Definition of the Scope 3 category

e-systems has defined consideration limits for the categories described above. These are described in more detail below.

**Purchased goods and services:** Exclusive consideration of printer paper consumption and coffee purchases.

**Business trips:** All business trips made by employees in company vehicles have already been taken into account in Scope 1 and are therefore not considered here.

**Employee commuting:** The routes taken by employees between their place of residence and the company's place of work were surveyed. Missing results were taken into account by means of extrapolation. Journeys with company vehicles have already been taken into account in Scope 1 and are therefore not considered here.

### Other CO<sub>2</sub> Emissions

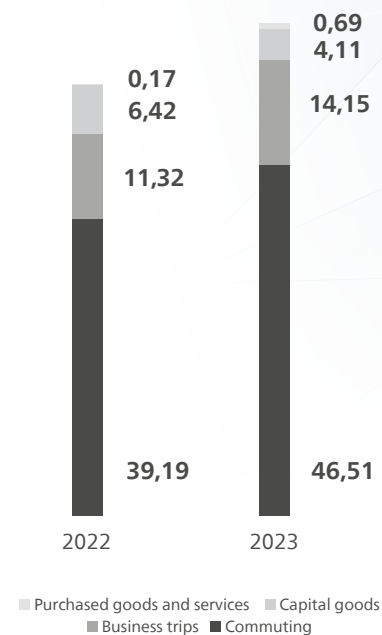


Figure 5: Scope 3 emissions of the e-systems companies in 2022 and 2023 in tCO<sub>2</sub>e.



## 3. Method of Carbon Footprint Accounting

By preparing an annual CO<sub>2</sub> balance sheet, e-systems documents the greenhouse gas emissions caused by its companies' business activities. The procedure used is based on the requirements of the Greenhouse Gas Protocol, a standard for the accounting and reporting of greenhouse gas emissions.

### 3.1 Reporting boundaries

In 2022 and 2023, e-systems again decided to set the limits of the emissions caused for the carbon footprint at the companies' locations. In the reporting years, take-e-way GmbH, trade-e-bility GmbH, get-e-right GmbH and VERE e.V. were based at the Hamburg-Wandsbek site.

### 3.2 Emissions taken into Account

The Scope 1, Scope 2 and Scope 3 categories listed in Figure 1 were taken into account. Further Scope 1 categories were excluded in view of e-systems' business activities. The same categories were used for the selection of Scope 3 categories as for the previous years that are no longer analysed. The categories will continue to be considered, as they are highly relevant to the overall balance sheet and, in some cases, have been identified as having significant potential for reduction measures. The inclusion of further Scope 3 categories will be reviewed again in subsequent years.

### 3.3 Data quality

Billing and consumption figures were mainly used as the basis for data collection. In a few categories, extrapolation and estimated values had to be used to obtain meaningful results. For example, an extrapolation had to be carried out for the Scope 3 category „Employee commuting“. In addition, in the Scope 3 category for **capital goods**, the number of units was multiplied by the corresponding emission factors to calculate the emission values, so that the emissions can be clearly calculated here. In the area of technology, an average value was for the emission factor from the Emissions taken into account of the electronic devices procured. Manufacturer information was used for this.

### 3.4 Verification and confirmation of the carbon footprint

The methodological approach and the plausibility of the carbon footprint were reviewed and confirmed by TÜV Rheinland Cert GmbH. In addition, the 2022 and 2023 greenhouse gas balances were verified. As part of this process, this report was approved by TÜV Rheinland and also verified with a limited degree of certainty, which is why the new base year is now set to 2022 instead of 2019, meaning that there will no longer be a quantitative comparison with the years 2018 - 2021. In the following cases, where the significance threshold is more than 5 %, a complete recalculation of the base year inventory should be carried out if the operation and / or the calculation methodology changes. This verification helps e-systems in its endeavours to improve its accounting and reporting and to break down the emissions even more precisely, to use current emission factors and to continue to develop its efforts to protect the climate. The measures for offsetting and reductions are explicitly not part of the verification. Important note: Only the German version has been verified as part of the certification process; the English version is only an addendum.



Scope 1  
Mobile equipment/  
vehicle fleet



Scope 2  
Electricity/  
District heating



Scope 3  
Purchased Goods and  
Services, Capital Goods,  
Business Travel,  
Employee Commuting

Figure 6: Categories considered.



## 4. Compensation and Reduction Measures

**The CO<sub>2</sub> balances form the basis for the identification and implementation of compensation and reduction measures and thus also for the e-systems' path to net zero emissions.**

### 4.1 Compensation measures

The offsetting measures are carried out by one of e-systems' shareholders, Buhck Umweltservices GmbH & Co. KG. In this context, CO<sub>2</sub> certificates are acquired annually for offsetting through the mediation of AQ Green TeC GmbH. Carbonbay GmbH & Co. KG uses the income from the CO<sub>2</sub> certificates to finance the maintenance and operation of three micro-hydropower plants in Honduras. This project was awarded the Gold Standard<sup>6</sup>. e-systems has been offsetting Scope 1 and 2 emissions since 2019, with only a residual quota available for 2023 as the current project has expired. The shareholder is currently in the process of selecting a new offsetting project.

In 2019, 46.63 tCO<sub>2</sub>e were offset. In 2022, 43.42 tCO<sub>2</sub>e were offset and 85% of the offsetting funds from the offsetting project are still available for 2023 (as described above). This new project will be named and figures provided in the next climate protection report.

### 4.2 Promotion of regional climate protection

Climate protection should not only be supported globally in other regions of the planet through compensation measures, but also on a regional level. To this end, the shareholder of e-systems is participating in the renaturalisation of the Herrenmoor in Schleswig-Holstein<sup>7</sup>. The aims of this project include protecting species typical of raised bogs and promoting peat growth by stabilising the water balance, which helps to improve the microclimate. Following successful renaturalisation, around 2,565 tCO<sub>2</sub> can be bound annually.

6) The Gold Standard certifies climate protection initiatives that contribute to the reduction of greenhouse gases, among other things. According to the Federal Environment Agency, this standard is an important quality feature for climate protection projects

7) The project is organised by the Schleswig-Holstein Nature Conservation Foundation.



## 4. Compensation and Reduction Measures

### 4.3 Reduction measures

Even in the fifth year of data collection and some experience, e-systems is still at the beginning of its climate protection journey. Once again, measures have been implemented, continued or deferred.

Firstly, measures relating to Scope 1 are postponed in the mobile facility / vehicle fleet category. Employees who are entitled to a company car can still choose whether to use a hybrid or electric vehicle. In order to further expand the vehicle fleet in the direction of e-mobility, e-systems is examining the possibility of a charging infrastructure in the in-house car parks. Due to the dependency on third parties, the exchange is continuous. In addition, employees have the option of using a partially e-mobility-based car-sharing service for customer visits and business activities. These measures are intended to reduce CO<sub>2</sub> emissions in Scope 1 in the long term.

In Scope 2 in the category of electricity procurement and district heating, the first climate protection report already reported on the purchase of green electricity at the Wandsbek site. Savings measures were implemented both in this area and in the area of district heating. These include the implementation of awareness-raising measures. Initially, display stands were developed to provide tips on how to make savings (already implemented in 2022), supplemented by an ongoing trainee project to identify potential savings with helpful tips on how to conserve resources. These are presented at irregular intervals. Savings are targeted through this measure.

Further measures to reduce emissions were also implemented in the Scope 3 categories. For example, a Code of Conduct was implemented in order to integrate climate protection into the selection of purchasing and business partners. In addition, the offer of mobile working is still very well utilised, which has made it possible to further reduce employee commuting despite company growth and the associated increase in employee numbers. In addition, the hvv-Profiticket (Train ticket for the Hamburg region) was upgraded to a subsidised local public transport ticket valid nationwide (so-called Deutschland-Ticket) and the option of leasing a bicycle was added.

Irrespective of the scopes listed above, further improvements were implemented in the area of purchasing: for example, only the Fairtrade variant is now consistently chosen for the procurement of coffee, complementing the existing organic fruit range. Furthermore, e-systems' existing environmental management system was successfully recertified in accordance with ISO 14001 in the first half of 2024. This certification is an important step and milestone in the endeavours to systematically consolidate environmental, climate protection and sustainability issues at e-systems using a certified management system.





# Outlook

e-systems endeavours to live up to its corporate responsibility and thus reflect its fundamental values of sustainability. For this reason, the slogan „acting consciously“ was established with the first climate protection report. In line with this slogan, the three e-systems companies are actively and continuously pursuing their climate protection strategy and thus keeping an eye on the impact of their actions on the climate. The recently published report by the German Weather Service (DWD) and the Copernicus climate service shows that in 2024, the annual average temperature will have risen to 1.6°C above the pre-industrial average. As a result, it was the warmest year since weather records began in 1881 and the Paris 1.5°C target was therefore exceeded very early on. This once again confirms the view of the corporate family that the commitment to climate protection is also playing an increasingly important role in the economy, as the consequences of climate change are already becoming visible today.

The third climate protection report is another important step in addition to the measures already implemented and planned and the ISO 14001 certification implemented in the past, which requires a continuous process. Based on the CO<sub>2</sub> balances and the climate protection reports, e-systems has continued to develop and make quantitative progress. As already forecast in the 2020/2021 report, e-systems' CO<sub>2</sub> emissions rose slightly again after the coronavirus pandemic and the reduction successes of the previous reporting periods did not continue. This is partly due to the resumption of business travel after the pandemic, but also to the continuous growth of the group.

As in previous years, e-systems aims to implement at least three different measures per year. However, as a service company, the scope is limited and the identification of measures and the sustainability strategy must be continuously reassessed. Due to its business activities, opportunities for further improvements are seen in Scope 3 in particular, although the potential for improvement in this area is also limited. For example, the existing travel policy is to be reviewed and, if necessary, tightened in order to utilise private underground parking spaces with sustainable concepts wherever possible. A renewed review of the electric charging infrastructure in the hotel's own car parks also needs to be carried out. In addition, the extent to which the existing waste concept can be optimised is to be examined so that raw materials are carefully separated and handled in line with the circular economy. A review of the lighting concept and the associated installation of motion detectors within the offices will also be considered. The identification of print jobs is also being considered in order to continuously save paper. In addition, service innovations are being pursued with the aim of supporting e-systems' customers in their environmental protection efforts and minimising the associated increase in legal complexity.