SUSTAINABLE DEVELOPMENT

MUC 23

MOVING OUR WORLD

Munich Airport

Integrated Report 2023

MANAGEMENT APPROACHES AND SUSTAINABILITY PROGRAM

The material topics for Munich Airport were determined based on a materiality analysis. Munich Airport's management approaches follow the requirements of the GRI Standards presented in the GRI Content Index.

External link
Internal link
Finances
Society
Infrastructure
Employees
Environment
Expertise

Environmental and climate protection

Greenhouse gas (CO_2) and air pollutant emissions

Examples

Climate protection measures, improvement of air quality

Management approaches

- The operation of an airport generates emissions. In addition to aircraft turbines, emitters also include aircraft handling processes on the ground, the generation of electricity, heating and cooling, as well as both public and non-public vehicle traffic. An ambitious CO_2 management program has been designed to reduce the environmental burden as far as possible. For this reason, we are embarking on a CO_2-free future and increasing the level of ambition of our climate protection efforts with our Net Zero strategy by 2035. In order to achieve net zero emissions, we will implement measures in four areas: energy supply, airport facilities, buildings, and the vehicle pool.
- The basis for all climate protection measures is a reliable and internationally standardized recording of all CO_2 emissions. The data is used to generate the so-called carbon footprint, in which the airport's greenhouse gas emissions are broken down in detail. The carbon footprint is determined in accordance with the internationally recognized «Greenhouse Gas Protocol».
- FMG is involved in projects with partners to promote the reduction of greenhouse gas emissions and the improvement of air quality. Long-lasting pollutants can accumulate in the environment. Continuous organic and honey monitoring with around 30 bee colonies around the airport provides information on air quality. We are a founding member of aireg. The organization is committed to the provision and use of renewable fuels in aviation. Every year, we participate in the CDP (Carbon Disclosure Project) ranking, which evaluates our climate strategy, climate data, as well as the quality and effectiveness of the measures implemented to reduce greenhouse gases. We also participate in the ACI (Airports Council International) certification system to obtain the ACA (Airport Carbon Accreditation) seal of approval.

Key figures

Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Energy consumption and emissions**
→ **Greenhouse gas emissions**
→ **Pollutant concentrations**
→ **Air pollutants**

One of the four key performance indicators is the company's carbon reductions.

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **Commitment to climate protection**
→ **Climate protection**
Net Zero
Air quality

Relation to business model

Sustainability program

Greenhouse gas (CO_2) and air pollutant emissions

Target	Measure	End of measure	Status in %
Climate strategy Net Zero 2035	Development of a dual climate strategy «Net Zero 2035»	2023 (extended)	100 (completed)
	Development of the «Net Zero 2035» communication campaign for the target group of travelers and visitors	2024	80
	Implementation of the regional project «Climate Forest MUC» through forest transformation at various locations in Bavaria with a project duration of 30 years	Ongoing	Ongoing
	Planning and implementation of suitable removal projects to achieve the Net Zero 2035 target	2035	5
	Lighting optimization in the P26, P44 and P51 parking garages	2025	5
	Conversion of the exterior lighting and apron lighting to LED technology	2024 (extended)	95
	Optimization of energy efficiency in existing facilities	Ongoing	Ongoing
	Green IT: Construction of a new Group data center	2025 (extended)	50
	Expansion of photovoltaic systems on building roofs and ground-mounted systems at and around the airport to 50 MWp	2029	4
	Operation of the vehicle fleet with regenerative energy supply	2030	37
	Use of air curtains to reduce heat losses	Ongoing	Ongoing
	Continuous, gradual replacement of old motors with newer, more efficient motors for the baggage handling system	Ongoing	Ongoing
Implementation of climate protection measures with cooperation partners	Equipping all positions near the building of Terminal 1 with pre-conditioned air (PCA)	Ongoing	Ongoing
	PCA systems: increase in utilization rate through adaptation of rules and regulations, process optimization and communication concept	Ongoing	Ongoing
	Marketing of the more climate-friendly «single engine taxiing» approach between runway and parking position through adaptation of the Aeronautical Information Publication and communication concept	2024	90

Sustainable use of resources

Examples
Circular economy, more economical water and energy consumption

Management approaches
- To keep our ecological footprint as small as possible, we follow a strategy of careful, economical, and responsible use of raw materials and resources. Flughafen München GmbH is authorized to conduct waste management independently on its site in accordance with the German Waste Management and Product Recycling Act. Absolute priority is given to preventing waste and returning recyclable materials to the material cycle. Our extremely dynamic energy, water, and waste policy and the associated rapid development of these markets call for a high degree of agility and flexibility. For this reason, our employees are constantly planning, implementing, and operating state-of-the-art, innovative technology. Most of the energy on the airport campus is used in the buildings. Energy-efficient optimization is therefore given high priority.
- Internal energy management provides advice and planning assistance with new buildings, renovations, and the provision of renewable energy and supports the corporate divisions in implementing measures to minimize energy consumption and increase energy efficiency. The principles of «reduce and recycle» are adhered to by Munich Airport's recycling management system.
  Munich Airport's water management efforts aim to influence the natural water balance as little as possible and to minimize any adverse effects caused by water management, drainage, and drinking and firefighting water supplies.
- We have also introduced a sustainable and effective environmental management system, which was certified for the first time in 2018 in accordance with DIN ISO 14001:2015 and the European EMAS Regulation 1221/2009.

Key figures
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→ **Drinking water**
→ **Process water**
→ **Wastewater**
→ **Waste**
→ **De-icing agent**
→ **Energy intensity coefficient**

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **Resources**
→ **Energy concept: photovoltaics and biogas as a solution strategy**

Relation to business model
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Sustainability program

Sustainable use of resources

Target	Measure	End of measure	Status in %
Plastic reduction	Development of a Group-wide concept for reducing the use of disposable plastics	2026 (extended)	15
Responsible use of drinking water	Increased use of service water instead of drinking water through the construction of service water wells	2028 (extended)	66
Establishment, operation, and ongoing development of the environmental management system in accordance with EMAS and DIN EN ISO 14001	Control of the environmental management system in accordance with EMAS and DIN EN ISO 14001 for Flughafen München GmbH, including the performance of internal and external audits, as well as recertification and revalidation every three years	Ongoing	Ongoing
Reduction of print products	Introduction of digital destination information (QR code), elimination of analog information stands	2023	100 (completed)

Biodiversity

Example

Promotion and preservation of the diversity of animal and plant species on the airport premises

Management approaches

- Sealing, expansion, and the operation of the airport have an almost unavoidable impact on the natural environment on and outside the airport campus. Munich Airport has always gone above and beyond the required legal obligations in order to offset its negative impact on flora and fauna as much as possible. The goal is to upgrade the compensation areas, as well as to preserve and increase biodiversity. The plant and animal species native to the natural fen are to be returned to their natural habitat or an adequate habitat.
- Of the almost 1,600 hectares of airport premises, around two thirds are green areas. Through targeted maintenance, species-rich vegetation and ecologically valuable habitats, especially for rare meadow breeders, have been created, notably within the security fence, on the green areas between the runways and their infrastructure facilities. In the peripheral zone (green belt), meaning in the immediate vicinity of the airport premises, the landscape was structured by grassland, bodies of water, and planting on an area of around 250 hectares. In this way, it was also possible to create protection against erosion and noise for the surrounding area, and the peripheral zone also acts as a «buffer» to integrate the airport into the landscape. We have also created around 520 hectares of compensation areas. This biotope network system is made up of corridors with extensive rough pastures, tall herbaceous meadows, wetlands, amphibian spawning waters, woodland plots, and scrub strips. The responsible approval authorities confirmed that they were produced and maintained in accordance with the requirements. With their structurally and species-rich vegetation, these areas contribute significantly to biodiversity in the region.
- Several divisions at FMG are responsible for long-term maintenance and nature conservation development. The animal and plant populations are systematically monitored for results. The 666-hectare airport meadows surrounding the two runways are located in the «Nördliches Erdinger Moos» European bird sanctuary and provide an ideal habitat for numerous rare bird species. Munich Airport is once again a participant in the Bavarian Environmental and Climate Pact, an agreement concluded between the Bavarian state government and Bavarian industry, for the period 2021 to March 2024. As part of «Blühpakt Bayern», or the Bavarian Blooming Pact, which was launched by the Bavarian Ministry of the Environment in response to the decline in the number of insects and biodiversity, Munich Airport was able to renew its award as a «Blühender Betrieb», or a blooming company, for an additional three years in 2022.

Key figures

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→ **Ecological areas outside the airport fence**

Targets and measures

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Links

→ **Biodiversity**
Nature conservation
Bird protection
Birdlife
Bavarian Flowering Pact
Bavarian Environmental Pact
→ **Low bird strike rate: special biotope management**

Relation to business model

Sustainability program

Biodiversity

Target	Measure	End of measure	Status in %
Raise awareness of internal and external stakeholders regarding the issue of wildlife trafficking	Collaboration with external stakeholders on campus to develop a wildlife trafficking awareness campaign	2026 (extended)	10
Maintaining and promoting biodiversity at and around the airport	Regular faunistic monitoring of the airport meadows, the airport campus, and parts of the «Nördliches Erdinger Moos» bird sanctuary	Ongoing	Ongoing
	Adapting the handling of the species present and their requirements to preserve the biodiversity of the airport meadows	Ongoing	Ongoing
	Continuous development of the environmental education program for external visitors and other interested parties, as well as representatives of the authorities (flyers, brochures, posters, etc.)	Ongoing	Ongoing
	Raising employee awareness of nature conservation issues (articles on the intranet, flyers, brochures, posters, etc.)	Ongoing	Ongoing
	Establishment and enhancement of insect-friendly biotopes (e.g. flowering meadows on the viewing hill, installation of insect hotels, tree planting in the Visitors Park)	Ongoing	Ongoing

Sustainable infrastructure and construction projects

Examples
Improvement of accessibility, sustainable construction

Management approaches
- Munich Airport has been developing successfully since it opened in 1992. The effects of airport operations are complex from an ecological, social, and economic perspective. For one, the airport campus is considered a job engine for Bavaria, while the air traffic connection is one of the most important location factors for international companies. However, as one of Europe's major intermodal transport hubs, Munich Airport is also dependent on attractive and customer-friendly landside connections. In the rail sector, the step-by-step concept for improving rail access developed jointly with the Bavarian State Ministry of Housing, Building, and Transport (StMB) was completed. For the further expansion of the airport and the airport buildings, it has been stipulated that the highest climate protection requirements must be met. By achieving a balance between needs-based expansion, maintenance, and optimization, we try to keep the impact on the environment as low as possible. Negative impacts, for example on the environment and the airport area, are reduced as far as possible through compensation and noise protection measures. In this area, we go beyond the legal requirements and industry standards.
- For new buildings, implementing life cycle cost analyses in the profitability analysis is an important step towards sustainable development. As a member of the German Sustainable Building Council (DGNB), FMG is also involved in the continued development of certification systems.
- An overview of all planned and ongoing construction projects can be found on the airport's website.

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links
→ **Numerous construction projects**
→ **Real Estate business unit**
Expansion of infrastructure

Relation to business model


Sustainability program

Sustainable infrastructure and construction projects

Target	Measure	End of measure	Status in %
Implementation of energy-efficient and sustainable building	Certification of selected sites according to the standards of the German Sustainable Building Council (DGNB), construction of selected buildings according to the Gold Standard	Ongoing	Ongoing
Demand-oriented and economic development of airport property	Further development of the LabCampus urban development concept and implementation of the LabCampus construction measures (Cluster 1)	2034 (extended)	25
	Procurement of affordable living space for employees in coordination with the municipalities of the region	2029 (extended)	10
Medium-term improvement of rail access	ÜFEX connection to and from Nuremberg	2024	80
	Review of the feasibility of additional regional connections, e.g. to the Allgäu, even before the second main line is put into operation	2025	10
	Development of a service concept for a long-distance train station at Munich Airport for local, regional, and long-distance transport as input for the update of the Deutschlandtakt timetable, which forms the basis for the needs assessment review for federal railways (in 2024) and the new Federal Transport Infrastructure Plan (starting from 2024).	2024 (extended)	80
Implementation of the electromobility strategy	Expansion of the charging infrastructure	2030	15

Employees and society

Occupational health and safety

Examples

Prevention of accidents at work, maintaining employability, as well as sports and health programs

Management approaches

- Prevention of work-related accidents, maintaining employability, sports and health programs. The Munich Airport Group is the second-largest employer in the region after Deutsche Lufthansa AG. The physical and mental health and well-being of our employees is of utmost importance to us. Furthermore, it is our duty as an employer to avoid hazards and accident risks in the workplace and to create healthy working conditions. We provide professional reintegration for employees returning from long-term illness.
- Occupational health and safety is ensured through active health management efforts, a broad range of fitness offerings, and targeted prevention programs. Together with the employer and the Works Council, the responsible Health Management, Occupational Health & Safety and Occupational Medicine departments undertake all necessary measures to prevent accidents at work, injuries, and work-related illnesses. The occupational health and safety policy was developed as part of the implementation of an occupational health and safety management system. The operational guidelines and processes are set out in the Occupational Health and Safety Management Manual, which defines the roles and responsibilities of all relevant stakeholders.

Regular occupational safety training and seminars are held for employees and managers. In addition, employees are instructed once a year on the workplace hazards. On top of that, we offer a web-based training course on the basics of Occupational Health & Safety.

- In the Annual Report «Shared Task, Shared Responsibility», Occupational Health & Safety, Occupational Medicine, and Health Management provide a comprehensive insight and overview of all topics. Compliance with occupational health and safety guidelines is guaranteed through company agreements.

Key figures

Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Occupational health and safety**
→ **Accident frequency**
→ **Sickness rate**
→ **Occupational illnesses**
→ **Employees with disabilities**

Munich Airport measures the performance of its managers using financial and non-financial indicators. One key performance indicator is the Lost Time Incident Frequency (LTIF), which is published annually in the integrated report.

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **Occupational health and safety: an important part of the company culture**
Occupational Health and Safety Management at Munich Airport: Annual Report

Relation to business model

Sustainability program

Occupational health and safety

Target	Measure	End of measure	Status in %
Maintaining the employability of personnel	Re-launch of Health Lounge AeroGround model project	2023	60
Use of automation processes to optimize occupational safety	Robotics: Development of a concept for the automation of processes in the ground handling service, in cooperation with the Fraunhofer Institute	2027 (extended)	40
Improvement of occupational safety	Implementation of a project to raise awareness of behavioral occupational safety	2024	20
	Procurement of occupational safety clothing and personal protective equipment including optimization of the procurement process	2024	10
	Procurement of security guard and operational clothing with reduced thermal load for the airport fire department	2023 (extended)	100 (completed)
Air conditioning at the southern fire station	Equipping of the offices, common areas, and break rooms at the southern fire station with air conditioning and sun protection	2025	10

Attractive employer

Examples

Variety of training and continuing education programs, diversity, competitive working conditions

Management approaches

- In order to cover our personnel requirements in terms of quantity and quality, it is very important to strengthen our attractiveness as an employer. Important elements include flexible and hybrid work arrangements, contemporary guiding principles of leadership, attractive benefits, and a broad range of athletic activities. Cultural change is being actively pursued in order to accommodate the different values of all generations. At the same time, the transfer of knowledge between experienced and new employees is encouraged and continuous training is seen as part of our corporate philosophy. Furthermore, various employee representative bodies ensure that all employees' voices are heard and that the company's development is driven forward in a participatory manner. We benefit from the diversity of our workforce, respecting the varying interests and needs and supporting them through shared leadership or cross-mentoring programs, for example. With high-quality training and development of the workforce and a strong employment volume, the airport as an employer increases the social and economic value creation in the region.
- With the AirportAcademy, which has been a training partner for 30 years, ongoing development opportunities for employees are firmly anchored in the company's attractiveness as an employer. It is a «certified educational institution» (AZAV) with a quality management system in accordance with DIN ISO 9001 and an official training institute of the ACI (Airport Council International). The guide «Reconciling Your Work and Family Life» provides all managers with an overview of the company's framework conditions and offers. Employee satisfaction is also assessed in regular employee surveys.
- Our annual Personnel and Social Report provides a transparent overview of internal developments.

Key figures

Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

- → **Employees**
- → **Employees with collective agreements**
- → **Age structure**
- → **Managers**
- → **Parental leave**
- → **Turnover**
- → **Hours of continuing education**
- → **Nationalities**
- → **Place of residence of employees**

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

- → **Employees and society**
- → **HR strategy: opportunities through change**
- **Munich Airport as an employer**

Relation to business model

Sustainability program

Attractive employer

Target	Measure	End of measure	Status in %
Strengthening of employer attractiveness – internally (employee retention) and externally (employer marketing)	Modernization and reorganization of the job evaluation and remuneration system for non-tariff employees	2025 (extended)	50
	Strengthening of image as an employer in the region and beyond, for example, through a corporate influencer program and career events	2025	60
	Optimization of employment conditions, for example, through relief measures and attractive employee benefits	2023	100 (completed)
	Further development of new development and talent formats and introduction of new learning management software	2024	30
	Development of regulations for employees transferred from the TVöD or from the restructuring collective agreement to the industry collective agreement	2024	10
	Establishment of a Group-wide transformation team to support and communicate change measures	Ongoing	Ongoing
Employee awareness for integration of sustainability in the workplace	Promotion of sustainable behavior among the workforce (e.g. formation of car pools or use of local public transport, reduction of paper consumption, waste separation)	2024	20
Increase in the quality of leadership	Continuation of regular management dialogues and derivation of corresponding measures for the targeted and needs-oriented development of competencies	Ongoing	Ongoing
	Development and establishment of a new qualification program for managers	2024 (extended)	100 (completed)
Qualitative and quantitative matching of employee requirements	Employee development through digital content and targeted development programs	2025 (extended)	50
	Expansion of recruiting activities for positions and areas of need (e.g. apprenticeships/dual studies, trainee programs, university interns, specialists)	2025	20
Stronger establishment and marketing of idea management	Use of a digital platform on which Group employees can make suggestions for improvements in all areas of the company	2023	100 (completed)
Reducing mental stress for employees	Introduction of a support program for prevention and immediate assistance in cases of mental distress	2024	50
Establishment of diversity management	Development of measures similar to the various aspects of diversity set out in the Diversity Charter	2025 (extended)	50
	Equal participation of all genders in executive positions in the Munich Airport Group in accordance with the targets set out in the Group Management Report	2025 (extended)	50

Commitment and value creation in the region

Examples

Cooperation and awarding of contracts in cities, municipalities, as well as social stakeholders in the region

Management approaches

- As a major employer and economic driver, Munich Airport is an important partner in the region.
  The value creation effects of the airport can be divided into direct, indirect, and induced effects due to consumption from income payments. The airport and the companies located on the campus generate value creation amounting to several billion euros every year. This benefits not only the region, but also the Free State of Bavaria. Effects resulting from the use of Munich Airport are referred to as catalytic effects or location effects. These include positive economic effects such as an increase in productivity and investment as well as a high level of employment and innovation, as well as negative effects such as high costs of rent due to a steady influx.
  There are numerous supply and service relationships between Munich Airport and the companies in the region. Around 3,500 suppliers work for the Munich Airport Group. The airport is mainly supplied by business partners from around the region — this ensures short transportation routes and reduces CO_2 emissions. Target group-oriented formats for exchange and information have been established along the entire value chain.
- The link between the airport and the region is the corporate division Communication and Politics, which maintains intensive contact with the communities, the citizens throughout the region, and representatives from politics, business, and administration at the European, national, state, and local level. By establishing a regional office, Munich Airport has created the basis for ongoing dialogue between the airport and neighboring towns and communities. We are committed to being a responsible neighbor and reliable partner to the region. We support around 700 projects in the areas of athletics, education, culture, social affairs, the environment, and media. Our involvement is divided into two types of support: sponsoring and donations (including donations in kind).
- In surveys, such as the acceptance study «The airport from the perspective of its neighbors», citizens rate the airport and the living situation in the region. Regular employment surveys provide details of the current structural data for Munich Airport.

Key figures

Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Determination of value creation**
→ **Distribution of value creation**
→ **Donations and sponsoring**
→ **Population development in neighboring municipalities**

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **Community engagement**
→ **Supply relationships: a focus on the region**
Expert reports & studies
Value creation for the airport and the region

Relation to business model

Sustainability program

Involvement and value creation in the region

Target	Measure	End of measure	Status in %
Ensuring good community relationships with the region	Direct contact with elected representatives; intensive dialogue with all important stakeholders in the region regarding current operations and developments at the airport, including selected formats (e.g. Inside Airport, information events for government officials and municipalities)	Ongoing	Ongoing
	Support and assistance for the airport's established dialogue platforms – the Communities Council and the Airport Forum	Ongoing	Ongoing
	Active involvement in the Communities Council and the IBA (International Building Exhibition) project group	Ongoing	Ongoing
	Analysis and communication of community relationships and acceptance of the airport (survey «The airport from the perspective of its neighbors»)	Ongoing	Ongoing
Integration of the airport within the region	Involvement in various regional committees within the fields of business and tourism, such as the IHK Regional Committee Erding/Freising (IHK-Regionalausschuss Erding/Freising), the Tourism Association of the Erding Region (Tourismusverein der Region Erding e.V.), and the European Metropolitan Region Munich (Europäische Metropolregion München e.V.)	Ongoing	Ongoing
	Cooperative location development, realization of joint projects between the Munich Airport Group and local authorities with the aim of achieving a win-win situation (e.g. optimization of cycle path connections)	Ongoing	Ongoing
	Development of a mobility strategy for and with the region within the framework of the Communities Council	Ongoing	Ongoing
The Munich Airport Group's assumption of social responsibility within the region	Support for initiatives and organizations with a charitable background in the areas of sports, social affairs, culture, education, and nature	Ongoing	Ongoing
	Regular review and updating of regional sponsorship priorities and evaluation tools	Ongoing	Ongoing
	Presence at sponsored events and regular contact with sponsoring partners	Ongoing	Ongoing
	Support for measures and regional cooperation projects that fall within the scope of CSR, for example, cooperation with the Freising Life Support Center (Lebenshilfe Freising) and the Erding and Freising community foundations	Ongoing	Ongoing
Demonstrating the airport's significance as an economic and locational factor in the region	Analysis and quantification of the airport's significance as an economic factor and qualitative description of the airport as a location factor (e.g. value added effects, employee survey, and representation of annual supply and service relationships)	Ongoing	Ongoing

Noise emissions and noise control

Examples
Noise protection for residents, low-noise flight procedures

Management approaches
- The reduction of aircraft noise and the extensive protection of local residents is a key concern for Munich Airport in its discussions with the community. Together with the airlines and air traffic control, we have been actively involved in all areas of noise control for years in order to satisfy residents' need for peace and quiet. The aim is to keep noise emissions at and around Munich Airport as low as possible.
- In recent decades, technical innovations in air traffic have led to great successes in noise reduction. Our aim is to achieve a balance between the interests of local residents and the environment, the requirements of the economy and people's mobility needs in accordance with the current legal situation (Aircraft Noise Protection Act and the Federal Immission Control Act FluLärmG). The relevant stakeholders of the Aircraft Noise Commission (including, for example, municipalities and authorities) meet regularly to advise the supervisory and safety authorities on measures to protect against aircraft noise and air pollution caused by aircraft. The government of Upper Bavaria has developed a noise action plan for Munich Airport with the participation of the public and the affected communities. This presents steps already implemented as well as future measures to reduce aircraft noise in the vicinity of the airport.
  By setting noise-differentiated landing charges, Munich Airport is able to influence the aircraft used so that airlines that use quiet aircraft benefit from a staggered, highly differentiated charging system.
- Stationary and mobile measurements permanently monitor aircraft noise in the region. The website «Fluglärmüberwachung-Online», or the Online Monitoring of Aircraft Noise, shows the current measured values and relevant traffic data in real time.

Key figures
Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Measured noise**
→ **Distribution of operating directions**
→ **Noise complaints**

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links
Current noise control values
→ **Noise control**

Relation to business model


Sustainability program

Noise emissions and noise control

Target	Measure	End of measure	Status in %
Reduction and monitoring of noise pollution from air traffic	Handling of the noise reduction measures falling within the responsibility of FMG as outlined in the noise action plan of the Government of Upper Bavaria for Munich Airport, in collaboration with the relevant stakeholders	Ongoing	Ongoing
	Aircraft noise monitoring (stationary and mobile) in the airport region using innovative technology and the associated communication in real time and online	Ongoing	Ongoing

Company and governance

Transparent and resilient corporate governance

Examples

Safeguarding interests, corporate governance, risk and opportunity management, sound business practices, and the responsible use of financial resources

Management approaches

- Future viability and sustainable development can only be ensured through dialogue with all societal stakeholders. We continuously communicate with our stakeholders – within the company or at the local, regional, national, and international level. Experts represent the company in the working groups of important industry and trade associations. This allows us to utilize synergy effects and look for solutions to the challenges posed by political and economic developments, for example.
- The compliance with national and international laws, government regulations, and official requirements, as well as internal company regulations is an integral part of our self-image. The compliance rules of procedure form the Group-wide basis for this. An annual compliance risk analysis complements our economic risk management efforts. The Code of Conduct plays a special role as a benchmark for our actions. It is based on Munich Airport's corporate culture and contains the guidelines and principles for conduct that is in line with our values and the law. Any incidents as well as solutions to eliminate violations, measures to minimize risks, and the compliance standard achieved are reported to the Executive Board at regular intervals and to the Supervisory Board in a standardized manner. In addition, the BKMS System® whistle-blower system is open to all employees, business partners, and other third parties who wish to report breaches of regulations. Compliance with guidelines is reviewed and ensured by the responsible managers and the internal audit department. In its annual integrated report, Munich Airport presents a holistic, transparent picture of our business activities and highlights all economic, environmental, and social aspects of the operation of the airport.
- Gaining and maintaining the trust of customers, partners, and employees is an important basis for sustainable, long-term corporate success. Active communication with our stakeholders, sound business practices, and the responsible use of financial resources are the foundation for the continued success of our business model. Munich Airport also invites all employees to actively codetermine the company's development. Surveys of employees, a strong works council, a representative body for young people and trainees, and a Council for Employees with Disabilities ensure that the different perspectives and needs of colleagues in the company are taken into account.

Key figures

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→ **Key figures**

Munich Airport measures the performance of its managers using financial and non-financial indicators. One key performance indicator is EBT, which is published annually as part of the integrated report.

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **Strategy**
→ **Sustainable corporate governance**
Sustainable corporate leadership
→ **Risk management system**
→ **Compliance management system**
Stakeholder dialogue

Relation to business model

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Sustainability program

Transparent and resilient corporate leadership

Target	Measure	End of measure	Status in %
Further development of the communication strategy	Implementation of a concept for communicating FMG's strategic realignment	2023 (extended)	100 (completed)
Creation of transparency and acceptance as well as ensuring a partnership-based dialogue with all stakeholder groups of the company	Continued development of stakeholder dialogue for statutory reporting requirements (Corporate Sustainability Reporting Directive)	2023 (extended)	100 (completed)
Fulfilling Munich Airport's corporate responsibility	Optimization of the sustainability dialogue with employees through the social intranet and the establishment of cross-departmental exchange formats (Sustainability Committee and Sustainability Board)	2023	100 (completed)
	Implementation of the «Environment Public Relations Concept», for example, the publication of measurement results in real-time (noise and air), transparent and comprehensive information on environmental topics via the website, and maintaining and updating the «Environmental Cycle Route»	Ongoing	Ongoing
	Participation as a cooperation partner in Munich's Climate Pact 3 (Klimapakt 3 Münchner Wirtschaft) with areas of focus on energy efficiency, climate-friendly electricity supply, heating and cooling, sustainable mobility, circular economy, biodiversity, greening of spaces, sustainable lifestyles, and digitalization	2025	30
Establishment of sustainable marketing	Step-by-step transformation of aviation marketing to «sustainable marketing» in the dimensions of event marketing, online marketing, social media, advertising media, print media	Ongoing	Ongoing
Identification of the role of the airport in dealing with human rights issues	Awareness-raising measures among the workforce, e.g. regarding topics like human trafficking	2026 (extended)	30
Integration of sustainability criteria in controlling	Stronger implementation of relevant non-financial KPIs in the existing controlling tools of group controlling	2024 (extended)	80
	Increased consideration of economic implications from sustainability effects in the context of economic feasibility studies (e.g. for construction projects)	2024	80
Implementation of the Sustainable Finance Strategy and its indications	Implementation of the EU Taxonomy Regulation, including examination of business activities for taxonomy eligibility and compliance, taking into account the technical assessment criteria	2026	20
	Review of advantageous financing options for investments related to the topic of sustainability, especially for process optimization, (energy-) efficiency improvements, and digitalization	Ongoing	Ongoing
Implementation of the corporate strategy	Implementation of the 2030+ strategy through a top-level portfolio of topics	Ongoing	Ongoing
	Quantification of Group targets and measures in the integrated strategy and planning process	Ongoing	Ongoing

Transparent and resilient corporate leadership

Target	Measure	End of measure	Status in %
Reduction in personnel costs in the Group	Reduction of time credits, utilization of short-time work, and implementation of the emergency collective agreement	2023	100 (completed)
Reinforcement of the Munich Airport Group's resilience to breakdowns in critical business processes	Implementation of a holistic business continuity management system within the Munich Airport Group	2024	50
Controls for non-financial opportunities and risks and derivation of appropriate measures	Introduction of systematic processes for the specific identification, prioritization, and control of non-financial opportunities and risks (e.g. climate-related risks)	Ongoing	Ongoing
	Investigations into the potential impact of extreme precipitation on Munich Airport, conducting calculations and expert assessments, as well as conceptual development of appropriate mitigation measures	2024 (extended)	75

Customer orientation and service quality

Example

Continued development of services and offerings, in particular for accessible travel and seamless travel

Management approaches

- The quality of our services is crucial to the satisfaction of our customers. Traveling can pose a major challenge, especially for passengers with limited mobility. The free Mobility Service at Munich Airport provides individual and extensive support. Munich Airport has already received several awards for the quality of its core aviation business and end customer business. The goal is to further increase the quality. FMG utilizes a continuous improvement process that incorporates extensive market analyses and benchmarks from other airports.
- Based on external requirements and the company's purpose, a medium to long-term target picture can be derived for the Group, which must then be ensured in its implementation. The continued development of the quality strategy also ensures the satisfaction of customer needs and thus long-term economic development. The exchange with business partners at the national and international level, among other factors, also ensures future-oriented development.
- The company's quality certification audits, such as the ACI, Airport Health Accreditation (AHA), and the Airport Service Quality (ASQ) survey, are important management elements and control instruments. We also take part in the annual global passenger survey conducted by the aviation research institute Skytrax.

Key figures

Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Dialogue management**

Munich Airport measures the performance of its managers using financial and non-financial indicators. One key performance indicator is the PEI (Passenger Experience Index), which is published in the integrated report.

Targets and measures

Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links

→ **5-star global involvement**
→ **5-star quality: top position despite challenges**
Accessible travel
Awards and honors

Relation to business model

Sustainability program

Customer orientation and service quality

Target	Measure	End of measure	Status in %
Assurance of quality and efficiency at the Munich Airport site	Integration of sustainability criteria in the selection of future tenants	2023	100 (completed)
	Improved occupancy of space and streamlining and optimization of the center management portfolio	Ongoing	Ongoing
Introduction of autonomous technologies	Concept development for autonomous passenger boarding bridges throughout the campus	2025 (extended)	10
	Concept development for autonomous driving on the apron	2024	30
	Concept development for the automated loading and unloading of baggage	2025	25
	Implementation of the check-in concept Stage 1: autonomous bag drops in Terminal 1	2023	100 (completed)
	Implementation of the check-in concept Stage 2: autonomous bag drops in Terminal 1	2026	5
	Introduction of indoor navigation for travelers	2024	45
Stronger integration of sustainability in the area of airport advertising	Reduction of waste products through greater use of digital advertising space, taking into account the high energy standard of digital advertising media	2026 (extended)	50
Sustainable product range for customers	Expansion of sustainable services in the airport's portfolio of products and services	2024 (extended)	20

Aviation development, safety and security

Examples
Strengthening of the function as a hub, security measures

Management approaches
- Munich's connection to the air traffic network makes a fundamental contribution to ensuring the city's competitiveness as a business location. The airport offers a considerable locational advantage for companies, as well as for the tourism sector. However, both national and international economic growth are crucial for an international air traffic hub.
- The goal is to satisfy the increased demand for high-quality air travel following the pandemic. The continued development of Munich Airport as a freight location strengthens our competitive position.
- Munich Airport's operating license is directly linked to EASA (European Aviation Safety Agency) certification. Under this certification, the airport must demonstrate constant compliance with relevant requirements to the responsible supervisory authority, the South Bavarian Aviation Office at the District Government of Upper Bavaria. We use our safety management system to continuously monitor ongoing flight and handling operations.

Key figures
Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

→ **Aviation traffic figures**
→ **Passenger numbers**
→ **Aircraft movements**
→ **Fire department deployment figures**
Air traffic indicators

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links
→ **Aviation**
→ **Security: a top priority at the airport**
Safety & Security

Relation to business model
€

Sustainability program

Aviation development, safety and security

Target	Measure	End of measure	Status in %
Ensuring smooth and efficient air traffic	Provision of an Airport Operations Plan (as a KPI dashboard)	2023 (extended)	100 (completed)
	Upgrade to more efficient passenger boarding bridges with presence detectors and LED lighting	2028 (extended)	5
	Concept development for optimized capacity planning, punctuality, and situational awareness of aircraft turnarounds	2023	100 (completed)
	FOD walk: Launch of a collaborative safety awareness campaign to prevent foreign objects and waste on the flight operation areas (FOD = Foreign Object Debris), thus reducing the risk of accidents and strategically contributing to a «clean apron»/«Clean Apron MUC». Incorporation of all relevant stakeholders. Scheduled to take place annually.	Ongoing	Ongoing
	Strategic expansion of the Foreign Object Debris (FOD) program to optimize FOD prevention, including through automation projects, thus reducing the amount of FOD and waste on the apron and flight operation areas.	Ongoing	Ongoing
	Prevention of possible bird collisions through sophisticated biotope management (for example, by taking into account the needs of rare meadow breeders /bird protection during renovations and construction work)	Ongoing	Ongoing

Digitalization

Examples
Professionalization of internal processes, digital offerings, protection of privacy and data security

Management approaches
- We process personal data in accordance with the applicable data protection law – in particular in accordance with the provisions of the General Data Protection Regulation (GDPR), the Federal Data Protection Act, and other applicable laws for the protection of personal data in order to protect people's privacy.
  New technological possibilities are changing Munich Airport's business model. This allows the digital transformation to be actively shaped together with employees and business customers. A program of measures was launched with the digital strategy. The achievement of the targets and measures set out therein is reviewed annually.
- Experts work together in five key areas (Data & Analytics, Aviation, Commercial & Marketing, Business & Workplace, Smart City) in a cross-divisional platform to promote communication and transparency on digital and innovation projects. In order to adequately meet its strategic importance, the Digital department was established.
- The aim is to create measurable added value for passengers, business partners, and employees.

Key figures
One non-financial key performance indicator is the PEI (Passenger Experience Index), which is published annually in the integrated report. Satisfaction with digital services is part of the Passenger Experience Index survey.

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links
→ **Digital at the airport**
Data protection
Cyber security

Relation to business model
€

Sustainability program

Digitalization

Target	Measure	End of measure	Status in %
Digitalization and personalization of the customer experience	Bundling of touch points for customers through airport and partner channels and optimization of personalized communication and offers	2026 (extended)	20
	Expansion of the language options for digital gate announcements in Terminal 1	2023	100 (completed)
	Automated answering of inquiries via various channels and assurance of round-the-clock service through a chatbot	2024	100 (completed)
Digitalization of the working environment	Introduction of modern office platforms (including Microsoft 365)	2024 (extended)	95
	Green IT: Use of a universal platform for different mobile radio services (Tetra radio)	2026	10
	Complete digitalization of the troubleshooting, repair, and maintenance of the technical systems on campus, including the use of digital devices	2024 (extended)	75
	Process digitization and optimization through workflow automation and process mining	Ongoing	Ongoing
	Further development of the Airport Community App, which provides relevant information in digital form for all target groups operating at the campus (regardless of whether they are airlines, airport operators, or ground handling OPS)	Ongoing	Ongoing
	Introduction of digital IoT and AI services to optimize energy and load management	2025	45
Establishment of efficient data management	Ongoing development of digital channels to make the flow of information for customers and employees more secure and efficient	2025 (extended)	10
	Establishment of group-wide data management for current and future use cases (data analytics, machine learning, rapid prototyping)	2025	20

Responsibility in the supply chain

Examples
Human and children's rights, fair pay, working conditions, environmental protection

Management approaches
- The Munich Airport Group, a sectoral contracting entity, operates in the field of «Ports and Airports». As such, it ensures its procurement policy is consistent with public procurement legislation. Where public contracts are involved, calls for tenders are issued on a Europe-wide basis in keeping with the binding regulations under procurement law. The Group normally puts contracts that are not subject to public procurement legislation to tender based on a formal, company-specific process.
  The Supply Chain Due Diligence Act (LkSG) came into force in January of 2023. The law regulates for the first time corporate responsibility for the observance of human rights and the protection of environmental concerns in the supply chain.
- In our Policy Statement on Respect for Human Rights, we commit to the highest sustainability standards, which include environmental and social responsibility as well as good corporate governance. The key principles and rules are summarized in the Munich Airport Group's Code of Conduct. It applies both within the Munich Airport Group and to third parties in a national and international context. The Munich Airport Group expects its suppliers/service providers and subcontractors, as well as other companies and individuals involved in the supply chain, to refrain from violating human rights, internationally recognized labor standards, and environmental obligations. To meet these expectations, the Group provides its direct suppliers with the appropriate training documentation.
- A series of processes and measures are designed to ensure compliance, identify any needs for action, and enable corrective intervention if necessary. For example, an interdisciplinary risk board with clearly defined structures and responsibilities ensures the compliance with due diligence obligations and their implementation within the Group. Regular training and risk analyses are carried out. In addition, an electronic whistle-blower system is available for reporting violations.

Key figures
Key figures are used for systematic controlling within the Group and are constantly monitored and evaluated. The relevant key figures are published annually in the integrated report.

Targets and measures
Targets and measures are presented in the strategic sustainability program. The program is brought up to date in annual target meetings with the respective departments and target achievement is assessed.

Links
→ **Procurement: diverse demand for goods and services**
Responsibility in the supply chain
Sustainable corporate leadership
Code of Conduct
Policy statement about the human rights strategy
Whistle-blower system

Relation to business model
€

Sustainability program

Responsibility in the supply chain

Target	Measure	End of measure	Status in %
Establishment of a sustainable supply chain	Implementation of the requirements of the German Supply Chain Due Diligence Act in the relevant procurement processes (integration of the Code of Conduct and the measures from risk management in the purchasing guideline and the purchase to pay process)	2023 (extended)	100 (completed)
Digitalization of supplier risk management with regard to sustainability issues	Introduction of a software application for the optimized and digitalized visualization of the requirements of the German Supply Chain Due Diligence Act (LkSG), the upcoming expanded German Supply Chain Act, and additional sustainability issues. Using AI-based media screening, risks in the supply chain can be identified and the necessary preventive and corrective measures can be implemented more quickly.	2025	20
Implementation of a measurable sustainability strategy in procurement	Development of an implementation concept and introduction of sustainability KPIs to implement a measurable sustainability strategy in procurement	2025	5
Greater emphasis on sustainability in supplier management	Integration of sustainability aspects in supplier management; both in the assessment process and in development discussions with strategic suppliers	2025 (extended)	40
Stronger consideration of sustainability in the procurement process	Introduction of mandatory targets for the consideration of sustainability aspects for defined product groups	2025 (extended)	20

SUSTAINABILITY INDICATORS

The totals are calculated including decimal places, which may occasionally lead to differences due to rounding.

Determination of value creation / GRI 201-1

IN € MILLION

Group	2023	2022	2021	2020
Revenue	1,373.3	1,188.0	601.3	579.7
+ Other income	43.2	45.3	79.2	44.5
Total revenue	1,416.50	1,233.30	680.5	624.2
+ Income from investments	1.3	–0.2	–2.6	–1.8
./. Non-personnel expenses	–557.3	–494.7	–307.2	–377.4
./. Depreciation	–202.8	–266.4	–239.9	–242.0
= Value generated	**657.7**	**472.0**	**130.8**	**3.0**

Distribution of value creation / GRI 201-1

IN € MILLION

Group	2023	2022	2021	2020
Employee	541.6	500.0	419.1	408.6
Lenders (netted)	75.9	37.4	48.0	27.8
Public sector	14.9	–6.6	–75.0	–112.0
Munich Airport Group	25.3	–58.8	–261.3	–321.4
= Value generated	**657.7**	**472.0**	**130.8**	**3.0**

The value generated calculation represents the difference between the service provided by the company and the value of the advance services required.

The distribution statement shows the proportions distributed to those involved in the value creation process – employees, the public sector, and lenders. Payments provided by FMG to the public sector include taxes. The interest on the loans to shareholders is included under the «Lenders» recipient group. The income from investments includes the results from companies valued using the equity method. The non-personnel expenses include the cost of materials and other expenses.

Traffic figures for aviation / GRI AO1, GRI AO2, GRI AO3 ✓

	2023	2022	2021	2020
Total passenger volume	**37,047,745**	**31,653,579**	**12,502,913**	**11,120,224**
Total commercial traffic[1]	37,037,070	31,642,738	12,496,432	11,112,773
Of which scheduled and charter traffic	37,017,627	31,618,832	12,474,794	11,094,096
Of which other commercial traffic[1]	19,443	23,906	21,638	18,677
Non-commercial traffic[1]	10,675	10,841	6,481	7,451
Total aircraft movements	**302,150**	**285,028**	**153,097**	**146,833**
Total commercial traffic[1]	294,342	276,821	146,675	140,480
Of which scheduled and charter traffic	283,515	263,807	134,193	130,622
Of which other commercial traffic[1]	10,827	13,014	12,482	9,858
General air traffic (non-commercial traffic)[1]	7,808	8,207	6,422	6,353
Seating capacity utilization (in %) scheduled and charter traffic	**81.3**	**77.5**	**65.2**	**59.6**
Cargo handling (cargo and airmail carried in t)	**284,346**	**266,779**	**173,307**	**150,928**
Traffic units (TU) of commercial traffic	**39,862,753**	**34,290,578**	**14,211,819**	**12,610,084**

[1] For term definitions see the Annual Statistics Report 2023, p. 19/20

Air traffic indicators

Passenger figures (commercial traffic only) / GRI AO1 ✓

	2023			2022			2021			2020		
	Total	**Domestic**	**International**	**Total**	**Domestic**	**International**	**Total**	**Domestic**	**International**	**Total**	**Domestic**	**International**
Total commercial traffic	**37,037,070**	**5,739,466**	**31,297,604**	**31,642,738**	**4,818,806**	**26,823,932**	**12,496,432**	**2,295,855**	**10,200,577**	**11,112,773**	**2,562,495**	**8,550,278**
Of which: arrivals	18,552,240	2,866,783	15,685,457	15,864,243	2,393,840	13,470,403	6,231,524	1,154,455	5,077,069	5,619,856	1,279,520	4,340,336
Of which: departures	18,467,051	2,868,493	15,598,558	15,758,549	2,417,903	13,340,646	6,247,229	1,133,472	5,113,757	5,480,948	1,278,159	4,202,789
Of which: transit passengers[1]	17,779	4,190	13,589	19,946	7,063	12,883	17,679	7,928	9,751	11,969	4,816	7,153
Number of O&D passengers[2] in millions	21.6	–	–	17.9	–	–	8.0	–	–	7.3	–	–
Number of transfer passengers in millions	15.4	–	–	13.7	–	–	4.5	–	–	3.8	–	–
Proportion of transfer passengers in %	**41**	**–**	**–**	**43**	**–**	**–**	**36**	**–**	**–**	**34**	**–**	**–**

[1] Transit passengers arrive at the airport and continue their journey on the same aircraft. They are counted only once when landing.
[2] O&D passengers begin or end their journey at the airport.

Aircraft movements[1] / GRI A02 ✓

	2023			2022			2021			2020		
	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures
Passenger flights, scheduled/charter	**279,468**	**139,603**	**139,865**	**259,449**	**129,642**	**129,807**	**129,737**	**64,801**	**64,936**	**126,013**	**63,067**	**62,946**
Domestic	54,985	27,478	27,507	51,254	25,600	25,654	28,537	14,253	14,284	35,202	17,595	17,607
International	224,483	112,125	112,358	208,195	104,042	104,153	101,200	50,548	50,652	90,811	45,472	45,339
Cargo flights, scheduled/charter	**3,591**	**1,779**	**1,812**	**3,882**	**1,935**	**1,947**	**4,038**	**1,962**	**2,076**	**4,398**	**2,185**	**2,213**
Domestic	1,172	543	629	1,201	682	519	1,301	748	553	1,463	758	705
International	2,419	1,236	1,183	2,681	1,253	1,428	2,737	1,214	1,523	2,935	1,427	1,508
Airmail flights, scheduled/charter	**456**	**228**	**228**	**476**	**243**	**233**	**418**	**209**	**209**	**211**	**106**	**105**
Domestic	456	228	228	476	243	233	418	209	209	211	106	105
International	0	0	0	0	0	0	0	0	0	0	0	0
General air traffic	**18,635**	**9,464**	**9,171**	**21,221**	**10,704**	**10,517**	**18,904**	**9,572**	**9,332**	**16,211**	**8,029**	**8,182**
Domestic	7,597	3,897	3,700	8,695	4,531	4,164	7,845	3,999	3,846	7,251	3,655	3,596
International	11,038	5,567	5,471	12,526	6,173	6,353	11,059	5,573	5,486	8,960	4,374	4,586
Total	**302,150**	**151,074**	**151,076**	**285,028**	**142,524**	**142,504**	**153,097**	**76,544**	**76,553**	**146,833**	**73,387**	**73,446**

[1] Military flights are not included.

Detailed information on night-time aircraft movements can be found in the monthly immissions reports

Detailed information on the night-flight curfew

Cargo tonnage (commercial handling) / GRI A03 ✓

IN T

	2023			2022			2021			2020		
	Cargo handled	Incoming cargo	Outgoing cargo	Cargo handled	Incoming cargo	Outgoing cargo	Cargo handled	Incoming cargo	Outgoing cargo	Cargo handled	Incoming cargo	Outgoing cargo
Cargo-only flights	60,588	28,585	32,003	63,300	33,484	29,816	72,194	33,282	38,912	50,253	22,813	27,440
Ancillary cargo on passenger aircraft	216,611	90,202	126,409	195,557	79,969	115,588	94,519	39,255	55,264	94,860	41,471	53,389
Total comprehensive income	**277,199**	**118,786**	**158,413**	**258,857**	**113,453**	**145,404**	**166,713**	**72,537**	**94,176**	**145,113**	**64,284**	**80,829**

Dialogue management: Dealing with feedback professionally / GRI 2-29

The central dialogue management team quickly responds to, categorizes, and analyzes all customer feedback on a case-by-case basis. This office deals with constructive criticism and positive feedback, in addition to complaints. In order to develop optimal process solutions for air travelers and to derive improvements where necessary, the departments, authorities, and system partners involved in the passenger experience chain are closely connected.

Dialog management recorded a total of 3,277 complaints in 2023. This is 44.23% more than in 2022. This increase is due to a number of irregularities in air traffic following the corona pandemic. In addition, there were industry-wide strikes that affected flight operations and services. In 2023, Munich Airport recorded a relative complaint rate of 89 complaints per million passengers handled. A large proportion of the complaints were related to airlines and baggage handling. The focus was on baggage reclaiming, tracing, and delivery. In addition, extreme weather conditions made handling on the apron and in the terminal area more difficult.

Dialogue management / GRI 2-29 ✓

NUMBER OF ENTRIES

	2023	2022	2021	2020
Total complaints	**3,277**	**2,272**	**829**	**932**
Number of complaints on key issues				
Airline	662	501	116	98
Airport facility	628	368	186	171
Baggage collection	838	274	40	64
Parking	107	66	49	59
Passport control	72	71	29	59
Security checks	271	261	106	112
Passenger transportation	104	96	96	65
Airport service	234	159	62	134
Lost & Found[1)]	152	230		
Other	209	246	145	170

[1)] First recorded in 2022

Donations and sponsoring / GRI 413-1

PROPORTION OF TOTAL BUDGET IN %

	2023	2022	2021	2020
Sport	55	77	60	55
Social welfare	8	4	18	21
Education	6	2	13	10
Culture	32	17	7	13
Environment	0	0	2	1

Sponsoring

Fire department deployment figures / GRI 417-1

	2023	2022	2021	2020
Total alarms	**8,631**	**8,111**	**5,028**	**4,915**
Number of deployments	**2,961**	**3,257**	**1,511**	**1,985**
Of which: technical support jobs	1,528	1,623	1,140	1,262
Of which: security monitoring jobs[1]	704	915	296	629
Of which: firefighting deployments	729	719	75	94
Other firefighting deployments[2]	**4,188**	**3,609**	**3,006**	**387**
Rescue service deployments	**1,482**	**1,245**	**511**	**473**

[1] On-call service provided by the fire department on site at certain particularly dangerous events in order to be able to intervene immediately if these dangers arise.
[2] Other activities and deployments of the fire department («other» Alarm labels/assessments)

As part of Corporate Security, the Airport Rescue and Firefighting service on the premises of the airport in Munich is responsible for fire safety and for technical assistance in the area of fire safety in aircraft and buildings. With qualified rescue service personnel and its own rescue vehicles, it provides 24-hour emergency assistance for passengers, visitors, and employees, and performs safety monitoring for work and events involving a fire hazard. From the two fire stations, the 50 firefighters present – the number of personnel on 24-hour duty as authorized by the licensing authority – can reach any point on the flight operations grounds within 180 seconds, thus meeting the prescribed response times for aircraft fire protection. The extinguishing capacity for aircraft fire protection meets the requirements of the highest category 10 of the International Civil Aviation Organization (ICAO) for each runway.

Number of employees / GRI 2-7, GRI 2-8, GRI 405-1 ✓

	2023						2022		2021		2020	
Group	**Women**	**Proportion in %[3]**	**Men**	**Proportion in %[3]**	**Total**	**Proportion in %[3]**	**Total**	**Proportion in %[3]**	**Total**	**Proportion in %[3]**	**Total**	**Proportion in %[3]**
Total number of employees[1]	**2,623**	**31.37**	**5,739**	**68.63**	**8,362**	**100.00**	**8,610**	**100.00**	**8,693**	**100.00**	**9,338**	**100.00**
Full- and part-time employees[1]												
Full-time	1,587	18.98	5,184	61.99	6,771	80.97	6,675	77.53	6,852	78.82	7,307	78.25
Part-time	1,036	12.39	555	6.64	1,591	19.03	1,935	22.47	1,841	21.18	2,031	21.75
Employment contracts[1]												
Temporary	227	2.71	298	3.56	525	6.28	497	5.77	184	2.12	327	3.50
Permanent	2,396	28.65	5,441	65.07	7,837	93.72	8,113	94.23	8,509	97.88	9,011	96.50
Other employees	**154**		**358**		**512**		**437**		**508**		**476**	
Apprentices	97		139		236		230		247		287	
Interns	6		11		17		7		2		9	
Workers in minor employment	50		115		165		163		136		180	
Temporary workers	1		93		94		37		123		0	
Total employees including other employees of the Group	**2,777**		**6,097**		**8,874**		**9,047**		**9,201**		**9,814**	
Employees on the airport campus[2]					**33,330**		**33,330**		**38,090**		**38,090**	

[1] Reporting date: December 31: Figures exclude apprentices, workers in minor employment, temporary workers, and interns
[2] The figure is not part of the independent external auditor's report. Includes all companies based at Munich Airport. The employee survey at Munich Airport is carried out every three years. The figures were last compiled in 2021. Further information on the data collection can be found here.
[3] All percentages are based on the total number of employees as per [1].

Number of employees / GRI 2-7, GRI 2-8, GRI 405-1 ✓

	2023						2022		2021		2020	
FMG	Women	Proportion in %[3]	Men	Proportion in %[3]	Total	Proportion in %[3]	Total	Proportion in %[3]	Total	Proportion in %[3]	Total	Proportion in %[3]
Total number of employees[1]	**1,053**	**25.88**	**3,016**	**74.12**	**4,069**	**100.00**	**3,990**	**100.00**	**4,176**	**100.00**	**4,364**	**100.00**
Full- and part-time employees[1]												
Full-time	603	14.82	2,730	67.09	3,333	81.91	3,287	82.38	3,519	84.27	3,671	84.12
Part-time	450	11.06	286	7.03	736	18.09	703	17.62	657	15.73	693	15.88
Employment contracts[1]												
Temporary	12	0.29	41	1.01	53	1.30	43	1.08	45	2.12	45	1.03
Permanent	1,041	25.58	2,975	73.11	4,016	98.70	3,947	98.92	4,131	97.88	4,319	98.97
Other employees	**40**		**112**		**152**		**156**		**172**		**208**	
Apprentices	34		93		127		135		149		170	
Interns	3		5		8		4				8	
Workers in minor employment	3		14		17		17		23		30	
Temporary workers	0		0		0		0				0	
Total employees including other employees of FMG	**1,093**		**3,128**		**4,221**		**4,146**		**4,348**		**4,572**	

[1] Reporting date: December 31: Figures exclude apprentices, workers in minor employment, temporary workers, and interns
[2] The figure is not part of the independent external auditor's report. Includes all companies based at Munich Airport. The employee survey at Munich Airport is carried out every three years. The figures were last compiled in 2021. Further information on the data collection can be found ↗ **here**.
[3] All percentages are based on the total number of employees as per [1].

By selling its 100% stake in AAS Berlin GmbH (formerly AeroGround Berlin GmbH), the Group ceased its activities at the Berlin airport effective December 31, 2022. The subsidiary InfoGate Information Systems GmbH was merged with Flughafen München GmbH with effect from January 1, 2023. The Occupational Medicine division was integrated into Flughafen München GmbH on January 1, 2023, prior to the sale of the shares in MediCare Flughafen München Medizinisches Zentrum GmbH.

Number of employees covered by collective bargaining agreements / GRI 2-30, GRI 202-1 ✓

	2023		2022		2021		2020	
	Group	FMG	Group	FMG	Group[2]	FMG	Group[2]	FMG
Total number of employees covered by collective bargaining agreements	8,082	4,112	8,211	4,048	8,565	4,336	9,270	4,554
Proportion of total employees in %[1]	91.08	97.42	90.76	97.64	93.06	99.72	94.46	99.61

[1] All percentages are based on the total number of employees including apprentices, workers in minor employment, temporary workers, and interns.
[2] Without amd.sigma

Ratio of total annual remuneration[1] / GRI 2-21

	2023	2022[2]
Indicates the ratio between the total annual remuneration of the highest-paid person in the organization and the median level of total annual remuneration of all employees (excluding the highest-paid person)	11.16	12.31
Indicates the ratio of the percentage increase in total annual remuneration of the highest-paid person in the organization to the mean percentage increase in total annual remuneration for all employees (excluding the highest-paid person)	0.12	0.01

[1] All FMG employees, excluding apprentices, workers in minor employment, temporary workers, and interns. The total compensation of part-time employees shall be extrapolated to a full-time equivalent in each case. Total compensation includes: base salary, bonuses, stock and option packages.
[2] Key figures influenced by short-time working leading up to mid-2022. Key figure collected for the first time in 2022 and so far only for FMG.

Age structure of employees / GRI 405-1 ✓

Group	2023 Women	2023 Proportion in %[2]	2023 Men	2023 Proportion in %[2]	2023 Total	2023 Proportion in %[2]	2022 Total	2022 Proportion in %[2]	2021 Total	2021 Proportion in %[2]	2020 Total	2020 Proportion in %[2]
Age structure of employees[1]												
Under 30 years	395	4.72	730	8.73	1,125	13.45	997	11.58	952	10.95	1,222	13.09
30 to 50 years	1,390	16.62	2,665	31.87	4,055	48.49	4,313	50.09	4,440	51.08	4,800	51.40
Over 50 years	838	10.02	2,344	28.03	3,182	38.05	3,300	38.33	3,301	37.97	3,316	35.51
Total	**2,623**	**31.37**	**5,739**	**68.63**	**8,362**	**100.00**	**8,610**	**100.00**	**8,693**	**100.00**	**9,338**	**100.00**

FMG	2023 Women	2023 Proportion in %[2]	2023 Men	2023 Proportion in %[2]	2023 Total	2023 Proportion in %[2]	2022 Total	2022 Proportion in %[2]	2021 Total	2021 Proportion in %[2]	2020 Total	2020 Proportion in %[2]
Age structure of employees[1]												
Under 30 years	164	4.03	257	6.32	421	10.35	376	9.42	407	9.75	442	10.13
30 to 50 years	576	14.16	1,184	29.10	1,760	43.25	1,704	42.71	1,809	43.32	1,948	44.64
Over 50 years	313	7.69	1,575	38.71	1,888	46.40	1,910	47.87	1,960	46.93	1,974	45.23
Total	**1,053**	**25.88**	**3,016**	**74.12**	**4,069**	**100.00**	**3,990**	**100.00**	**4,176**	**100.00**	**4,364**	**100.00**

[1] Reporting date: December 31: Figures exclude apprentices, workers in minor employment, temporary workers, and interns
[2] All percentages are based on the total number of employees as per [1].

Managers / GRI 405-1 ✓

Group	2023		2022		2021		2020	
		Proportion in %		Proportion in %		Proportion in %		Proportion in %
Total managers[1), 2)]	**689**	**8.24**	**683**	**7.93**	**703**	**8.09**	**688**	**7.37**
Women	174	25.25	173	25.33	168	23.90	151	1.62
Men	515	74.75	510	74.67	535	76.10	537	5.76
Age structure of managers[2)]								
Under 30 years	18	2.61	17	2.49	9	1.28	14	2.03
30 to 50 years	344	49.93	370	54.17	364	51.78	357	51.89
Over 50 years	327	47.46	296	43.34	330	46.94	317	46.08

FMG	2023		2022		2021		2020	
		Proportion in %		Proportion in %		Proportion in %		Proportion in %
Total managers[1), 2)]	**396**	**9.73**	**382**	**9.57**	**401**	**9.6**	**421**	**9.65**
Women	74	18.69	65	17.02	62	15.46	64	1.47
Men	322	81.31	317	82.98	339	84.54	357	8.18
Age structure of managers[2)]								
Under 30 years	5	1.26	5	1.31	4	1.00	7	1.66
30 to 50 years	169	42.68	157	41.10	153	38.15	169	40.14
Over 50 years	222	56.06	220	57.59	244	60.85	245	58.19

[1)] Reporting date December 31: Proportion of managers in the total number of employees
[2)] Percentage of managers in relation to the total number of employees

Parental leave taken[1] / GRI 401-2, GRI 401-3 ✓

	2023			2022	2021	2020
Group	**Women**	**Men**	**Total**	**Total**	**Total**	**Total**
Parental leave taken	97	149	246	297	276	297
Part-time parental leave taken	15	3	18	10	7	12

	2023			2022	2021	2020
FMG	**Women**	**Men**	**Total**	**Total**	**Total**	**Total**
Parental leave taken	54	82	136	149	136	144
Part-time parental leave taken	6	3	9	4	2	8

[1] Number of employees who have taken parental leave in the year under review. Figures exclude apprentices, workers in minor employment, temporary workers, and interns.

Due to the significant expense of evaluating the various parental leave models manually (duration of parental leave, split of parental leave), the number of individuals returning from parental leave, along with the number of resignations following parental leave, have not been recorded.

Employee turnover: Starters and departures[1] / GRI 401-1 ✓

Group	2023 Starters	2023 Proportion in %[2]	2023 Leavers	2023 Proportion in %[2]	2022 Starters	2022 Leavers	2021 Starters	2021 Leavers	2020 Starters	2020 Leavers
Starters and leavers by age group										
Under 30 years	678	45.78	339	30.82	518	332	120	261	271	345
30 to 50 years	620	41.86	440	40.00	499	476	82	378	221	403
Over 50 years	183	12.36	321	29.18	154	347	29	377	62	234
Total	**1,481**	**100.00**	**1,100**	**100.00**	**1,171**	**1,155**	**231**	**1,016**	**554**	**982**
Starters and leavers by gender										
Male	1,009	68.13	715	65.00	716	704	142	690	350	571
Female	472	31.87	385	35.00	455	451	89	326	204	411

FMG	2023 Starters	2023 Proportion in %[2]	2023 Leavers	2023 Proportion in %[2]	2022 Starters	2022 Leavers	2021 Starters	2021 Leavers	2020 Starters	2020 Leavers
Starters and leavers by age group										
Under 30 years	155	43.54	59	20.56	83	64	51	60	94	40
30 to 50 years	156	43.82	62	21.60	52	86	22	87	68	40
Over 50 years	45	12.64	166	57.84	15	155	10	204	15	81
Total	**356**	**100.00**	**287**	**100.00**	**150**	**305**	**83**	**351**	**177**	**161**
Starters and leavers by gender										
Male	243	68.26	226	78.75	115	214	56	275	122	111
Female	113	31.74	61	21.25	35	91	27	76	55	50

[1] Including apprentices, excluding workers in minor employment, temporary workers, and interns
[2] All percentages are based on the total number of starters/leavers among the employees as per [1].

Turnover rate[1] / GRI 401-1 ✓

IN %

	2023		2022		2021		2020	
	Group	FMG	Group	FMG	Group	FMG	Group	FMG
Turnover rate	13.05	6.96	13.00	7.35	11.00	7.94	9.93	3.55

[1] The turnover rate reflects the ratio of leavers to the number of employees (as an annual average including apprentices and excluding workers in minor employment, temporary workers, and interns).

Average hours of continuing education[1] / GRI 404-1 ✓

	2023		2022		2021		2020	
	Group[3]	FMG	Group[4]	FMG	Group[5]	FMG	Group[6]	FMG
Average number of hours of continuing education per employee	**20.8**	**7.1**	**13.8**	**6.2**	**7.6**	**3.5**	**11.9**	**5.2**
Per male employee	21.2	7.9	14.2	7.1	8.2	3.9	12.9	5.8
Per female employee	19.9	4.5	13.0	3.6	6.4	2.2	9.8	3.3
Per manager[2]	10.0	6.8	6.1	3.9	5.4	3.0	6.6	4.8
Per employee (without managerial responsibilities)	21.8	7.1	14.5	6.4	7.8	3.5	12.3	5.2

[1] Average number of hours spent on professional development, training, and seminars that are recorded in a time management system (excluding aviation security courses) per employee (excluding apprentices, employees in minor employment, temporary workers, and interns) as of the reporting date, December 31.
[2] First- to fourth-tier managers excluding the Executive Board of FMG
[3] Excluding amd.sigma, Munich Airport NJ LLC, MAI US Holding, and MUCReal
[4] Excluding AE Berlin, amd.sigma, Munich Airport NJ LLC, MAI US Holding, MUCReal, LabCampus, and Infogate
[5] Excluding MucReal, LabCampus, amd.sigma, Munich Airport NJ LLC, and Infogate
[6] Excluding MucReal, LabCampus, amd.sigma, and Munich Airport NJ LLC

Occupational Health and Safety / GRI 403-9 ✓

Group[1]	2023 Total	2022 Total	2021 Total	2020 Total
Accident statistics[2]				
Reportable occupational accidents	155	225	107	94
Number of resulting days of absence[3]	3,536	4,646	2,264	2,508
Fatal occupational accidents	0	0	0	0
Rate per 1,000 workers[4]	21.6	32.74	13.38	10.85

FMG[1], [6]	2023 Total	2022 Total	2021 Total	2020 Total
Accident statistics[2]				
Reportable occupational accidents	20	51	20	16
Number of resulting days of absence[3]	438	1,497	446	298
Fatal occupational accidents	0	0	0	0
Rate per 1,000 workers[4]	6.91	17.53	6.44	5

[1] Including apprentices, workers in minor employment, temporary workers, and interns
[2] Injuries requiring first aid are also recorded as soon as the employee reports to the medical service at Munich Airport.
[3] These are calendar days and are counted from the day following the work accident. Only days of absence that are in the same calendar year as the accident event are reported.
[4] Reportable occupational accidents × 1,000 / annual average actual employee capacity (EC)
[5] Ground handling employees working for Flughafen München GmbH, employees of AeroGround and temporary workers employed by AeroGround
[6] Figures exclude «Ground handling employees working for Flughafen München GmbH». Those workers are reported as «employees of Munich ground handling».

Occupational Health and Safety / GRI 403-9 ✓

Employees in ground handling Munich[5]	2023 Total	2022 Total	2021 Total	2020 Total
Accident statistics[2]				
Reportable occupational accidents	78	61	24	33
Number of resulting days of absence[3]	2,151	1,030	583	816
Fatal occupational accidents	0	0	0	0
Rate per 1,000 workers[4]	46.67	57.01	12.02	15.30

Workers in ground handling Berlin	2023 Total	2022 Total	2021 Total	2020 Total
Accident statistics[2]				
Reportable occupational accidents	0	44	34	21
Number of resulting days of absence[3]	0	555	493	838
Fatal occupational accidents	0	0	0	0
Rate per 1,000 workers[4]	0	108.93	88.31	48.24

By selling its 100% stake in AAS Berlin GmbH (formerly AeroGround Berlin GmbH), the Group ceased its activities at the Berlin airport effective December 31, 2022.

[1] Including apprentices, workers in minor employment, temporary workers, and interns
[2] Injuries requiring first aid are also recorded as soon as the employee reports to the medical service at Munich Airport.
[3] These are calendar days and are counted from the day following the work accident. Only days of absence that are in the same calendar year as the accident event are reported.
[4] Reportable occupational accidents × 1,000 / annual average actual employee capacity (EC)
[5] Ground handling employees working for Flughafen München GmbH, employees of AeroGround and temporary workers employed by AeroGround
[6] Figures exclude «Ground handling employees working for Flughafen München GmbH». Those workers are reported as «employees of Munich ground handling».

Aircraft handling on the ground is a critical area for occupational health and safety measures at Munich Airport. This is why FMG publishes additional accident statistics for employees who work in aircraft handling.

Lost Time Incident Frequency[1] / GRI 403-9 ✓

	2023	2022	2021	2020
Total (FMG + AeroGround)[2]	**16.00**	**19.93**	**11.09**	**11.45**
FMG	5.40	8.15	7.10	4.60
AeroGround[2]	35.63	42.03	22.62	30.54

[1] Occupational accidents (with lost time ≥ 1 day) × 1,000,000 / hours worked
[2] Including ground handling employees at the Munich site working for FMG, employees and temporary workers employed by AeroGround

Sick leave[1] / GRI 403-10 ✓

IN %

	2023			2022	2021	2020
Group	**Women**	**Men**	**Total[3]**	**Total[3]**	**Total[4]**	**Total[4]**
Sickness rate[2]	7.86	10.16	9.5	10.21	5.98	6.00

	2023			2022	2021	2020
FMG	**Women**	**Men**	**Total**	**Total**	**Total**	**Total**
Sickness rate[2]	5.94	9.12	8.39	9.10	5.67	6.39

[1] Including apprentices, excluding workers in minor employment, temporary workers, and interns
[2] Sick hours in relation to the target hours to be worked, including rehabilitation, sanatorium, curative procedures, etc.; related to the number of total employees as per [1].
[3] Excluding amd.sigma, Munich Airport NJ LLC, MAI US Holding, and MUCReal
[4] Excluding Eurotrade, amd.sigma, MUCReal, LabCampus, MAI US Holding, Munich Airport NJLLC, and InfoGate

Occupational illnesses[1] / GRI 403-10 ✓

IN %

	2023		2022		2021		2020	
	Group	FMG	Group	FMG	Group[2]	FMG	Group[2]	FMG
Reported occupational illnesses	4	0	6	4	6	1	3	3

[1] Including apprentices, excluding workers in minor employment, temporary workers, and interns
[2] Without amd.sigma

Employment of people with disabilities / GRI 405-1 ✓

	2023[3]	2022[3]	2021	2020
Group	Total	Total	Total	Total
Number of employees with limiting disabilities[1]	648	653	737	711
Employees with severe disabilities in %[2]	7.47	7.33	7.67	7.06

	2023	2022	2021	2020
FMG	Total	Total	Total	Total
Number of employees with limiting disabilities[1]	439	451	496	485
Employees with severe disabilities in %[2]	10.60	10.81	11.15	11.60

[1] Degree of disability of at least 30 within the meaning of equality under Book IX of the German Social Security Code
[2] Proportion of employees with disabilities according to [1] in relation to the average total number of employees, including apprentices, including workers in minor employment, excluding temporary workers and excluding interns
[3] Excluding Munich Airport NJ LLC and MAI US Holding

Nationalities[1] / GRI 405-1 ✓

Group	2023 Women	2023 Men	2023 Total	2023 Proportion in %[2]	2022 Total	2022 Proportion in %[2]	2021 Total	2021 Proportion in %[2]	2020 Total	2020 Proportion in %[2]
Employee nationalities, overall picture	**2,720**	**5,878**	**8,598**		**8,840**		**8,940**		**9,625**	
German nationals	2,065	4,111	6,176	71.83	6,590	74.55	6,879	76.95	7,306	75.91
Foreign nationals	655	1,767	2,422	28.17	2,250	25.45	2,061	23.05	2,319	24.09
Most represented groups of foreign nationals										
Turkey	44	420	464	5.40	501	5.67	486	5.44	525	5.45
Croatia	33	179	212	2.47	209	2.36	201	2.25	251	2.61
Bosnia and Herzegovina	29	162	191	2.22	107	1.21	77	0.86	85	0.88
Romania	78	89	167	1.94	142	1.61	130	1.45	170	1.77
USA	58	85	143	1.66	95	1.07	42	0.47	25	0.26
Hungary	16	108	124	1.44	129	1.46	141	1.58	156	1.62
Italy	29	93	122	1.42	123	1.39	119	1.33	129	1.34

FMG	2023 Women	2023 Men	2023 Total	2023 Proportion in %[2]	2022 Total	2022 Proportion in %[2]	2021 Total	2021 Proportion in %[2]	2020 Total	2020 Proportion in %[2]
Employee nationalities, overall picture	**1,087**	**3,109**	**4,196**		**4,125**		**4,325**		**4,534**	
German nationals	1,036	2,752	3,788	90.28	3,722	90.23	3,936	91.01	4,103	90.49
Foreign nationals	51	357	408	9.72	403	9.77	389	8.99	431	9.51
Most represented groups of foreign nationals										
Turkey	2	222	224	5.34	224	5.43	221	5.11	243	5.36
Austria	9	19	28	0.67	28	0.68	28	0.65	31	0.68
Italy	5	16	21	0.50	20	0.48	20	0.46	24	0.53
Kosovo	1	20	21	0.50	21	0.51	22	0.51	22	0.49
Greece	3	15	18	0.43	17	0.41	18	0.42	19	0.42

[1] Reporting date December 31: Total number of employees including apprentices, excluding workers in minor employment, temporary workers, and interns
[2] All percentages are based on the total number of employees as per [1].

Place of residence of employees[1] / GRI 2-7, GRI 401-1 ✓

	2023				2022		2021		2020	
Administrative districts	**Group**	**Proportion in %[2]**	**FMG**	**Proportion in %[2]**	**Group**	**FMG**	**Group**	**FMG**	**Group**	**FMG**
Freising	2,365	27.51	871	20.76	2,223	835	2,197	854	2,395	906
Erding	1,614	18.77	959	22.86	1,639	977	1,740	1,030	1,874	1,076
Munich	1,677	19.50	732	17.45	1,631	705	1,669	759	1,796	802
Landshut	1,208	14.05	651	15.51	1,199	658	1,246	692	1,315	720
Pfaffenhofen	166	1.93	98	2.34	159	91	154	91	146	95
Ebersberg	156	1.81	97	2.31	149	92	159	97	184	113
Other districts[3]	1,412	16.42	788	18.78	1,840	767	1,775	802	1,915	822
Total	**8,598**	**100.00**	**4,196**	**100.00**	**8,840**	**4,125**	**8,940**	**4,325**	**9,625**	**4,534**

[1] Number of total employees, including apprentices, excluding workers in minor employment, temporary workers and interns who resided in the respective county on the reporting date of December 31.
[2] All percentages are based on the total number of employees as per [1].
[3] The item «Berlin and surrounding area», which was reported separately until the 2021 reporting year, has been part of «Other districts» since the 2022 reporting year.

Energy consumption and emissions[1] / GRI 301-1, GRI 302-1, GRI 302-2, GRI 302-4, GRI 302-5, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-5 ✓

	2023			2022			2021			2020		
	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)
Scope 1: Direct energy consumption/emissions												
Natural gas gas/diesel generating sets CHPP	0	0	0	0	0	0	0	0	0	0	0	0
Natural gas gas/gasoline generating sets CHPP	1,248,966	346,935	70,417	1,230,410	341,781	68,829	1,125,086	312,524	62,375	1,151,294	319,804	63,863
Natural gas boiler plant	36,173	10,048	2,039	12,534	3,482	701	40,619	11,283	2,252	23,494	6,526	1,303
Fuel oil gas/diesel gensets	18,529	5,147	1,373	31,177	8,660	2,310	28,393	7,887	2,104	29,488	8,191	2,185
Fuel oil boiler plant	4,421	1,228	328	10,551	2,931	782	32	9	2	89	25	7
LPG	0	0	0	0	0	0	1,084	301	70	374	104	24
Fuel oil emergency gensets	1,991	553	147	2,242	623	166	2,257	627	167	1,382	384	102
Natural gas consumption EFM[2]	7,528	2,091	424	6,956	1,932	389	5,612	1,559	311	3,758	1,044	208
Diesel and gasoline	120,676	33,521	8,957	113,863	31,629	8,436	78,325	21,757	5,794	77,220	21,450	5,715
Total Scope 1	**1,438,283**	**399,523**	**83,686**	**1,407,733**	**391,037**	**81,613**	**1,281,409**	**355,947**	**73,075**	**1,287,100**	**357,528**	**73,407**
Scope 2: Indirect energy consumption/ emissions[3]												
External electricity procurement[4]	111,283	30,912	14,189	133,834	37,176	16,172	110,668	30,741	11,682	119,084	33,079	14,125
Procured district heating[5]	87,365	24,268	1,292	101,459	28,183	1,501	123,768	34,380	1,465	99,162	27,545	1,173
Procured natural gas[6]	60,610	16,836	3,417	55,412	15,392	3,100	17,147	4,763	951	23,742	6,595	1,317

[1] Flughafen München GmbH calculates its carbon footprint on the basis of the WRI/WBCSD Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. For Scope 3, FMG reports on – for its business model – relevant sub-sectors. In addition, the principle of operational control is applied. To the extent that they are subject to emissions trading, conversion parameters, such as heat values and emission factors in particular, are determined according to the provisions of the German Emissions Trading Authority (DEHSt). Other conversion parameters are based on the latest publications from the German Federal Environment Agency (UBA).
[2] EFM: Company for de-icing and aircraft towing at Munich Airport; associated company
[3] Reporting of Scope 2 emissions in accordance with the GHG Protocol Scope 2 Guidance (2015) using the «location-based» method based on BRD domestic consumption, electricity mix, and district heating mix emission factors. Net Scope 2 emissions with specific emission factors are 0.459 kg/kWh for electricity and 0.213 kg/kWh for district heating from fossil fuels (Source: UBA). The total district heating supply consists of fossil district heating and district heating from biomass with the specific emission factor of 0 kg/kWh.
[4] 59% electricity from renewable energies (as of 2022 according to Section 42 of the German Energy Act (EnWG)).
[5] Estimated value based on previous years: 75% of the district heating is obtained from biomass directly from the biomass heating plant at the Zolling site.
[6] Procurement of natural gas only (reference year 2023), no renewable energies
[7] Including quantities transmitted to external companies
[8] Total volume of electricity transmitted to external companies and subsidiaries. The specific emission factor used for purchased power was also used here.
[9] For physical reasons, it does not make sense to combine heat, cold, and electricity into energy units. The sum can only be used to draw very limited conclusions.
[10] No information, since values cannot be reported for all items.
[11] Sum of Scope 1, Scope 2, and the subtotal Scope 3a
[12] Emission calculation with the LASPORT model for the classification of flight operations according to the LTO cycle
[13] Scope 2 emissions taking into account GHG Protocol Scope 2 Guidance (2015) according to the «Market based» method result in 2,313 t CO_2. The basis is the emission factor of 0.156 kg/kWhel for the electricity procured by Munich Airport. The other emission factors from [3] remain unchanged.
[14] Calculated from aircraft movements using the LASPORT model, subsequently taking into account the APU emissions prevented by using PCA systems.
[15] Feeder traffic includes road traffic caused by air travelers, visitors, and employees in the airport area calculated according to ACA.
[16] Since 2021, the calculation has taken into account an increased radius: CO_2 emissions from the arrival and departure traffic of employees, passengers, and people traveling at the airport. In the case of employees, only the route to the workplace at the Munich Airport campus is considered.
[17] Errors identified during the review of the data were subsequently corrected.

Energy consumption and emissions[1] / GRI 301-1, GRI 302-1, GRI 302-2, GRI 302-4, GRI 302-5, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-5 ✓

	2023			2022			2021			2020		
	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)
Power supplied to outside companies[7]	–166,976	–46,382	–21,289	–170,622	–47,395	–20,617	–143,266	–39,796	–15,123	–155,203	–43,112	–18,409
Heat supplied to outside companies	–80,971	–22,492	–1,292	–77,427	–21,508	–1,501	–80,147	–22,263	–3,773	–74,833	–20,787	–3,640
Electricity for cooling supplied to outside companies	–1,066	–296	–136	–696	–193	–84	–397[17]	–110[17]	–42	–348[17]	–97[17]	–41
Natural gas supplied to outside companies	–60,610	–16,836	–3,417	–55,412	–15,392	–3,100	–17,147	–4,763	–951	–23,742	–6,595	–1,317
Purchased power transmitted[8]	110,145	30,596	14,043	109,808	30,502	13,269	104,742	29,095	11,056	116,824	32,451	13,857
Total Scope 2[13]	[9]	[9]	**6,806**	[9]	[9]	**8,739**	[9]	[9]	**5,265**	[9]	[9]	**7,065**
Scope 3: Other indirect energy consumption/ emissions (by third parties)	[10]	[10]		[10]	[10]					[10]	[10]	
Electrical energy purchases of outside companies	–	–	21,289	–	–	20,617	–	–	15,123	–	–	18,409
Heat purchases of outside companies	–	–	1,292	–	–	1,501	–	–	3,773	–	–	3,640
Electricity for cooling purchases of outside companies	–	–	136	–	–	84	–	–	42	–	–	41
Natural gas purchases of outside companies	–	–	3,417	–	–	3,100	–	–	951	–	–	1,317
Fuel for outside companies	–	–	5,604	–	–	6,446	–	–	4,261	–	–	4,080
Subtotal	[9]	[9]	**31,739**	[9]	[9]	**31,747**	[9]	[9]	**24,149**	[9]	[9]	**27,487**

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[8] Total volume of electricity transmitted to external companies and subsidiaries. The specific emission factor used for purchased power was also used here.
[9] For physical reasons, it does not make sense to combine heat, cold, and electricity into energy units. The sum can only be used to draw very limited conclusions.
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[11] Sum of Scope 1, Scope 2, and the subtotal Scope 3a
[12] Emission calculation with the LASPORT model for the classification of flight operations according to the LTO cycle
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[17] Errors identified during the review of the data were subsequently corrected.

Energy consumption and emissions[1] / GRI 301-1, GRI 302-1, GRI 302-2, GRI 302-4, GRI 302-5, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-5 ✓

	2023			2022			2021			2020		
	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)	GJ	MWh	CO_2 (t)
Total CO_2 emissions that can be influenced annually[11]												
Air traffic (LTO cycle)[12]	–	–		–	–		–	–		–	–	
Take-off	–	–	41,846	–	–	37,296	–	–	17,720	–	–	18,279
Climb out	–	–	71,290	–	–	63,596	–	–	30,950	–	–	31,747
Idle (taxiing on the apron)	–	–	121,389	–	–	105,454	–	–	52,622	–	–	49,752
Approach	–	–	85,884	–	–	77,417	–	–	37,713	–	–	38,009
APU (PCA taken into account)[14]	–	–	13,076	–	–	9,947	–	–	8,033	–	–	8,928
Engine test runs	–	–	455	–	–	349	–	–	430	–	–	502
Feeder traffic[15]	–	–	67,246[16]	–	–	55,783[16]	–	–	27,389[16]	–	–	9,300
Total Scope 3			**432,925**			**381,589**			**199,006**			**184,004**

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[15] Feeder traffic includes road traffic caused by air travelers, visitors, and employees in the airport area calculated according to ACA.
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Power generation and procurement / GRI 305-1, GRI 305-2, GRI 305-5

With its own block heat and power plant, which is operated on the basis of the cogeneration of heat and power, Munich Airport generates around 80% of its total electricity requirements as an energy supplier. The missing portion of approximately 20% is procured and supplied to affiliated companies and third-party customers on campus. The cogeneration plant converts used natural gas into electrical energy and usable heat at the same time. Around 80% of the waste heat generated during power generation covers the heating requirements of the airport campus. The airport procures the remaining required heating from the Freising district heating supply. Since the beginning of 2011, around half of the district heating procured has come from renewable biomass.

Energy intensity coefficient[1] / GRI 302-3 ✓

IN KWH/PASSENGER

	2023	2022	2021	2020
Power consumption	5.50	6.52	14.89[2]	17.23[2]

[1] Electricity consumption is responsible for more than 2/3 of the total CO_2 emissions caused by energy-induced processes at the airport (excluding airline emissions). Furthermore, it is only very slightly linked to weather conditions. For this reason, the power consumption per passenger is the most meaningful key figure for energy consumption at Munich Airport.
[2] The calculation of the energy intensity coefficient is related to the number of passengers. Due to the sharp drop in passenger numbers from 2020 onwards, the value differs greatly from pre-pandemic figures.

The total electricity consumption of all buildings and facilities, including the electricity transmitted through the grid, is counted as electricity consumption on the airport campus. This includes power consumption by FMG and its subsidiaries, consumption by external companies, and all losses at the low-voltage level.

Greenhouse gas emissions intensity[1] / GRI 305-4 ✓

IN KG/PASSENGER

	2023	2022	2021	2020[2,3]
CO_2 emissions (Scope 1, 2, 3a)	–	–	8.20	9.71
CO_2 emissions (Scope 1, 2)	2.44	2.85	–	–

[1] The measurement of CO_2 emissions per passenger allows a physically meaningful addition of the various forms of primary and secondary energy used at the airport in relation to passenger figures. Up to and including 2021, the calculation of the key figure is made up of CO_2 emissions from Scope 1, 2, and 3a (including the consumption of electricity, heating, cooling, natural gas, and fuels from external companies). Starting in 2022 – according to the current CO_2 strategy – the CO_2 emissions of Scope 1 and 2 will be added together without Scope 3a.
[2] The calculation of the intensity of greenhouse gas emissions is related to the number of passengers. Due to the sharp drop in passenger numbers from 2020 onwards, the value differs greatly from pre-pandemic figures.
[3] Errors identified during the review of the data were subsequently corrected.

Other greenhouse gas emissions / GRI 305-3, GRI 305-5, GRI 305-6 ✓

CH_4, N_2O, AND FLUORINATED GREENHOUSE GASES IN CO_2 EQUIVALENTS[1] (T)

	2023	2022	2021	2020
LTO cycle	3,231	2,862	1,402	1,389
Feeder traffic[2]	429	417	317	277
APU[3]	270	242	127	127
Engine test run[4]	5	4	4	5
Small appliances in buildings and central cooling plants	62	715	173	346
Mobile systems (vehicles)	28.8	119	113	140

[1] Conversion of emissions into CO_2 equivalents in accordance with the IPCC Fourth Assessment Report
[2] Feeder traffic includes the traffic caused by passengers, visitors, and commuters in the area around the airport.
[3] Calculated from aircraft movements using the LASPORT model, taking into account the remaining APU period when using PCA
[4] Estimated figures

Glossary

De-icing agents used[1] / GRI 301-1, GRI 301-2, GRI 301-3, GRI A06 ✓

	2022/2023	2021/2022	2020/2021	2019/2020
De-icer for areas of operation in t[2]	2,780	2,558	1,829	1,287
Aircraft de-icing agent (Safewing Type I) in m³	**3,256**	**2,563**	**1,283**	**1,859**
Aircraft de-icing agent (Safewing Type IV) in m³	**536**	**455**	**187**	**241**
Recycling rate of Type I de-icing agent used in %	**69**	**68**	**68**	**55**
Number of days of winter operations	37	56	67	52

[1] The values refer to the period from October 1, 2022 to September 30, 2023. The data basis is seasonal conditional. Year-on-year fluctuations are associated with the weather conditions in winter.
[2] Liquid potassium formate and sodium formate granules

The company responsible for de-icing operations at Munich Airport, Gesellschaft für Enteisen und Flugzeugschleppen am Flughafen München mbH (EFM), uses glycol-based de-icing agent that is sprayed onto aircraft by de-icing vehicles. The low-viscosity Type I de-icing fluid is mixed with water in a 55:45 ratio, heated, and applied to the aircraft at a temperature of 85 degrees Celsius. Type IV de-icing agent contains thickeners, making it viscous. It is sprayed on cold and undiluted.

EFM

Measured pollutant concentrations[1] / GRI 305-7, GRI A05 ✓

IN µG/M³

	Current legal annual limit value	2023	2022	2021	2020
NO_2 concentration (nitrogen dioxide)	40	13	14	12	14
SO_2 concentration (sulphur dioxide)[2]	20	2	2	2	2
PM_{10} concentration (particulate matter)	40	10	11	10	11
$PM_{2.5}$ concentration	25	6	8	8	8

[1] In the course of the publication of the integrated report, NO_2, SO_2, and PM_{10}, as well as $PM_{2.5}$ are collected. Other pollutant concentrations can be found in the ↗ **current web reports on the air quality measurements**.
[2] Statutory threshold to protect vegetation, only strictly applicable away from urban centers and transport facilities, but complied with here as well as the immission value specified by the administrative regulation TA Luft for protecting human health (50 µg/m³).

Air pollutants emitted / GRI 305-7, GRI A05 ✓

IN T

	2023	2022	2021	2020
NO_x Aviation (LTO cycle)	1,197.1	1,085.6	455.1	466.9
NO_x Feeder traffic[1]	47.2	51.6	41.4	39.9
SO_x Aviation (LTO cycle)	81.2	72.0	35.2	34.9
SO_x Feeder traffic[1]	0.2	0.2	0.1	0.1
PM_{10} Aviation (LTO cycle)	10.2	8.9	4.4	4.1
PM_{10} Feeder traffic[1]	0.5	0.6	0.5	0.5

[1] Feeder traffic includes the traffic caused by passengers, visitors, and commuters in the area around the airport.

Total drinking water consumption[1),2)] / GRI 303-3, GRI 303-5

1 m³ corresponds to 0.001 mega liters	2023	2022	2021	2020
Water purchased from utility in m³	891,705	811,648	562,510	563,789
Water consumption per 1,000 traffic units in m³	22.4	23.7	39.6	44.7

1) Includes all companies on the campus.
2) Derivation of values: Water metering in m³ measured at the drinking water feed points (transfer points water metering shafts 1 to 4) from the Moosrain Water Utility Company to Munich Airport

Total process water extraction for cooling in the power centers, west and east / GRI 303-1, GRI 303-3, GRI 303-5

1 m³ corresponds to 0.001 mega liters	2023	2022	2021	2020
Quantity of the quaternary groundwater extracted in m³	232,530	218,527	200,064	198,729

Total wastewater input[1),2)] / GRI 303-2, GRI 306-1, GRI 303-4

1 m³ corresponds to 0.001 mega liters	2023	2022	2021	2020
Total wastewater discharged from Munich Airport to the sewage plant of the Erdinger Moos Water Utility Company in m³	2,387,073	2,051,259	1,955,165	1,610,406
Wastewater consumption per 1,000 traffic units in m³	59.9	59.8	137.6	127.7

1) Includes all companies on the campus.
2) The wastewater discharged to the sewage plant of the Erdinger Moos Water Utility Company is composed of domestic wastewater, de-icing water, and rainwater.

Water sources / GRI 303-1, GRI 303-3

Munich Airport sources its drinking water from the Moosrain Water Utility Company, which extracts it from the tertiary strata via seven water wells at depths of between 94 and 160 meters. The water wells are located in water protection areas at «Obere Point» (surface area 33 ha) and «Oberdingermoos» (surface area 36 ha) in the Oberding municipality.

moosrain.de/verband/daten-fakten

Water samples / GRI 303-1, GRI 303-2, GRI A04

According to the provisions of the planning approval decision, Munich Airport must examine the existing water management conditions in the area surrounding the airport. Securing evidence regarding the quantity (water level) and quality (water quality) of groundwater is particularly important. FMG measures the water levels of more than 300 groundwater and 17 surface water measurement points on an ongoing basis. Water quality is determined at 18 groundwater measuring points and eleven surface water measuring points. All implemented measures are summarized in a report, evaluated, and presented to the water authorities.

azv-em.de

Waste[1] / GRI 306-2, GRI 306-4

IN T

	2023	2022	2021	2020	Point of disposal and recycling
Recycling					
Paper, cardboard, and cartons from buildings	725	683	380	516	Sorting facilities, recycling firms in Eitting, Schwaig, Moosburg, and Munich (recycling)
Mixed reclaimed materials/waste for recycling from buildings	1,871	1,670	944	1,122	
Top soil (humus-rich excavated material)[2]	125	175	0	31	
Mixed glass	204	300	133	107	
Wood	407	471	435	369	
Bulk waste	545	364	302	417	
Scrap metal containing electronic waste	719	322	260	378	
Other recyclables[3]	277	213	98	113	
Total recycling	**4,873**	**4,198**	**2,552**	**3,053**	
Recycling					
Material recycling	**2,971**	**2,338**	**2,115**	**2,277**	
Building site waste (waste from demolition, conversion, renovation and maintenance measures)	1,988	1,017	1,167	1,784	Recycling/disposal specialist (material recycling/pit filling)
Hazardous waste without ADR[4] (only FMG portion, without mineral wool and without hazardous goods)	175	268	48	45	Recycling/disposal firms (material recycling) or hazardous waste specialists in Munich and Ebenhausen (secondary fuels)
ADR (= hazardous goods)[4]	223	324	134	191	
Other waste[5]	585	729	765	257	
Energy recycling	**2,295**	**2,184**	**1,181**	**1,133**	
Food waste	872	800	440	518	Biogas plant (energy recovery)
Waste for disposal/prohibited liquids (terminal areas)	46	66	40	39	
Waste for disposal/Commercial waste from buildings	1,377	1,318	700	576	
Total recycling	**5,266**	**4,522**	**3,296**	**3,410**	

[1] All quantities refer exclusively to the disposal processes organized by FMG waste management. This refers to the total amount shown (2023: 10,330 t).
[2] The topsoil comes from various construction activities.
[3] Foil, lightweight packaging, for example
[4] ADR (Accord européen relatif au transport international des marchandises dangereuses par route): European Agreement on the International Carriage of Dangerous Goods by Road
[5] For example, runway wear, refuse, old tires, rubber waste

Waste[1] / GRI 306-2, GRI 306-4

IN T

	2023	2022	2021	2020	Point of disposal and recycling
Landfill waste					
Insulators (mineral wool)	191	309	116	163	
Total landfill	**191**	**309**	**116**	**163**	GSB hazardous waste landfill Schweinfurt
Total amount	**10,330**	**9,029**	**5,964**	**6,626**	

[1] All quantities refer exclusively to the disposal processes organized by FMG waste management. This refers to the total amount shown (2023: 10,330 t).
[2] The topsoil comes from various construction activities.
[3] Foil, lightweight packaging, for example
[4] ADR (Accord européen relatif au transport international des marchandises dangereuses par route): European Agreement on the International Carriage of Dangerous Goods by Road
[5] For example, runway wear, refuse, old tires, rubber waste

Hazardous goods: Inspections and training / GRI 306-4

Munich Airport generates water and environmentally hazardous substances as a result of its operations, which have to be transported away and then declared as hazardous goods. The vehicles used for transporting hazardous goods were inspected to verify that they are in proper condition and are roadworthy and safe to operate. Employee training on the handling of hazardous goods is held at regular intervals in accordance with legal regulations. In the reporting year 2023, a total of 223 tons of waste (previous year: 324 tons) was transported as declared hazardous goods for disposal.

Waste management / GRI 306-2

Flughafen München GmbH is authorized to conduct waste management independently on its site in accordance with the German Circular Economy Act. Avoidance of waste is an absolute priority. However, waste and scrap products are generated from the operation of the airport – across the board – and these are then collected where they occur in various separating systems, handed over to certified specialist businesses close to the airport, prepared in sorting plants, and then recycled. The small proportion of residual waste that cannot be recycled is converted by the Munich North power plant into district heating and power.

The majority of waste and scrap material is generated by affiliated companies as well as the companies and airlines based at the airport. The prerequisite for successful resource conservation is therefore a disposal concept tailored to the individual waste producer – from waste generation to recycling and disposal. FMG therefore provides regular information on current waste topics, gives tips on environmentally friendly conduct, and is on hand to offer advice.

Waste from aircraft / GRI 306-2

The waste (Category 1 material) from aircraft cabin interior cleaning and catering is disposed of or energetically recycled by a specialized waste disposal company at the waste incineration plant/power plant Munich North in accordance with EU Regulation 1069/2009 (Regulation on animal by-products).

The disposal service is not the responsibility of FMG and is conducted by a specialist contractor working on behalf of the Erding animal carcass disposal association.

Measured noise[1] / GRI A07 ✓

IN DB(A)

Measurement point (nearest municipality)	2023 Night[2]	2023 Day	2022 Night[2]	2022 Day	2021 Night[2]	2021 Day	2020 Night[2]	2020 Day
Brandstadl (municipality of Hallbergmoos)	48	56	48	57	42	55	44	55
Pallhausen (town of Freising)	43	52	44	53	40	49	42	50
Reisen (municipality of Eitting)	47	54	46	54	42	52	41	49
Viehlaßmoos (municipality of Berglern)	45	54	45	52	40	49	40	49

[1] Continuous sound level Leq3 of the six busiest months at four aircraft noise measuring points, each located at the main departure directions, in dB(A)
[2] Time period: 10 PM to 6 AM

Noise protection regulations

The main regulations for the aviation industry are defined on an international level. Under the umbrella organization that is the United Nations, the ICAO (International Civil Aviation Organization) deals with the issue of reducing aircraft noise. The EU has similar objectives: With the «Flightpath 2050», it aims to reduce noise emissions by 65% by 2050, starting from 2000. But the airport operator can also help to regulate this area. Loud aircraft without certificates to ICAO Annex 16 are not allowed to take off from or land at Munich Airport. The regulations are even stricter at night: The night-flight curfew at Munich Airport is based on a noise quota that takes into account the number of movements as well as the type and size of the aircraft. In 2023, the utilization rate of the noise quota was 50%. The permissible continuous sound level of 50 dB(A) was not exceeded at any intersection of the flight corridors with the boundary line of the designated day/night protected area.

Noise protection

Distribution of operations directions between west and east

	2023				2022				2021				2020			
	Westward		Eastward		Westward		Eastward		Westward		Eastward		Westward		Eastward	
Total aircraft movements[1], absolute	194,153		105,537		172,227		109,752		96,748		53,577		103,782		40,399	
Total aircraft movements[1], in %	65		35		61		39		64		36		72		28	
	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings	Take-offs	Landings
North runway	42,554	54,831	25,205	24,198	37,205	48,440	27,233	24,028	21,806	24,452	12,894	11,304	18,451	31,846	15,693	6,432
South runway	54,530	42,238	27,556	28,578	48,953	37,629	27,582	30,909	26,582	23,908	13,887	15,492	33,489	19,996	4,486	13,788

[1] Excluding helicopters
Source: WebReporting January to December 2023

The assignment of the operating direction, in other words the decision as to whether the aircraft take off and land to the east or west, depends on the wind. This is because take-offs and landings usually take place against the prevailing wind direction. In addition, when using the runway system, FMG makes sure that the north and south runways are utilized as equally as possible.

Noise complaints[1] / GRI 2-26 ✓

	2023	2022	2021	2020
Noise complaints received via telephone	64	77	58	51
Complainants	42	58	47	28
Complaints received in writing	78	364	78	33
Complainants	33	43	42	27

[1] There is no direct correlation between the number of aircraft movements and the number of noise complaints. There are many personal factors that can affect the way we handle complaints.

Population development in the neighboring municipalities[1] / GRI A07 ✓

Number of residents	2022	2021	2020
Freising (District of Freising)	49,339	48,582	48,872
Marzling (District of Freising)	3,306	3,237	3,250
Oberding (District of Erding)	6,726	6,472	6,455
Hallbergmoos (District of Freising)	11,662	11,337	11,148

[1] The reporting date is December 31 in each case.
Source: Bavarian State Office for Statistics and Data Processing (Bayerisches Landesamt für Statistik und Datenverarbeitung) – Statistical atlas of Bavaria (Statistikatlas Bayern). Figures for 2023 were not available at the time of going to press.

Airport «Green spaces»[1] outside the airport fence / GRI 304-3 ✓

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	2023	2022	2021	2020
«Green spaces» in total	**877**	**875**	**872**	**864**
Compensatory and replacement measures, zone III[2]	524	522	519	499
Airport periphery, zone II	250	250	250	250
Ecological land reserve for future expansion measures	103	103	103	115

[1] Zone II and III green areas that are developed or maintained by Flughafen München GmbH in accordance with nature conservation requirements (as opposed to leased agricultural land or other real estate).
[2] Between 2022 and 2023, Flughafen München GmbH was required to provide around 1.71 hectares of additional compensatory and replacement land. Work has begun on the development of approx. 1.59 hectares of compensation and replacement land. The remaining 0.12 hectares were created and enhanced on existing compensation and replacement land.