ENVIRONMENTAL STATEMENT 2025
EUROWINGS

REPORTING YEAR 2024

Eurowings Technik Eurowings Eurowings Digital

EMAS
VERIFIED ENVIRONMENTAL MANAGEMENT
DE-142-00008

AGENDA

01. INTRODUCTION

Dear Readers,

The responsible use of resources, the climate, and the environment is one of the key challenges of our time – and a responsibility that Eurowings, as Europe's leading value airline, takes very seriously. This first environmental statement – as part of our environmental management system under EMAS and ISO 14001 – documents our environmental achievements to date and sets out the goals and strategies we will implement to continuously improve our actions. We see the successful initial certification of our environmental management system at our German sites as an important milestone in the systematic and transparent integration of environmental concerns into our business processes.

Efficient environmental management is essential for achieving sustainable progress. It enables us to examine existing processes, develop new solutions, and make our progress measurable. Our priority is to continuously optimise our operational procedures, use resources more efficiently, and promote sustainable innovations that offer environmental and economic benefits.

We made significant progress last year: The modernisation of our aircraft fleet, a reduction in the consumption of specific fuel, and targeted initiatives to raise employee awareness are just some of the steps that have helped us reduce our environmental impact. At the same time, we are facing challenges such as regulatory requirements, high energy and location costs, and geopolitical uncertainties. We address these with a clear strategy and a steadfast commitment to sustainable business practices.

By implementing EMAS, we are focused on maximum transparency and the continuous improvement of our environmental performance. We invite you to learn more about our goals, measures, and progress, and hope you find this an interesting read.

JENS BISCHOF, CEO & CCO
Eurowings Aviation GmbH and Eurowings GmbH

EDI WOLFENSBERGER, COO
Eurowings Aviation GmbH and Eurowings GmbH

MICHAEL ERFERT, MANAGING DIRECTOR (CEO)
Eurowings Digital GmbH

JOHANNES HANSEN - MANAGING DIRECTOR (CTO)
Eurowings Digital GmbH

MATTHIAS GRUBER, MANAGING DIRECTOR
Eurowings Technik GmbH

RUBEN BAUMGARTEN, ENVIRONMENTAL OFFICER
Eurowings

02. VOICES FROM OUR ENVIRONMENTAL MANAGEMENT SYSTEM

VOLKER STARK

Senior Expert Product & Partner Management

“We aim to ban environmentally harmful materials from onboard catering and replace them with eco-friendly alternatives. The selection of our products and the implementation of recycling processes play a significant role in this process.”

RIA ARORA

Manager OPS Efficiency

“Sustainability is at the core of OPS Efficiency, as every operational decision presents an opportunity to minimise environmental impact. By enhancing situational awareness, refining post-flight insights, and fostering a culture of efficiency, we support a more sustainable future for aviation while maintaining operational excellence.”

SEBASTIAN BIRK

Manager Technical Strategy

“Sustainability is an integral part of our work at Eurowings Technik. By adopting digital maintenance processes, we have already been able to substantially reduce our paper consumption while increasing our work efficiency. Modern maintenance and repair technologies help us to implement targeted resource conservation and keep our fleet’s fuel efficiency at a high level. Together with our partners, we are pursuing the development and adaptation of further innovative solutions.”

RUBEN BAUMGARTEN

Manager Sustainability and Environmental Officer

“Our environmental management system is central to our sustainability strategy. It helps us to systematically identify environmental aspects, set targeted measures, and make our progress measurable as well as externally verifiable. Only through pursuing continuous improvement and having the commitment of everyone involved can we achieve our ambitious environmental goals and actively help to balance climate protection with aviation. This ecological transformation is not a one-off project but a fundamental aspect of our identity – and our environmental management system is the compass that confidently keeps us on course.”

ABOUT US

03. ABOUT US – EUROWINGS

Eurowings is the value airline of the Lufthansa Group, which makes it part of Europe's largest airline group. With our focus on direct flights, Eurowings offers an attractive range of connections within Europe and to neighbouring countries. Eurowings stands for affordable and flexible flights and enables passengers to customise their travel experience with flexible fares. For everything from city tours, business trips or recreational holidays – Eurowings is the ideal partner for relaxed travel.

Eurowings has a modern fleet of 100 aircraft that fly to more than 140 destinations in 39 countries. The airline operates a total of 13 bases in Germany, Austria, Spain, Sweden, and the Czech Republic. Its strong presence in Europe has established Eurowings as one of the largest leisure airlines in the European region. The fleet consists of aircraft from the Airbus A320 family, known for their efficient and comfortable short and medium-haul flights.

Eurowings has over 5,000 employees who make sure that passengers reach their destinations safely and comfortably. The airline carries over 23 million passengers a year.

Eurowings stands for affordable travel without compromising comfort or quality. The continuous modernisation of our fleet, expanded route networks, and digitalised processes enable us to meet the growing demands of our passengers. Positioned as a leading provider of point-to-point connections, Eurowings will continue to play a central role in European air transport well into the future.

5
AIRBUS A321NEO

8
AIRBUS A320NEO

6
AIRBUS A321

50
AIRBUS A320

31
AIRBUS A319

EUROWINGS COMPANIES

04. EUROWINGS COMPANIES IN THE ENVIRONMENTAL MANAGEMENT SYSTEM

The Eurowings brand comprises several legally independent and separate companies that handle various operational functions. For now, the environmental management system under EMAS includes the companies Eurowings Aviation GmbH, Eurowings GmbH, Eurowings Technik GmbH, and Eurowings Digital GmbH. The companies Eurowings Europe Ltd. (Malta), Wings Handling Palma S.L. (Spain), and Eurowings Holidays GmbH (Germany) are, for the time being, not part of the environmental management system.

Eurowings

Eurowings Aviation GmbH is responsible for the strategic and operational management of the group. This includes support for commercial marketing, the development of a uniform product and brand identity, as well as the provisioning of internal business applications and services. Its headquarters is located at Cologne/Bonn Airport.

Eurowings Technik

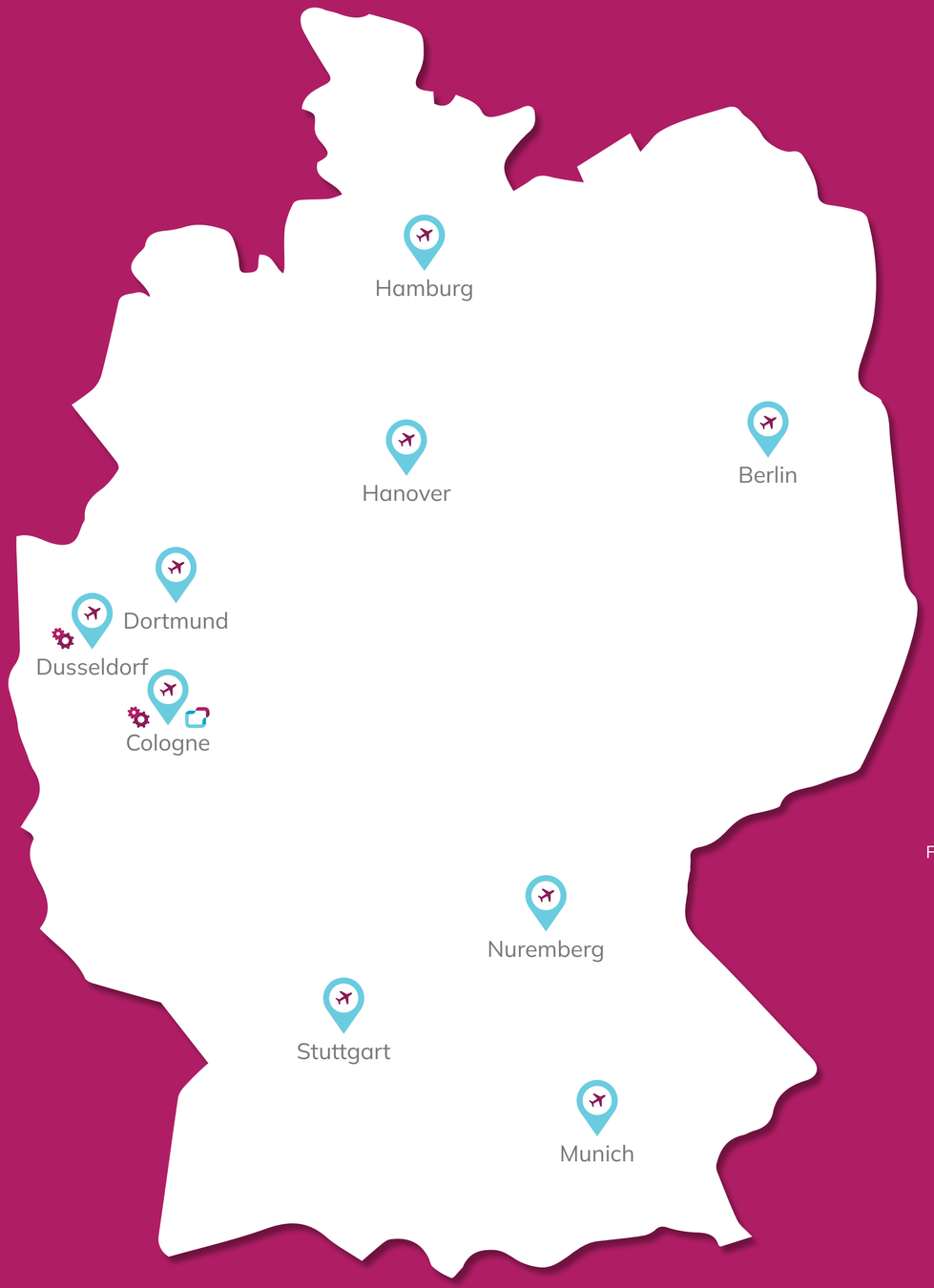
As a centre of technical competence, Eurowings Technik GmbH makes sure that the fleet (CAMO) is airworthy. It also handles some of the maintenance operations (part-145 operation). The CAMO and Technical Commercial departments are located at Cologne/Bonn airport, while the maintenance hangar is in Dusseldorf.

Eurowings

Eurowings GmbH carries out flight operations with its cockpit and cabin crew at its German bases. Its headquarters is at Dusseldorf airport, whereas crews are spread across various locations around Germany.

Eurowings Digital

As a centre of digital competence, Eurowings Digital GmbH is the driving force behind the transformation and continuing development of our digital services. Its priorities include managing the website and app, optimising booking process, and providing innovative, personalised services. Eurowings Digital GmbH is based in Cologne-Mülheim



Addresses and number of employees

Location	EW companies	Address	Post code, city	Employee figures*
Cologne/Bonn Airport	Eurowings Aviation GmbH Eurowings Technik GmbH Eurowings GmbH	Waldstraße 249 Cologne/Bonn Airport, Kennedystrasse	51147 Cologne	approx. 1500
Cologne-Mülheim	Eurowings Digital GmbH	Schanzenstr. 6-20	51063 Cologne	approx. 300
Dusseldorf Airport	Eurowings Technik GmbH Eurowings GmbH Eurowings Aviation GmbH	Halle 7, Frachtstr. Dusseldorf Airport, Flughafenstr. 105	40474 Dusseldorf	approx. 1300
Munich Airport	Eurowings GmbH Eurowings Aviation GmbH Eurowings GmbH	Munich Airport T1, Nordallee 25	85356 Munich	approx. 10
Hanover Airport	Eurowings GmbH	Hanover Airport, Flughafenstraße 4	30855 Hanover	approx. 10
Nuremberg Airport	Eurowings GmbH	Flughafenstraße 100	90411 Nuremberg	approx. 30
Dortmund Airport	Eurowings Aviation GmbH Eurowings GmbH	Flugplatz 7 Dortmund Airport, Flughafenring 2	44319 Dortmund	approx. 20
Berlin Airport	Eurowings Aviation GmbH Eurowings GmbH	Berlin Brandenburg Airport, Melli-Beese-Ring 1	12529 Schönefeld	approx. 300
Hamburg Airport	Eurowings GmbH Eurowings Aviation GmbH	Hamburg Airport, Flughafenstr. 1-3	22335 Hamburg	approx. 450
Stuttgart Airport	Eurowings GmbH Eurowings Aviation GmbH	Stuttgart Airport, Flughafenstraße 32	70629 Stuttgart	approx. 400

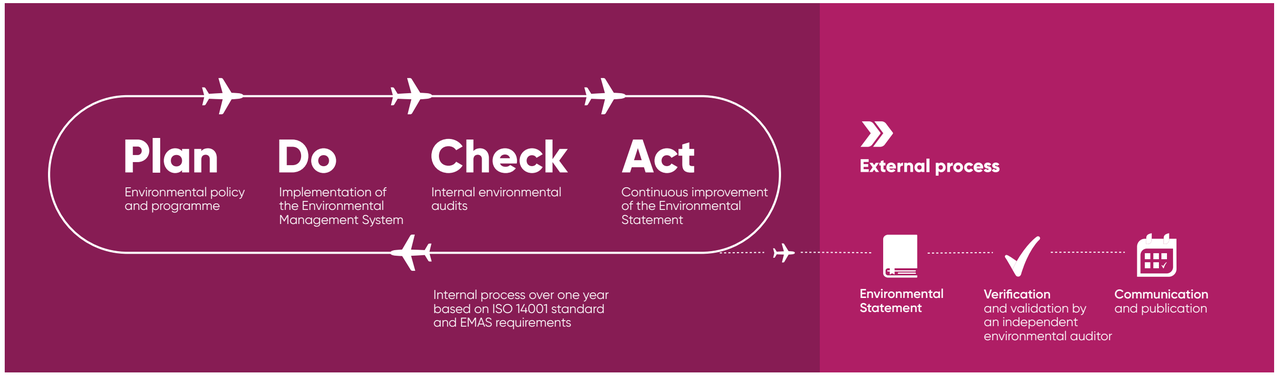
* The stated number of employees represents a non-binding overall figure, composed of staff from several legally independent and operationally separate companies. This information is provided solely for informational purposes within the scope of the environmental management system and does not constitute an official metric under commercial, tax, or social security law. For official reporting, statistical surveys, or other legally relevant purposes, the individual figures of the respective companies shall apply.

PROCESS AND RESPONSIBILITIES

05. PROCESS AND RESPONSIBILITIES

Process

The joint environmental management system employed by participating Eurowings companies is firmly integrated into our operational processes and follows the established Plan-Do-Check-Act model for continuous improvement. In line with EMAS, it is structured around the central elements of an environmental management system and ensures that environmental aspects, and their impact, are systematically recorded and optimised. We have firmly embedded our shared values in our environmental policy – both within the company and our interactions with our partners and suppliers.



The people behind it

Clear responsibilities are essential for systematically managing and continuously improving environmental impacts. Overall responsibility for compliance with environmental obligations and the continuous improvement of environmental performance lies with top management as defined by the environmental management system, represented by the management of Eurowings GmbH. The managing directors and managers are responsible for implementing these obligations on a corporate and department level.

The environmental officer serves as the central contact point and coordinates the environmental management system within Eurowings in close collaboration with other environmental officers in the Lufthansa Group.

In day-to-day business, a management representative assumes the rights and obligations of top management within the meaning of the environmental management system, while overall responsibility remains with the respective company management.

Environmental coordinators appointed by the department managers handle the local implementation of the environmental management system and represent their departments' environmental concerns. In this process, they collaborate closely with the environmental officer, ensuring that all areas in the organisation are integrated into the environmental management system via a direct reporting channel.

All employees are asked to actively support environmental protection by adhering to the processes defined in the environmental management system. We carry out regular training to familiarise our team with more eco-friendly processes and demonstrate how everyone can actively contribute to greater sustainability. We also implement an easily accessible ideas management system, in which all employees can share their ideas and specific suggestions on how to operate more sustainably – at any time and regardless of their job description. An environmental committee, headed by the environmental officer and with the participation of environmental coordinators from the most relevant departments, organises the implementation of the environmental management system and arranges for collaboration with relevant areas of the Lufthansa Group.

Flat hierarchies and an extensive network ensure that the environmental management system permeates all areas of the company and that the implementation and responsibilities are clearly defined at all times.

STAKEHOLDERS

06. STAKEHOLDERS

Working together for sustainable progress

In everything we do, our priority is to safely, comfortably, and ever more sustainably transport millions of people each year to their desired destinations in Europe and beyond. We are aware that our passengers have high expectations, both of their flight and our company. That's why we make every effort to combine ecological and social responsibility with economic success. Whether it's our system partners, passengers, or residents living close to airports – as a company, we attach special importance to understanding the concerns of everyone involved and integrating them into our actions in the best way possible. That is why we actively pursue dialogues with our stakeholders.

We work together with airports, the relevant authorities, and our partners within the Lufthansa Group to develop innovative solutions that address the needs of our passengers and business partners. Our goal is to establish procedures that demonstrate long-term effectiveness and that are supported by everyone involved. These include carrying out guest surveys, working together with businesses, collaborating on projects with universities, and engaging in purposeful dialogues at trade fairs and events.

Sharing information is also a key component of our corporate culture within Eurowings. We encourage our employees to actively participate in the continuous ecological and social improvement of our actions. We promote cross-functional dialogue and bolster cooperation across the entire Eurowings team through regular training sessions, events, and communication channels.

EMPLOYEES

Ground-based and flying personnel, as well as trade unions and employee representatives

SOCIETY

General public and media professionals

LOCAL RESIDENTS

Communities and people near airports

CUSTOMERS

Leisure travellers, corporate customers, and tour operators

SYSTEM PARTNERS

Airports, ground service providers, and air traffic control

CONTRACTUAL PARTNERS

Suppliers and maintenance partners

PUBLIC ADMINISTRATION

Government, political institutions, and authorities

CIVIC ORGANISATIONS

NGOs, associations, and clubs

EDUCATION

Science, research, and educational institutions

OUR ENVIRONMENTAL POLICY

07. OUR ENVIRONMENTAL POLICY

Our environmental policy guides the sustainable development of Eurowings and formulates the environmental policy we set ourselves to minimise our environmental impact. Supported by the management of the participating Eurowings companies, these guidelines are an integral part of our environmental management system. They form the foundation of all environmentally relevant decisions and are reviewed on a regular basis to ensure that it meets our own ambitions, socio-technological developments, and societal expectations. Together with our partners and employees, we continuously commit ourselves to bring the environmental policy and its following components to life in our daily and future activities.

WE WANT TO DO BETTER

We understand sustainability as a journey. That is why we want to continuously evolve and improve. Compliance with environmental regulations is only our minimum standard. With regular reviews and optimisations of our operational structures and measures within our environmental management system, we are continually strengthening our environmental performance.

WE BUILD TRUST THROUGH COMMUNICATION

We know that transparency creates trust. That is why we take environmental concerns very seriously and why we engage in an open dialogue with passengers, authorities and the public. By regularly publishing our verified environmental information in an annual environmental statement, we highlight our commitment to responsibility and transparency.

TOGETHER WE ARE STRONGER

Every employee, from management level to operative, plays a role in improving our environmental performance. They know their responsibility and the influence they have on the environment. By communicating our environmental measures to passengers, we can raise awareness and encourage them to join us on our sustainability journey.

WE MAKE DATA-BASED DECISIONS

Our environmental sustainability initiatives are based on the efficient and responsible use of natural resources. We focus on scientifically established reduction targets and data-supported decisions. We continuously evaluate the environmental impacts of our activities, and we implement targeted actions and monitor their success.

WE FOCUS ON RESPONSIBLE COLLABORATION

High ethical standards govern our business activities and we make sure that our partners and suppliers also align with these values. Environmental criteria play a starring role in selecting new contractual partners

WE VALUE INNOVATION AND CREATIVITY

By using innovative and resource-friendly technologies, we are constantly improving our environmental performance. Even in the face of economic challenges, we see changes as an opportunity to bolster our innovative capacity and further expand our contribution to environmental protection.

ENVIRONMENTAL ASPECTS

08. SIGNIFICANT ENVIRONMENTAL ASPECTS

Sustainability permeates almost all areas of our company – whether in our daily work, along the supply chain or in our collaboration with our service providers. We systematically analyse our environmental impact to maintain an overview and to base our approach specifically on those areas where we have the greatest influence. Here we focus on the areas with the greatest ecological relevance and highest potential for improvement.

1 ATMOSPHERIC EMISSIONS

Through the burning of kerosene, air traffic contributes to the emission of gases that are harmful to the climate, particularly carbon dioxide (CO_2) and nitrogen oxides (NO_x). These emissions directly impact the climate by increasing the concentration of greenhouse gases in the atmosphere. They also impact it indirectly through effects such as the formation of condensation trails and cirrus clouds, which can play a role in warming the Earth's atmosphere even further.

In addition to emissions from flights, there are also environmental impacts that originate on the ground. Conventional ground vehicles emit local air pollutants, while the use of auxiliary power units (APUs) on parked aircraft results in additional fuel consumption and noise pollution. Energy consumption at airports, such as for lighting and air conditioning, further impacts resource consumption and the carbon footprint.

Taken together, these factors highlight the multi-layered environmental impact of aviation, which extends well beyond CO_2 emissions (even if indirect effects remain difficult to measure and quantify). However, we must consider more than the direct emissions alone: Indirect climate effects and ground-based environmental damage should also be included in environmental impact assessments.

2 ENERGY CONSUMPTION

Ground-based energy consumption includes electricity and heating for office buildings, maintenance hangars, and IT infrastructure. At Eurowings, all electricity is sourced from renewable energy, and buildings are heated using district heating systems.

Significant indirect energy consumption also occurs along the supply chain, particularly in the manufacture of aircraft and spare parts. Energy-intensive materials processing, such as for aluminium and titanium, as well as the production and maintenance of technical systems, both contribute significantly to the environmental impact.

For that reason, the efficient use of electricity and heat throughout the value chain is essential to reducing emissions and other environmental impacts.

3 WASTE

Waste represents a significant environmental impact at Eurowings. While the disposal of hazardous materials plays only a minor role, it is primarily the large volumes of non-hazardous waste that lead to negative environmental effects. These include packaging, food waste, and non-recyclable onboard items, all of which contribute to substantial resource consumption during production and result in emissions during disposal.

Aircraft maintenance also produces considerable waste, especially through packaging for spare parts, replaced components, and consumables. While hazardous waste, such as used oil or chemical cleaners, requires careful disposal, the main environmental impact is caused by the volume of waste generated.

Reducing waste and closing material loops are therefore key levers for lowering Eurowings' environmental footprint. In addition to avoiding waste, transport and disposal also play a role, as these activities consume energy and emit CO_2.

4 FOSSIL FUEL CONSUMPTION

By far the greatest consumption of fossil fuel occurs during flight operations. Positioning flights are empty flights necessary for operational processes. These contribute to fuel consumption in addition to regular passenger flights. Likewise, business travel by car or plane play a role when more environmentally-friendly transport or digital alternatives are not possible.

Fuel consumption in the supply chain also has an indirect environmental impact. Spare aircraft parts often require long-distance transport, as specialised maintenance and production facilities are distributed across the globe. This results in added emissions from both air and land transport.

The dependence on fossil kerosene therefore remains the central environmental challenge for us at Eurowings. While operational efficiency can help mitigate some impacts, long-term improvements such as sustainable aviation fuels and new drive technologies continue to be crucial for reducing our environmental footprint.

5 LOCAL PHENOMENA

Noise constitutes a major environmental impact, especially in areas near airports and along flight paths. Flight noise is caused not only by aircraft engines but also by air vortices that surround the aircraft. The noise occurs most intensively at low flight altitudes, such as during take-off and landing. These noise emissions can have far-reaching repercussions on the environment and on people's quality of life.

The wide-ranging health effects of noise pollution include sleep disturbances, elevated stress levels, and even long-term cardiovascular diseases. People living directly near airports or busy flight paths are particularly affected. Humans are not the only ones who suffer under aircraft noise: Wildlife is also impacted by constant acoustic disturbances. The noise can disrupt the natural behaviour of birds and similar wildlife, such as reproduction and foraging, which threatens their populations in the long term.

6 § ENVIRONMENTAL LEGISLATION

Environmental regulations are of enormous importance to Eurowings and the entire European aviation sector, as they ensure that environmental impacts and related processes are subject to uniform provisions. These regulations help limit the environmental impact of our operations, such as emissions, waste, and resource use, while also working toward a reduction through market-based mechanisms. Meeting these requirements is not only a legal obligation but also essential for the sustainable improvement of our corporate environmental performance on a level competitive field. Our environmental management system ensures that we monitor all legal requirements and integrate them into our operational processes in a transparent manner.

To this end, our environmental management system plays a central role. It ensures that we systematically monitor and comply with all relevant legal regulations and integrate them transparently into our operational processes. Working in close collaboration with the Lufthansa Group, we identify all relevant laws, ordinances, and regulations at an early stage, and incorporate them into our workflows. This approach allows us to respond quickly to changes and to implement appropriate measures that ensure compliance with such provisions. This is especially important, not only for meeting regulatory requirements but also for contributing to our long-term reduction of negative environmental effects and monitoring them through regular audits.

ENVIRONMENTAL GOALS AND MEASURES

09. ENVIRONMENTAL GOALS AND MEASURES

The following tables provide a structured overview of our key environmental objectives and the measures we intend to take to achieve them. While many of these goals fall under the responsibility of individual departments, tackling more complex challenges often requires cross-departmental collaboration—sometimes even beyond the boundaries of the company. In such cases, we benefit from the close network within the Lufthansa Group, which plays a key role in helping us implement our sustainability goals efficiently, effectively, and with a holistic approach.

Our environmental objectives are deliberately ambitious. They reflect our commitment to consistently go beyond legal minimum requirements and actively contribute to the ecological transformation of aviation. At the same time, they are shaped by a dynamic environment—technological advancements, regulatory requirements, and market developments all influence their implementation and make regular review essential.

For this reason, all targets and associated measures are reviewed annually with regard to their feasibility, relevance, and current implementation status. We report transparently on the results of this assessment and any necessary adjustments in subsequent environmental statements.

The clustering of objectives and measures is based on the environmental aspects presented in this environmental statement. In addition, two overarching target areas have been added: environmental communication and the expansion of the environmental management system. These two areas play a key role in structurally embedding environmental awareness and fostering a continuous improvement process across all parts of the company.

Reduction of greenhouse gas emissions and use of fossil fuels:

Status: ✓ ongoing | planned | under evaluation

Goal	Measures	Implementation by	Status	Description
Reduction of specific CO_2 emissions from flight operations by 30.6 % by 2030 (Base year: 2019)	Increased use of sustainable aviation fuel (SAF) to 5.5 %	2030	✓	Our customers have the opportunity to purchase SAF as part of our PlanetBlu options and thereby increase the share used beyond the obligatory amount. Here our main focus is to use targeted communication and incentivisation to increase customers' willingness to pay for SAF. In addition, some of the SAF volume is covered by the EU SAF mandate (ReFuelEU).
Reduction of the amount of fossil kerosene by 10 % by 2030 (Base year: 2019)	OPS Sustainability Phase 1	2025	✓	Around 60 projects in 15 fields of action are scheduled to be implemented as part of the OPS Sustainability Programme by 2025. The direct CO_2 conservation measures include single-engine taxi-in (SETI) and taxi-out (SETO), the revision of the cost index, as well as improved flight planning and preparation software. In addition, enabler projects, such as improved communication on efficiency-increasing processes and integration in manuals, indirectly encourage CO_2 conservation. The goal is to achieve more sustainable and efficient flight operations.
	OPS Sustainability Phase 2+3	2030	📅	The measures for phases 2 and 3 of the OPS Sustainability Programme have not been conclusively defined yet. However, according to a potential analysis, all measures in the programme should reduce specific CO_2 emissions by 4.5 %.
	Renewal of aircraft fleet	2030	✓	Additional fleet shifts in the A320Fam fleet are planned in favour of newer and more efficient aircraft by 2027. Starting in 2027, the fleet is also expected to expand with 40 new Boeing 737-8 MAX, which require up to 30% less kerosene. The delivery is scheduled to be completed by the beginning of the 2030s.
Additional compensation for specific net CO_2 emissions from flight operations (own fleet) by 19 % by 2030 (Base year: 2019)	CO_2 offsetting	2030	✓	Our PlanetBlu options offer our customers the opportunity to offset the CO_2 emissions generated by their flight through selected climate protection projects. We are focusing on increasing customers' willingness to pay for climate protection projects through targeted communication, incentives, and a constant qualitative revision of the project portfolio. Direct CO_2 offsetting by Eurowings is also in planning.
Reduction of specific CO_2 emissions from flight operations (wet lease) by 16 % by 2030 (Base year: 2021)	Selection of wet lease aircraft and contract negotiations	2030	✓	The selection process for our wet lease partners favours younger and more efficient aircraft in order to reduce fuel consumption and emissions per seat.
	Support for the efficiency of wet lease OPS	2030	🔍	We would like to share our knowledge of emission reduction measures with our wet lease partners.
	Expanded use of SAF	2030	✓	As Eurowings itself is responsible for supplying the fuel for wet leases, the general SAF measures apply here in equal measure.
Full electrification of the company vehicle fleets by 2030 Reduction of fossil fuel consumption for ground vehicles to 0% by 2030	Electrification of maintenance and pool vehicles	2030	📅	Electrification of the vehicle fleet starts in 2025 with a first test vehicle. Additional vehicles are planned in the area of technology by 2027. At the same time, we want to accelerate negotiations on the provision of the necessary charging infrastructure with the relevant airports.

Decreasing waste:

Status: ongoing planned under evaluation

Goal	Measures	Implementation by	Status	Description
5% annual reduction in the amount of waste from unsold food by 2027	Extension of “Happy Hour” for perishable foods	2026	under evaluation	We currently hold a “Happy Hour” on the last flight of the day to sell perishable food at a reduced price and thus decrease food waste. If we make the Happy Hour more flexible, such as by offering it on the penultimate flight – depending on the availability of perishable food – we could further reduce food waste. With this approach, we could respond more effectively to fluctuations in demand and ensure that more food is sold instead of being discarded.
Reduction of non-recycled residual waste by 2027	Implementation of a system for recording the quantities of onboard waste	2026	under evaluation	Our goal is to develop a measuring system to accurately record the amount and type of onboard waste per cleaning cycle. The external cleaning crews are not currently weighing the waste, which is discarded together with the waste from other airlines at the airport. This makes it difficult to determine and monitor specific targets and measures in the area of onboard waste management.
	Recycling of PET on board	2026	ongoing	At this time, PET waste is discarded together with residual waste, as the options for separating waste on board are limited and many airports do not have a separate disposal infrastructure. We would therefore like to expand the onboard separation options as well as the separate disposal and recycling by cleaning service providers.

Reduction of noise exposure:

Goal	Measures	Implementation by	Status	Description
A decrease in the “lateral” noise levels of our fleet's noise certificates by 0.2 % per year until 2027	Retrofitting of multifunctional LED lighting	2027	under evaluation	The old landing lights of the A320/21ceo aircraft increase air resistance, which causes more noise. The firmly integrated LED lights eliminate this effect and ensure that noise pollution is reduced.
Reduction in perceived noise emissions by 2027	Use of vortex generators	2023	ongoing	Vortex generator modification has been in use by the entire Eurowings fleet since 2023. These 10-centimetre long metal pieces were installed in front of the tank pressure equalisation openings on both wings. This eliminates annoying whistling noises and decreases the overall noise level during landing within a radius of 10 to 17 kilometres around the airport by up to four decibels. At greater distances, the effect is even more pronounced.
	Noise reduction system (LNAS)	2027	under evaluation	Low Noise Augmentation System (LNAS) technology minimises aircraft noise during approach and landing. It optimises the flight route and speed, thereby reducing noise levels in the vicinity of airports. LNAS provides real-time guidance to pilots, which ensures optimised and quieter descents and thus reduces the overall noise pollution.
	Reduced use of APU on the ground	2027	ongoing	Reducing the use of auxiliary power units (APU) can significantly lower ground noise levels and emissions at airports. APUs are small turbine engines in the rear of an aircraft that provide power and air conditioning when the main engines are switched off. However, they are the source of considerable noise and emissions. Lowering the use of APUs involves amplifying the use of ground power units (GPU) and preconditioned air (PCA) systems, which are quieter and more eco-friendly alternatives. These systems supply electricity and air conditioning to parked aircraft, making APUs superfluous.

Reduction in energy consumption:

Status: ✓ ongoing | planned | under evaluation

Goal	Measures	Implementation by	Status	Description
Reduction of relative electricity consumption in office buildings by 10 % until 2027 (base year: 2024)	Migrating the data centre to the cloud	2027	planned	We are planning to relocate additional parts of the data centre in CGN to the cloud in order to benefit from the efficiency advantages of centralised service infrastructure.
	Installation of solar panel systems on the VGA and VG4 administration buildings in CGN	2025	ongoing	The property owner of our administration building in Cologne is installing photovoltaic equipment on the roof. The electricity generated by this will be used directly in the buildings.
	Retrofitting of LEDs in office buildings	2027	under evaluation	Switching the office lighting in CGN (VG4 and VGA) to LED can reduce electricity consumption by up to 75%. While corridors have already been converted, the offices still use fluorescent tubes. This change would conserve energy and reduce the use of resources.
	Installing motion sensors	2027	under evaluation	The installation of motion detectors in Cologne (VG4 and VGA) and at EWD (Schanzenstrasse 6–20) greatly reduces lighting requirements and increases energy efficiency. As a result, lights are switched on only when required and unnecessary energy consumption is minimised.
Reduction of relative electricity consumption in Hall 7 by 10% by 2027 (base year: 2024)	Replacement of the hangar ceiling lighting with LED lights	2026	planned	Replacing the hangar ceiling lights in Düsseldorf with LED lights is an important step to increasing energy efficiency and lowering electricity consumption. Halogen lights are currently used in Hangar 7, which require a considerably high amount of energy. However, this step requires approval by the landlord, as a replacement would involve considerable changes to the electrical system and cabling.

More environmentally-friendly handling of materials and resources:

Goal	Measures	Implementation by	Status	Description
10 % annual reduction in the proportion of SUP and SUA items in F&B service by 2027	Preferential listing of non-SUP/SUA F&B products	2027	planned	Replacement of single-use plastic and aluminium with sustainable or reusable packaging for food and drinks on board.
5 % annual reduction in the proportion of SUP and SUA articles in duty-free sales by 2027	Preferential listing of non-SUP/SUA duty-free products	2027	planned	Replacement of single-use plastic and aluminium by sustainable or reusable packaging for duty-free articles on board.
5 % annual reduction of meat consumption in in-flight service by 2027	Sale of meat substitute products on board	2027	under evaluation	Offering a meat-free alternative, such as a sandwich or vegetarian sausage.
Reduction of paper consumption for printers by 100,000 sheets per year by 2027	Paperless maintenance	2026	ongoing	The introduction of paperless maintenance tools such as the AMOS e-signature, the electronic logbook, and AMOSmobile replaces paper-based processes. These IT solutions not only reduce paper consumption, they also eliminate the need to transport and archive physical documents.
	Recycled paper at the head administrative office	2025	planned	We are currently testing recycled paper on a printer in the administration office. In the past, staff have reported negative experiences, such as paper jams, when using recycled paper. A new test will now be carried out with paper from a new manufacturer in a less OPS-critical area of administration.

Amplification of environmental communication:

Status: ✓ ongoing | planned | under evaluation

Goal	Measures	Implementation by	Status	Description
Amplification of environmental communication by 2027	Introduction of EMAS web-based training	2025	✓	Our goal is to provide online EMAS training for all employees to provide them with a standardised level of knowledge on the following topics: the importance of the environmental management system for Eurowings, our environmental policy, the main environmental impacts, objectives, and measures.
	ESG exhibition and accompanying information programme at CGN	2025	✓	We are organising an ESG exhibition at our headquarters with the goal of making our sustainability strategy and the associated steps toward emission reduction tangible and accessible. The exhibition was developed by LHG and will be on display in Cologne for two months. It will be accompanied by a supporting programme of presentations and events that aim to involve employees and that promote active dialogue on the environmental measures it presents.
	Provision of special resources for ESG information and training for flying personnel	2025	✓	The obstacle of physical distance has meant that it has been difficult to inform flying personnel about environmental topics and to motivate their active participation. To counteract this, we have created a position responsible for communicating environmental and sustainability issues. The goal is to talk to crew about specific topics, enable them to actively participate in our environmental goals, and to win them over as ambassadors for our passengers and stakeholders.

Expansion of the environmental management system:

Goal	Measures	Implementation by	Status	Description
Expansion of the environmental management system (EMS) to all Eurowings companies by 2026	Integration of Eurowings Holidays GmbH, Eurowings Europe Ltd., and Wings Handling Palma S.L. into the EMS	2026	planned	This initiative involves the integration of Eurowings Europe Ltd. into the EMS, including all pan-European flight operation locations (PMI, ARN, GRZ, SZG, PRG), and the administration in Malta. The newly founded Eurowings Holidays GmbH will also be included in the EMS. In addition, WingsHandling Palma S.L., the company-owned ground-handling service provider in PMI, will be integrated into the EMS.
Increase in the proportion of suppliers with their own environmental management system (EMS) or energy management system (EnMS)	Ensuring a measurable EMS/EnMS share in procurement transactions	2027	planned	The newly introduced ESG questions in the supplier questionnaire from 2025 make it possible to determine the proportion of suppliers with environmental and energy management systems in the total procurement volume. The presence of an environmental and energy management system can also be included as a criterion in the supplier selection process.

OVERVIEW OF KEY FIGURES

TOTAL

10. OVERVIEW OF KEY FIGURES

Total:

Our employees [1]	Unit	2022	2023	2024	Change compared to previous year
Number of employees (as on 31 December)	Headcount [amount]	3.334	3.663	4.246	**+16 %**
Number of flying personnel (cockpit Eurowings GmbH)	Headcount [amount]	854	896	886	**-1 %**
Number of flying personnel (cabin Eurowings GmbH)	Headcount [amount]	1.649	1.784	1.860	**+4 %**
Number of Ground Ops and administrative personnel	Headcount [amount]	557	669	1.177	**+76 %**
Number of technical personnel	Headcount [amount]	259	293	299	**+2 %**
Number of apprentices/dual study programme students	Headcount [amount]	9	9	24	**+167 %**
Proportion of women across all companies	%	51 %	51 %	51 %	**+0 %**
Number of employees in the environmental department	Headcount [amount]	1	1,4	1,4	**+0 %**

Our fleet [10]	Unit	2022	2023	2024	Change compared to previous year
Cars	Amount	22	22	22	**+0 %**
Transporters	Amount	17	17	17	**+0 %**

Our transport performance [3]	Unit	2022	2023	2024	Change compared to previous year
Number of destinations (summer flight schedule)	[Amount]	136	138	144	**+4 %**
Number of routes flown (summer flight schedule)	[Amount]	401	425	461	**+8 %**
Number of countries flown to (summer flight schedule)	[Amount]	37	37	39	**+5 %**
Completed flights	[Amount]	116.266	133.287	138.233	**+4 %**
Transported passengers	[Amount]	13.460.779	16.856.461	18.214.334	**+8 %**
Seat kilometres offered (SKO)	Million PKM	23.024	27.054	30.632	**+13 %**
Passenger kilometres (RPK)	Million PKM	17.725	21.828	24.865	**+14 %**
Seat load factor (SLF)	%	77 %	81 %	81 %	**+0 %**
Total business trips [4]	[Amount]	19.436	24.213	40.587*	**+68 %**
Of these, business trips by rail	[Amount]	unknown	unknown	10.772	**-**
Of these, business trips by plane	[Amount]	19.436	24.213	29.815	**+23 %**
Offset business trip emissions [4]	%	100	100	100	**+0 %**

Our aircraft fleet [2]	Unit	2022	2023	2024	Change compared to previous year
Fleet size at Eurowings GmbH, total	[Amount]	76	79	76	**-4 %**
Eurowings GmbH fleet size, Airbus A319	[Amount]	30	27	27	**+0 %**
Eurowings GmbH fleet size, Airbus A320	[Amount]	39	35	31	**-11 %**
Eurowings GmbH fleet size, Airbus A320neo	[Amount]	6	7	7	**+0 %**
Eurowings GmbH fleet size, Airbus A321	[Amount]	1	6	6	**+0 %**
Eurowings GmbH fleet size, Airbus A321neo	[Amount]	0	4	5	**+25 %**
Fleet size at Eurowings Europe Ltd., total	[Amount]	20	21	24	**+14 %**
Eurowings Europe Ltd. fleet size, Airbus A319	[Amount]	6	6	4	**-33 %**
Eurowings Europe Ltd. fleet size, Airbus A320	[Amount]	14	15	19	**+27 %**
Eurowings Europe Ltd. fleet size, Airbus A320neo	[Amount]	0	0	1	**+100 %**

Our fuel consumption [5]	Unit	2022	2023	2024	Change compared to previous year
Total fuel consumption	tonnes	528.718	609.605	665.341	**+9 %**
Proportional fuel consumption by EW, long haul	%	12 %	12,5 %	14,5 %	**+16 %**
Proportional fuel consumption by EW, medium haul	%	64,7 %	63,5 %	64,7 %	**+2 %**
Proportional fuel consumption by EW, short haul	%	23 %	23,8 %	20,8 %	**-13 %**
Proportional fuel consumption by EW, freight	%	0,3 %	0,2 %	0 %**	**-99 %**
Specific fuel consumption by EW, passenger transport	l/100 PKM	3,71	3,48	3,34	**-4 %**
Specific fuel consumption by EW, long haul	l/100 PKM	2,85	2,61	2,62	**+0 %**
Specific fuel consumption by EW, medium haul	l/100 PKM	3,40	3,23	3,15	**-2 %**
Specific fuel consumption by EW, short haul	l/100 PKM	6,46	5,61	5,38	**-4 %**
Specific fuel consumption by EW, freight	g/RTK	42.487	33.039	-	**-**
Diesel	l	10.476	12.322	12.408	**+1 %**
Super	l	5.056	6.312	9.153	**+45 %**
Super E10	l	361	691	274	**-60 %**
V-Power	l	0	40	49	**+23 %**
V-Power Diesel	l	0	121	77	**-36 %**
Fuel consumption per vehicle	l/vehicle	408	500	563	**+13 %**

Emissions from our flight operations [6] [7]	Unit	2022	2023	2024	Change compared to previous year
Absolute carbon dioxide emissions, total	tonnes	1.665.460	1.920.256	2.102.479	**+9 %**
Absolute carbon dioxide emissions, long haul	tonnes	200.395	239.617	304.450	**+27 %**
Absolute carbon dioxide emissions, medium haul	tonnes	1.077.609	1.219.154	1.360.543	**+12 %**
Absolute carbon dioxide emissions, short haul	tonnes	382.841	457.333	437.487	**-4 %**
Absolute carbon dioxide emissions, freight	tonnes	4.612	4.155	-	**-**
Specific carbon dioxide emissions, passenger transport	kg/100 PKM	9,37	8,78	8,45	**-4 %**
Specific carbon dioxide emissions, long haul	kg/100 PKM	7,20	6,59	6,63	**+1 %**
Specific carbon dioxide emissions, medium haul	kg/100 PKM	8,59	8,15	7,96	**-2 %**
Specific carbon dioxide emissions, short haul	kg/100 PKM	16,32	14,15	13,62	**-4 %**
Specific carbon dioxide emissions, freight	kg/TKM	133,95	104,11	-	**-**
Absolute nitrogen oxide emissions	tonnes	7.175	8.502	8.830	**+4 %**
Absolute carbon monoxide emissions	tonnes	2.492	2.773	2.868	**+3 %**
Absolute unburnt hydrocarbons (UHC)	tonnes	528	534	531	**-1 %**
Specific nitrogen oxide emissions	g/tkm	4,05	3,89	3,55	**-9 %**
Specific carbon dioxide emissions	g/tkm	1,41	1,27	1,15	**-9 %**
Specific unburnt hydrocarbons (UHC)	g/tkm	0,30	0,24	0,21	**-13 %**

Our energy consumption [11]	Unit	2022	2023	2024	Change compared to previous year
Electricity	kWh	1.325.939	2.048.780	2.053.134***	**+0 %**
Electricity consumption per employee	kWh/person	398	559	484***	**-14 %**
District heating	kWh	998.055	2.006.354	2.952.164***	**+47 %**
District heating per m²	kWh/m²	152	121	181***	**+49 %**

Our ground emissions (incl. business trips) [13]	Unit	2022	2023	2024	Change compared to previous year
Carbon dioxide, absolute	kg	1.675.842	2.218.843	2.883.851***	**+30 %**
Nitrogen oxides, absolute	g	1.360.730	1.880.037	2.191.034***	**+17 %**
Sulphur oxides, absolute	g	85.767	168.091	245.950***	**+46 %**
Emissions of fine particulate matter, absolute	g	96.805	123.293	133.510***	**+8 %**
Carbon dioxide per employee	kg/person	503	606	679***	**+12 %**
Nitrogen oxides per employee	g/person	408	513	516***	**+1 %**
Sulphur oxides per employee	g/person	26	46	58***	**+26 %**
Emissions of fine particulate matter per employee	g/person	29	34	31***	**-7 %**

Our materials & resources consumption	Unit	2022	2023	2024	Change compared to previous year
Net floor area	m²	6.551	16.564	16.335	**-1 %**
Fresh water [11]	m³	3.610	5.398	3.795	**-30 %**
Water consumption per employee [11]	m³/person	1,0828	1,4736	0,8938	**-39 %**
Refrigerants (air conditioning systems) [11]	kg	0	2	2	**+0 %**
Virgin fibre printing paper [8]	Sheet	2.450.000	1.950.000	1.600.000	**-18 %**
Paper consumption per employee	Sheet/person	735	532	377	**-29 %**
Adhesives, sealants, and corrosion protection	kg	1.729	1.461	1.180	**-19 %**
Coatings & colours	kg	2.510	2.018	1.318	**-35 %**
Cleaning agents and disinfectants	kg	369	417	473	**+13 %**
Solvents and thinners	kg	2.129	2.021	529	**-74 %**
Other	kg	30	70	210	**+200 %**
Oils	kg	1.091	1.026	743	**-28 %**
Hazardous materials per aircraft	kg/aircraft	82	70	45	**-37%**

Our waste	Unit	2022	2023	2024	Change compared to previous year
Non-hazardous waste [12]					
Mixed municipal waste “residual waste”	m³	648	686	698	**+2 %**
Paper and cardboard	m³	252	270	273	**+1 %**
Biodegradable kitchen and canteen waste	m³	3	3	3	**-6 %**
Plastic	m³	35	34	37	**+9 %**
Waste per employee	m³/person	0,281	0,271	0,238	**-12 %**
Hazardous waste [12]					
Other halogen-free solvents	t	-	0,6	1,3	**+104 %**
Waste oil collection category I	t	-	2,3	3,1	**+35 %**
Suction and filter materials	t	-	1,1	0,7	**-38 %**
Batteries and accumulators, haz.	t	-	0,1	0,1	**-5 %**
Aircraft-bound components (metals)	t	-	0,5	0,6	**+25 %**
Laboratory chemicals	t	-	0,3	0,2	**-30 %**
Fluorescent tubes, Hg residues	t	-	0,3	0,4	**+44 %**
Solvents	t	-	0,0	0,1	**+100 %**
Solvent-based adhesives and sealants	t	-	0,2	0,1	**-40 %**
Solvent-based paints and varnishes	t	-	1,1	1,7	**+46 %**
Aerosol cans	t	-	0,1	0,5	**+314 %**
Packaging containing hazardous substances	t	-	2,3	3,4	**+48 %**
Hazardous waste per aircraft	t/aircraft	-	0,089	0,121	**+36 %**
Waste from onboard catering					
Fresh food discarded [9]	tonnes	58,02	51,66	46,08	**-11 %**
Fresh food discarded per passenger [9]	g/person	4,31	3,06	2,53	**-17 %**

Explanation of relevant changes in key figures:

* Increase in business trips due to still prevailing coronavirus effects in 2022 & 2023.

** Complete decline in freight fuel consumption and freight emissions due to significant reduction in freight volumes in 2024

*** Electricity consumption 2024 without consumption data for crew rooms in DTM & BER, offices in Cologne-Mülheim and infrastructure in MUC & HAJ // District heating 2024 without consumption data for crew rooms in CGN, DTM, HAM, BER, offices in Cologne-Mülheim and infrastructure in MUC & HAJ.

OVERVIEW OF KEY FIGURES

LOCATIONS

11. OVERVIEW OF KEY FIGURES

Key figures per location:

Cologne/Bonn Airport	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	1.197.067	1.058.264	1.023.225
Electricity consumption per employee [11]	kWh/person	1.006	784	683
District heating [11]	kWh	409.032	410.802	281.499***
District heating per m² [11]	kWh/m²	898	902	618***
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	2.504	3.489	2.411
Water consumption per employee [11]	m³/person	2	3	2
Net floor area [14]	m²	455,68	455,68	455,68
Vehicle fleet [10]				
Cars	Amount	4	4	4
Transporters	Amount	1	1	1
Fuel consumption				
Diesel	l	2.595	3.401	2.561
Super	l	1.673	3.172	4.762
Super E10	l	353	691	236
V-Power	l	0	40	49
V-Power Diesel	l	0	25	77
Fuel consumption per vehicle	l/vehicle	924	1.466	1.537

Ground emissions [13]				
Carbon dioxide, absolute	kg	94.186	100.547	74.573***
Nitrogen oxides, absolute	kg	388.057	472.315	354.764***
Sulphur oxides, absolute	kg	34.805	36.719	27.326***
Emissions of fine particulate matter, absolute	kg	25.714	32.865	25.305***
Carbon dioxide per employee	kg/person	79	75	50***
Nitrogen oxides per employee	kg/person	326	350	237***
Sulphur oxides per employee	kg/person	29	27	18***
Emissions of fine particulate matter per employee	kg/person	22	24	17***
Waste [12]				
Mixed municipal waste “residual waste”	m³	444	435	433
Paper and cardboard	m³	176	175	174
Biodegradable kitchen and canteen waste	m³	3	3	3
Plastic	m³	30	29	29
Waste per employee	m³/person	0,549	0,476	0,426
Number of employees				
Eurowings Aviation GmbH	Amount	approx. 700	approx. 750	approx. 850
Eurowings GmbH	Amount	approx. 350	approx. 400	approx. 450
Eurowings Technik GmbH	Amount	pprox. 150	approx. 150	approx. 200

Cologne-Mülheim	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	5.501	21.654	-*
Electricity consumption per employee [11]	kWh/person	38	95	-*
District heating [11]	kWh	156.403	119.907	-*
District heating per m² [11]	kWh/m²	61	62	-*
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	383	599	479
Water consumption per employee [11]	m³/person	2,66	2,62	1,62
Net floor area [14]	m²	2.555	1.925	1.925
Ground emissions [13]				
Carbon dioxide, absolute	kg	31.906	24.461	-*
Nitrogen oxides, absolute	g	50.049	38.370	-*
Sulphur oxides, absolute	g	12.512	9.593	-*
Emissions of fine particulate matter, absolute	g	1.564	1.199	-*
Carbon dioxide per employee	kg/person	222	107	-*
Nitrogen oxides per employee	g/person	348	168	-*
Sulphur oxides per employee	g/person	87	42	-*
Emissions of fine particulate matter per employee	g/person	11	5	-*
Waste [12]				
Mixed municipal waste “residual waste”	m³	72	80	94
Paper and cardboard	m³	27	30	35
Biodegradable kitchen and canteen waste	m³	0	0	0
Plastic	m³	0	0	0
Waste per employee	m³/person	0,69	0,48	0,43
Number of employees				
Eurowings Digital GmbH	Amount	approx. 150	approx. 250	approx. 300

Dusseldorf	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	159.463	824.350	1.010.580**
Electricity consumption per employee [11]	kWh/person	120	612	748**
District heating [11]	kWh	209.194	1.262.456	2.670.665**
District heating per m² [11]	kWh/m²	119	102	215**
Refrigerants [11]	kg	0	2	2
Fresh water [11]	m³	392	876	563
Water consumption per employee [11]	m³/person	0,3	0,7	0,4
Net floor area [14]	m²	1.759	12.402	12.416
Vehicle fleet [10]				
Cars	Amount	14	14	14
Transporters	Amount	16	16	16
Fuel consumption				
Diesel	l	7.881	8.921	9.847
Super	l	2.891	2.476	3.739
Super E10	l	8	0	0
V-Power Diesel	l	0	56	0
Fuel consumption per vehicle	l/vehicle	359	382	453

Dusseldorf	Unit	2022	2023	2024
Ground emissions [13]				
Carbon dioxide, absolute	kg	68.522	286.614	578.707**
Nitrogen oxides, absolute	g	844.410	1.288.675	1.826.156**
Sulphur oxides, absolute	g	20.133	104.123	218.003**
Emissions of fine particulate matter, absolute	g	67.209	86.657	108.088**
Carbon dioxide per employee	kg/person	51	213	428**
Nitrogen oxides per employee	g/person	634	957	1.352**
Sulphur oxides per employee	g/person	15	77	161**
Emissions of fine particulate matter per employee	g/person	50	64	80**
Waste [12]				
Mixed municipal waste “residual waste”	m³	70	113	106
Paper and cardboard	m³	26	43	40
Plastic	m³	5	4	7
Waste per employee	m³/person	0,08	0,12	0,12
Hazardous waste				
Other halogen-free solvents	t	-	0,6	1,3
Waste oil collection category I	t	-	2,3	3,1
Suction and filter materials	t	-	1,1	0,7
Batteries and accumulators, haz.	t	-	0,1	0,1
Aircraft-bound components (metals)	t	-	0,5	0,6
Laboratory chemicals	t	-	0,3	0,2
Fluorescent tubes, Hg residues	t	-	0,3	0,4
Solvents	t	-	0,0	0,1
Solvent-based adhesives and sealants	t	-	0,2	0,1
Solvent-based paints and varnishes	t	-	1,1	1,7
Aerosol cans	t	-	0,1	0,5
Packaging containing hazardous substances	t	-	2,3	3,4
Number of employees				
Eurowings Aviation GmbH	Amount	approx. 10	approx. 10	approx. 10
Eurowings GmbH	Amount	approx. 1.200	approx. 1.200	approx. 1.200
Eurowings Technik GmbH	Amount	approx. 100	approx. 100	approx. 150

Dortmund	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	4.730	4.730	-*
Electricity consumption per employee [11]	kWh/person	206	225	-*
District heating [11]	kWh	15.392	15.000	-*
District heating per m² [11]	kWh/m²	44	43	-*
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	1	1	39
Water consumption per employee [11]	m³/person	0,03	0,03	2,07
Net floor area [14]	m²	349	349	105
Vehicle fleet [10]				
Cars	Amount	1	1	1
Fuel consumption				
Super	l	78	137	36
Super E10	l	0	0	38
Fuel consumption per vehicle	l/vehicle	78	137	74
Ground emissions [13]				
Carbon dioxide, absolute	kg	209	367	198
Nitrogen oxides, absolute	g	5.010	4.949	81
Sulphur oxides, absolute	g	1302	1323	67
Emissions of fine particulate matter, absolute	g	167	173	13
Carbon dioxide per employee	kg/person	144	159	8
Nitrogen oxides per employee	g/person	218	326	4
Sulphur oxides per employee	g/person	57	63	4
Emissions of fine particulate matter per employee	g/person	7	8	1
Waste [12]				
Mixed municipal waste “residual waste”	m³	0	0	8
Paper and cardboard	m³	0	0	3
Biodegradable kitchen and canteen waste	m³	0	0	0
Plastic	m³	0	0	0
Waste per employee	m³/person	0	0	1
Number of employees				
Eurowings Aviation GmbH	Amount	approx. 20	approx. 20	approx. 20
Eurowings GmbH	Amount	< 5	< 5	< 5

Berlin	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	26.337	55.190	-*
Electricity consumption per employee [11]	kWh/person	139	226	-*
District heating [11]	kWh	70.964	70.959	-*
District heating per m² [11]	kWh/m²	135	135	-*
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	63	107	83
Water consumption per employee [11]	m³/person	0,3	0,4	0,3
Net floor area [14]	m²	526	526	526
Vehicle fleet [10]				
Transporters	Amount	0	0	0
Cars	Amount	1	1	1
Fuel consumption				
Super	l	257	0	110
Fuel consumption per vehicle	l/vehicle	257	0	110
Ground emissions [13]				
Carbon dioxide, absolute	kg	15.012	14.476	229
Nitrogen oxides, absolute	g	22.989	22.707	120
Sulphur oxides, absolute	g	5.908	5.677	99
Emissions of fine particulate matter, absolute	g	753	710	19
Carbon dioxide per employee	kg/person	79	59	1
Nitrogen oxides per employee	g/person	122	93	0
Sulphur oxides per employee	g/person	31	31	0
Emissions of fine particulate matter per employee	g/person	4	3	0
Waste [12]				
Mixed municipal waste “residual waste”	m³	11	13	15
Paper and cardboard	m³	4	5	6
Biodegradable kitchen and canteen waste	m³	0	0	0
Plastic	m³	1	1	1
Waste per employee	m³/person	0,09	0,08	0,08
Number of employees				
Eurowings Aviation GmbH	Amount	< 5	approx. 5	approx. 5
Eurowings GmbH	Amount	approx. 200	approx. 250	approx. 300

Hamburg	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	22.792	20.419	19.328
Electricity consumption per employee [11]	kWh/person	53	49	44
District heating [11]	kWh	64.883	61.451	-*
District heating per m² [11]	kWh/m²	162	154	-*
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	141	171	115
Water consumption per employee [11]	m³/person	0,3	0,4	0,3
Net floor area [14]	m²	400	400	400
Vehicle fleet [10]				
Cars	Amount	1	1	1
Fuel consumption				
Super	l	157	229	184
V-Power Diesel	l	0	40	0
Fuel consumption per vehicle	l/vehicle	157	269	184
Ground emissions [13]				
Carbon dioxide, absolute	kg	13.563	13.114	383
Nitrogen oxides, absolute	g	20.934	23.844	201
Sulphur oxides, absolute	g	5.332	5.126	166
Emissions of fine particulate matter, absolute	g	676	981	31
Carbon dioxide per employee	kg/person	31	32	1
Nitrogen oxides per employee	g/person	48	57	0
Sulphur oxides per employee	g/person	12	12	0
Emissions of fine particulate matter per employee	g/person	2	2	0
Waste [12]				
Mixed municipal waste “residual waste”	m³	27	23	23
Paper and cardboard	m³	10	9	8
Biodegradable kitchen and canteen waste	m³	0	0	0
Plastic	m³	0	0	0
Waste per employee	m³/person	0,08	0,08	0,07
Number of employees				
Eurowings Aviation GmbH	Amount	< 5	approx. 5	approx. 5
Eurowings GmbH	Amount	approx. 450	approx. 400	approx. 450

Stuttgart	Unit	2022	2023	2024
General information and energy				
Electricity [11]	kWh	67.545	61.800	-*
Electricity consumption per employee [11]	kWh/person	185	170	-*
District heating [11]	kWh	72.187	65.779	-*
District heating per m² [11]	kWh/m²	142	130	-*
Refrigerants [11]	kg	0	0	0
Fresh water [11]	m³	127	155	106
Water consumption per employee [11]	m³/person	0,3	0,4	0,3
Net floor area [14]	m²	507	507	507
Vehicle fleet [10]				
Cars	Amount	1	1	1
Fuel consumption				
Super	l	0	298	322
Fuel consumption per vehicle	l/vehicle	0	298	322
Ground emissions [13]				
Carbon dioxide, absolute	kg	14.726	14.040	671
Nitrogen oxides, absolute	g	23.100	21.374	351
Sulphur oxides, absolute	g	5.775	5.531	290
Emissions of fine particulate matter, absolute	g	722	708	55
Carbon dioxide per employee	kg/person	40	39	2
Nitrogen oxides per employee	g/person	63	59	1
Sulphur oxides per employee	g/person	16	15	1
Emissions of fine particulate matter per employee	g/person	2	2	0
Waste [12]				
Mixed municipal waste “residual waste”	m³	24	21	20
Paper and cardboard	m³	9	8	8
Biodegradable kitchen and canteen waste	m³	0	0	0
Plastic	m³	0	0	0
Waste per employee	m³/person	0,1	0,1	0,1
Number of employees				
Eurowings Aviation GmbH	Amount	approx. 5	approx. 5	approx. 5
Eurowings GmbH	Amount	approx. 350	approx. 350	approx. 400

Explanation of relevant changes in key figures:

* Data is not yet available and will be published in the next environmental statement.

** Data for the associated infrastructure in NUE and HAJ is missing and will be added in the next environmental statement.

*** Data for the associated crew facilities in CGN is missing and will be added in the next environmental statement.

DATA DELIMITATION AND CALCULATION METHODOLOGY

12. DATA DELIMITATION AND CALCULATION METHODOLOGY

General information

EMAS is location-based and initially applies to the German-based entities. This includes the locations and infrastructure, as well as all flights operated by or on behalf of Eurowings GmbH, regardless of departure airport. The only exception is Eurowings Holidays, which has not been included yet, due to its establishment in 2025. A location may include multiple business units, such as the Cologne/Bonn Airport site. Eurowings Aviation GmbH, Eurowings GmbH, and Eurowings Technik operate there.

Accuracy

Some of the figures in the tables and graphics are rounded for readability. However, the year-over-year changes and percentage differences are based on exact values. As a result, a figure may appear unchanged from the previous year but still demonstrate a relative change. Due to the rounding of proportional percentages, it is also possible that their addition leads to deviating results compared to the addition of non-rounded percentages. For example, proportional percentages do not add up to 100 percent due to rounding, despite this being the logical expectation.

Calculation methodology

Unless otherwise noted, the environmental performance indicators are based on the following data delimitation:
“[1] Employees
The stated number of employees refers to the headcount (not full-time equivalents) of individuals employed by the respective companies as of the reporting date, 31/12. This information is provided solely for informational purposes within the scope of the environmental management system and does not constitute an official metric under commercial, tax, or social security regulations. For official reporting, statistical surveys, or other legally relevant uses, only the individual figures of the respective companies shall apply.”

“[2] Fleet
This includes all aircraft operated in the Eurowings GmbH AOC on the reference date of 31/12. It also lists the aircraft of Eurowings Europe Ltd., as they operate exclusively on behalf of Eurowings GmbH.”

“[3] Transport performance
This covers all scheduled and charter flights operated under the economic risk of Eurowings GmbH. It includes flights operated by Eurowings GmbH itself, as well as flights operated by Eurowings Europe Ltd. or external wet lease partners.”

“[4] Business trips
This includes all business trips by air and rail made via the EW business trip tool myDutyTrip and as part of crew procedures or business trips by ground crew. Excluded are business trips with third-party airlines, which cannot be booked in myDutyTrip, and business trips by rental car or private car. The associated CO_2 emissions for business trips made by plane are calculated using the Lufthansa Group-wide standardised calculation.”

“[5] Absolute kerosene
Kerosene consumption is determined on the basis of actual flight operations, taking into account the actual utilisation rate and routing according to the gate-to-gate principle. It covers all flight phases – from moving on the ground to detours and holding patterns in the air. The numbers are collected and analysed centrally within the Lufthansa Group.”

“[6] Absolute emissions from our flight operations
The absolute emissions from flight operations are calculated based on the actual transport performance and the actual utilisation rate, as well as on the actual absolute kerosene consumption in the reporting year. The transport performance is measured in passenger kilometres, which means passengers transported over a distance. Every combination of aircraft engines in the fleet is considered separately and calculated using programs from the respective engine and aircraft manufacturers. The programs are fed the annual average flight profile of each individual sub-fleet. This makes it possible to determine emissions as a function of altitude, distance, thrust, and load. This is required in particular for nitrogen oxides (NOX), carbon monoxide (CO) and unburnt hydrocarbons (UHC). In contrast, CO_2 emissions do not require any special aircraft-specific calculation, as these are calculated using the density of the burnt kerosene. By burning one tonne of kerosene, around 3.16 tonnes of CO_2 (TTW factor) are generated, depending on the actual density.”

“[7] Specific consumption and emissions from flight operations
The calculation of the specific consumption and emissions puts the absolute values in relation to the transport performance. The key figure of litres per 100 passenger kilometres (l/100 PKM), for example, is calculated on the basis of the actual utilisation rate and the kerosene that was actually consumed. The underlying distances refer to great-circle distances. In combined transport (freight and passenger transport on one aircraft), the allocation of the fuel consumption is carried out to determine passenger- or freight-specific values, based on their share of the total payload. The DIN EN 16258 standard has provided a guideline for the standardised calculation of greenhouse gas emissions for transport processes since 2013. For the allocation of payload, the Lufthansa Group adheres to this guideline. In parallel, the International Air Transport Association (IATA) has developed its own calculation proposals, which cover the distribution of fuel consumption between freight and passengers. These attribute a higher proportion of fuel consumption to passengers, due to the passenger-specific infrastructure. Although this method does not affect the overall flight efficiency, it does change the allocation between passengers and freight. We would welcome a standardised, internationally harmonised and accepted method.
When presenting specific consumption by route length, the following information should be considered: Long haul > 3,000 km, medium haul 800–3,000 km, short haul <800 km.

“[8] Paper
This includes all DINA4 printing paper made from virgin fibres. The count is performed as part of procurement, which is done centrally for the head administration office in CGN. It is not possible to allocate consumption to individual locations.”

“[9] Food waste of fresh food on board
This covers all fresh food on board that has to be disposed of because it was not sold. The catering service provider counts the fresh food that is disposed of. The amount is multiplied by the standard weights for each item.”

“[10] Vehicle fleet, ground fuels, and emissions (ground operations)
Vehicle fleet size: The number of available vehicles is listed as on 31 December.
The absolute fuel consumption is based on the actual amount of fuel used, which is documented by fuel card statements.
CO_2 emissions: The CO_2 emissions are calculated in line with the standardisation by the GLEC Framework (January 2022) and DIN EN 16258. CO_2 emission conversion factors according to the well-to-wake principle (WTW) are applied.”

“[11] Electricity, heating, cooling, and water consumption
All Eurowings buildings are rented from third parties. The property owners transmit the available consumption data for water, electricity, and heating energy each year. Some of the consumption in the crew rooms at airports is not separately determined by meters and is calculated using a conversion key.
Chillers generate the necessary cooling for the interior cooling of the buildings. This is done with electricity consumption. There are no separate meters for cooling provided for interiors.”

“[12] Waste
The waste data and key figures for waste in ground operations are compiled and assessed annually using the transfer certificates and invoices from the disposal companies.
Waste generated in the cabin is disposed of by the catering partner. This process cannot be influenced by Eurowings and data is available only to a limited extent or not at all. The goal is to increase the availability of this data in the future.”

“[13] Ground emissions
Ground emissions include carbon dioxide, nitrogen oxides, sulphur oxides, and fine particulate matter from buildings and ground vehicles. All electricity purchased by Eurowings is certified with the HKN NEU100 label and thereby represents 100% green electricity with an emission factor of 0 g/kWh. In the comprehensive overview, CO_2 and nitrogen oxide emissions from business trips are added to ground emissions. As it is not possible to determine nitrogen oxides directly for business trips, we use the proportional factor of nitrogen oxides for the CO_2 emissions from flight operations for the respective year and multiply it by the CO_2 value determined for business trips. District heating as well as diesel and petrol consumption are determined according to the following standard values:

District heating: CO_2e: 0.204 kg/kWh (Gemis 5.1); SO_2: 0.08 g/kWh; NO : 0.32 g/kWh; PM: 0.01 g/kWh (ProBas 2024)
Gasoline: CO_2e: 2.084 kg/l (DEFRA 2024); SO_2: 0.90 g/l; NO : 1.09 g/l; PM: 0.17 g/l (Gemis 5.1)
Diesel: CO_2e: 2.513 kg/l (DEFRA 2024); SO_2: 0.10 g/l; NO : 98.25 g/l; PM: 8.20 g/l (Gemis 5.1)“

“[14] Land consumption refers to the rented usable building area, not the area of land covered by the building footprint. The rented areas do not include any green space.”

DECLARATION OF VALIDITY

13. DECLARATION OF VALIDITY

EMAS Certificate + Declaration by the Environmental Auditor

INTECHNICA
FUTURE SECURE BUSINESS GROWTH

Erklärung des Umweltgutachters

zu den Begutachtungs- und Validierungstätigkeiten nach Anhang VII der Verordnung (EG) Nr. 1221/2009

sowie nach Änderungs-VO 2017/1505 und 2018/2026

Der Unterzeichnende, **Dr.-Ing. Reiner Beer** EMAS-Umweltgutachter mit der Registrierungsnummer DE-V-0007 akkreditiert oder zugelassen für den Bereich 51.10 und 62.02 (NACE-Code Rev. 2), bestätigt, begutachtet zu haben, ob die gesamte Organisation/ wie in der Umwelterklärung der Organisation

EUROWINGS AVIATION GMBH, EUROWINGS GMBH, EUROWINGS TECHNIK GMBH, EUROWINGS DIGITAL GMBH

51147 Köln, Waldstraße 249

mit den Standorten gem. Anhang

angegeben, alle Anforderungen der Verordnung (EG) Nr. 1221/2009 des Europäischen Parlaments und des Rates vom 25.11.2009 und Änderungs-VO 2017/1505 vom 28.08.2017 und 2018/2026 vom 19.12.2018 über die freiwillige Teilnahme von Organisationen an einem Gemeinschaftssystem für Umweltmanagement und Umweltbetriebsprüfung (EMAS) erfüllt.

Mit der Unterzeichnung dieser Erklärung wird bestätigt, dass

- die Begutachtung und Validierung in voller Übereinstimmung mit den Anforderungen der Verordnung (EG) Nr. 1221/2009 und Änderungs-VO 2017/1505 und 2018/2026 durchgeführt wurden,
- das Ergebnis der Begutachtung und Validierung bestätigt, dass keine Belege für die Nichteinhaltung der geltenden Umweltvorschriften vorliegen,
- die Daten und Angaben der konsolidierten Umwelterklärung der Organisation / des Standortes ein verlässliches, glaubhaftes und wahrheitsgetreues Bild sämtlicher Tätigkeiten der Organisation/ des Standortes innerhalb des in der Umwelterklärung angegebenen Bereichs geben.

Diese Erklärung kann nicht mit einer EMAS-Registrierung gleichgesetzt werden. Die EMAS-Registrierung kann nur durch eine zuständige Stelle gemäß der Verordnung (EG) Nr. 1221/2009 erfolgen. Diese Erklärung darf nicht als eigenständige Grundlage für die Unterrichtung der Öffentlichkeit verwendet werden.

Nürnberg, 02.06.2025

Dr.-Ing. Reiner Beer
Umweltgutachter

Intechnica Cert GmbH Umweltgutachterorganisation · Ostendstraße 181, 90482 Nürnberg
Telefon: +49 (0)911 51 33 11, Fax: +49 (0)911 51 33 99, Email: certification@intechnica.de, www.intechnica.eu

Eurowings

EMAS
VERIFIED
ENVIRONMENTAL
MANAGEMENT
DE-142-00089

Imprint

Herausgeber
Publisher
Eurowings GmbH
Terminal-Ring 1, Central Building East
Düsseldorf Airport
40474 Düsseldorf
Germany
May 2025

Contact
sustainability@eurowings.com