



New times. New horizons.



MUNICH AIRPORT
Integrated Report 2021

Living ideas – Connecting lives



New times. New horizons.

The reversal of the trend is complete. New goals set the course. They are our answer to new times. As a modern company, we focus on sustainable connections. We are ready to maintain our position as a premium hub in Europe.

CONTENTS

4

**Munich Airport
at a glance**

4

Key figures

6

Letter from the Executive Board

10

New times. New horizons.

18

Business model

20

**Strategy and
management**

21

Strategy

30

Management

34

Responsibility

35

Ecological responsibility

43

Social responsibility

50

Economic responsibility





52

Finances

53
Group management report

92
Abridged consolidated financial
statements

99
Supervisory Board report



Online

The online report
can be found at:
report2021.munich-airport.com

Additional content
in the online report:

- Report profile
- Financial report with
auditor's report [PDF]
- GRI Content Index
- Sustainability indicators
- Sustainability program
- Independent assurance report
- Key topics

KEY FIGURES

Economic

RESULTS OF OPERATIONS, ASSETS,
AND FINANCIAL POSITION

€ million	2021	2020	2019	Change in % 2021/20
Group revenue	601.3	579.7	1,568.00	3.7
Of which aviation in %	45	41	55	
Of which non-aviation in %	55	59	45	
EBITDA	-45.8	-161.8	554.3	
EBIT	-285.7	-403.9	345.5	
Consolidated earnings after taxes [EAT]	-261.3	-321.4	177.8	
EBITDA margin in %	-7.6	-27.9	35.4	
EBITDA/Pax in €	-3.7	-14.6	11.6	
EBIT margin in %	-47.5	-69.7	22	
ROCE ¹⁾ in %	-6.0	-8.4	7.6	
Cash flow from operating activities	-45.8	-116	429.1	
Investments	250.0	391	319.4	-36.1
Free cash flow	-273.5	-503.8	109.1	
Equity	1,815.2	2,065.00	2,378.10	-12.1
Equity ratio in %	33.0	37.4	42.9	
Net debt	2,945.7	2,633.40	2,108.10	11.9
Net debt/EBITDA	-64.3	-16.3	3.8	
Net gearing (net debt/equity) in %	162	128	89	

¹⁾ ROCE = EBIT/(equity + net debt + ongoing employee benefits)

Ecological

CO₂ EMISSIONS

In tonnes	2021	2020	2019	Change in % 2021/20
Direct emissions Scope 1	73,075	73,407	88,876	-0.5
Indirect emissions Scope 2	5,265	7,065	12,635	-25.5
Attributable CO₂ emissions	78,340	80,472	101,511	-2.6

SPECIFIC CO₂ EMISSIONS

In kilograms	2021	2020 ¹⁾	2019	Change in % 2021/20
CO ₂ emissions per passenger	8.20	9.71	3.08	-15.6

¹⁾ Errors identified during the review of the data were subsequently corrected.

DRINKING WATER AND WASTEWATER

In cubic meters	2021	2020	2019	Change in % 2021/20
Volume of purchased drinking water	562,510	563,789	1,032,239	-0.2
Drinking water consumption per 1,000 TU ¹⁾	39.6	44.7	20.1	-11.4
Total wastewater discharged	1,955,165	1,610,406	2,494,388	21.4
Wastewater per 1,000 TU ¹⁾	137.6	127.7	48.5	7.8

¹⁾ Traffic units

Social

EMPLOYEE STRUCTURE¹⁾

Number	2021	2020	2019	Change in % 2021/20
Total	8,693	9,338	9,806	-7.0
Women in %	32.21	31.92	32.55	0.9
Men in %	67.79	68.08	67.45	-0.4
Full-time in %	78.82	78.25	75.79	0.7
Part-time in %	21.18	21.75	24.21	-2.6
< 30 years in %	10.96	13.09	15.68	-16.3
30-50 years in %	51.07	51.40	51.56	-0.6
> 50 years in %	37.97	35.51	32.76	6.9

¹⁾ Reporting date: December 31: Figures exclude apprentices, workers in minor employment, temporary workers, and interns

APPRENTICES

Number	2021	2020	2019	Change in % 2021/20
Total	247	287	303	-13.9

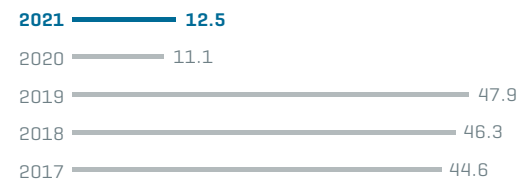
OCCUPATIONAL HEALTH AND SAFETY

Number	2021	2020	2019	Change in % 2021/20
Reportable occu- pational accidents	107	94	236	13.8
Resulting days of absence	2,264	2,508	6,539	-9.7
Rate per 1,000 workers	13.38	10.85	27	23.3

Operational

AIR TRAVELLERS

In millions

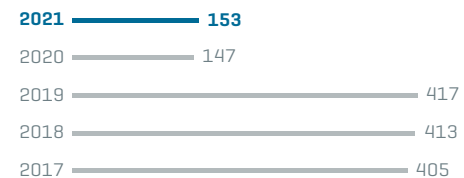


- Passenger figures increased by 1.4 million, or more than twelve percent, to 12.5 million compared with 2020.
- This meant that the airport achieved only slightly more than a quarter of its record result from the pre-crisis year 2019.

→ page 65

AIRCRAFT MOVEMENTS

In thousands



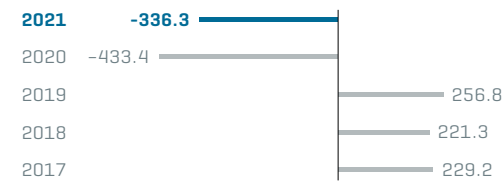
- A total of around 153,000 take-offs and landings were recorded in 2021.
- This is 6,000 aircraft movements or over four percent more than in the previous year.

→ page 64

Management-related

CONSOLIDATED EARNINGS BEFORE TAXES (EBT)

€ million

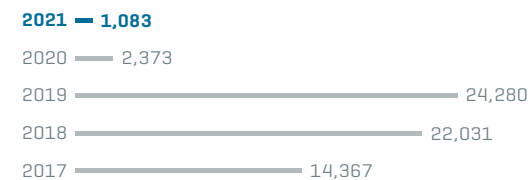


- EBT in fiscal 2021 continues to be impacted by the effects of the Corona pandemic.
- Despite drastic countermeasures, it was not possible to compensate for the decline in earnings.

→ page 58

CO₂ REDUCTIONS¹⁾

In tonnes



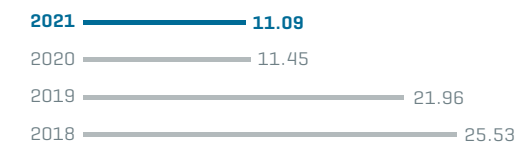
- Munich Airport's goal is to be carbon-neutral by 2030.
- Several factors led to a sharp decline in the implementation of CO₂ reduction measures.

→ page 59

¹⁾ 2020 and 2021 CO₂ reductions excluding savings from use of preconditioned air, i.e., energy efficiencies and deployment only.

Munich Airport has defined four key performance indicators to measure the development of the company. These key performance indicators are a measure of doing business in a sustainable and integrated manner and influence the variable remuneration components for managers.

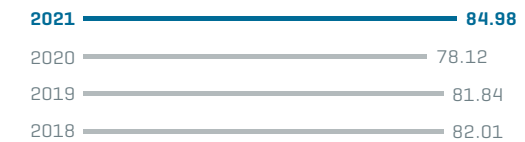
LOST TIME INCIDENT FREQUENCY (LTIF)



- Lost Time Incident Frequency (LTIF) represents an accident benchmarkable frequency rate.
- This key performance indicator will be relevant to the management of Flughafen München GmbH and AeroGround München from 2022. There are plans to extend it to other subsidiaries.

→ page 59

PASSENGER EXPERIENCE INDEX (PEI)



- The customer satisfaction metric increased significantly in 2021.
- In 2021, Munich Airport was only able to conduct passenger surveys in the second half of the year due to corona.

→ page 59

«We succeeded
in limiting the
airport's losses
and securing its
liquidity and
future viability.»

NATHALIE LEROY

Dear Reader,

It is with great concern and sympathy for all the people affected that we observe the ongoing Russian war of aggression in Ukraine. Aviation has always been driven by the idea of dialogue and exchange between people and nations. During war, these connections break down. The medium- and long-term effects of the conflict, for example on air routes, global supply chains, and the energy sector, are difficult to predict. We hope for a quick end of violence.

The year 2021 was also marked by the effects of the global Corona crisis. Nevertheless, after the dramatic, pandemic-related traffic slump in 2020, the past fiscal year showed a turn for the better. We are looking ahead again with confidence. The longing for travel and personal encounters is great, perhaps greater than ever. During the recent Easter vacations, traffic volumes at Munich Airport were already back up to around 70 percent. We expect to be back at pre-crisis levels starting in 2024, or 2025 at the latest.

We have used the past two years to further develop the company, to adapt to the changed environment with new goals, a leaner organization, and a revised strategy. We are entering new times: We feel a strong sense of team spirit within the Group, have joined forces across divisions, and have grown closer together. Everyone can and wants to make a contribution so that we maintain our top position among European airport hubs.



JAN-HENRIK ANDERSSON
Chief Commercial
and Security Officer

NATHALIE LEROY
Chief Financial Officer,
Chief Infrastructure Officer

JOST LAMMERS
President and Chief Executive Officer,
Personnel Industrial Relations Director

«Overall, we anticipate a significant increase in aircraft movements and travelers in 2022.»

JUST LAMMERS

Even though air traffic has been developing positively since this spring, our company is still in a difficult situation. As expected, the balance sheet for the second year of the pandemic is not very encouraging: With revenue of around 601 million euros, we generated only 3.7 percent more in 2021 than in the previous year. One small ray of hope is that we were able to reduce our loss for the year [EAT] by 19 percent to 261 million euros.

Traffic figures recovered slightly to around 153,000 take-offs and landings. 12.5 million passengers – around 12 percent more than in the previous year – used Munich Airport for their traveling in 2021.

The pandemic has shown that Bavaria's gateway to the world also functions very well as a transshipment point for airfreight, especially for high-value products. The fact that Munich is being served by more and more cargo aircraft once again demonstrates the enormous potential that our airport offers as a hub for airfreight. In view of the export strength of the southern German economy and its close links with markets and production sites around the world, we believe there is still considerable scope for development here.

The air traffic of the future must become more sustainable. As an airport operator, we are committed to decarbonizing air traffic. The adversary is not aviation, but carbon emission. We need a fair and effective climate policy that does not put European airlines and airports in an unfavorable position than their global competitors. In Europe, we are very well positioned with our technologies to rethink air traffic. This is a huge opportunity. One important lever, for example, is low-emission, climate-friendly fuels known as Sustainable Aviation Fuels [SAF]. In 2021, we reviewed our tank infrastructure and approved it for climate-friendly SAF. We encourage airlines at Munich Airport to use green fuel as much as possible.

We are constantly driving forward the sustainable development of the site as part of our long-standing system partnership with Lufthansa. We were delighted that Lufthansa has now stationed twenty-one ultra-modern, extremely economical Airbus A350 long-haul aircraft at its Bavarian hub. Particularly in these challenging times, this is an important signal that will provide additional momentum and further strengthen Munich's global connectivity.

Improved accessibility to the airport is also urgently needed on the landside: We keep emphasizing that Munich Airport needs the long-distance rail connection and the Deutschlandtakt. The link to regional and national rail traffic is also a top priority for us.

At this point, we would like to express our gratitude to all employees, the entire airport community, for their willingness to change and their commitment. The signs are now pointing to growth. We at Munich Airport are prepared to reach new horizons in these new times.

Yours sincerely,



JUST LAMMERS
President and Chief Executive Officer,
Personnel Industrial Relations Director

«Munich Airport
remains highly
attractive as a key
location for retail
and gastronomy.»

JAN-HENRIK ANDERSSON

Significant external influencing factors

Intensification of the competitive environment

Strong non-European competition
for airport hubs
Volatility due to global crises

High regulatory requirements

Airport operations
Site development

Intensification of the climate discourse

Climate protection measures

Behavioral changes of air travelers

Awareness for sustainability
High dynamics in digitalization



Key stakeholder expectations

Airlines

Functioning and smooth air-side processes
and technical supply
Suitable and reliable infrastructure with
development potential

Air travelers and visitors

Wide range of destinations and connections worldwide
Shopping and catering facilities in the terminals and
in the visitor park

Employees

Responsible employer and secure employment
Promotion of diversity

Politics and authorities

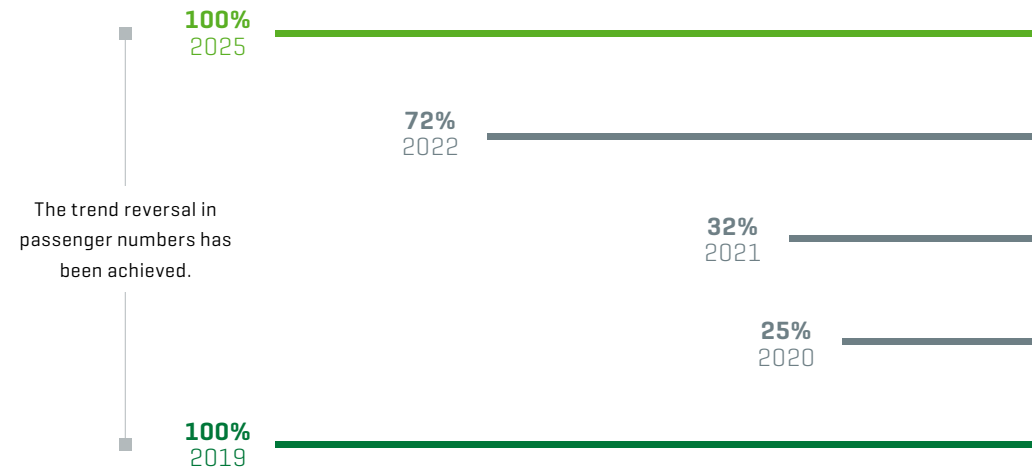
Good governance and compliance
Sustainable corporate policy

New times

Covid-19 has profoundly changed Munich Airport's business environment. In «the new normal», strategic answers must be found to a wide range of challenges.

Forecast development

Passenger traffic at German airports



Source: German Airports Association [Arbeitsgemeinschaft Deutscher Verkehrsflughäfen e.V. – ADV], December 2021

Strategic Vision 2030

Munich Airport regains
its top position among
European hubs.

Economic premium hub

As a customer- and profit-oriented premium hub, Munich Airport aims to offer quality and service in line with the market and demand from its own economic strength and to secure sustainable value growth at the Munich hub location with proven airport expertise.

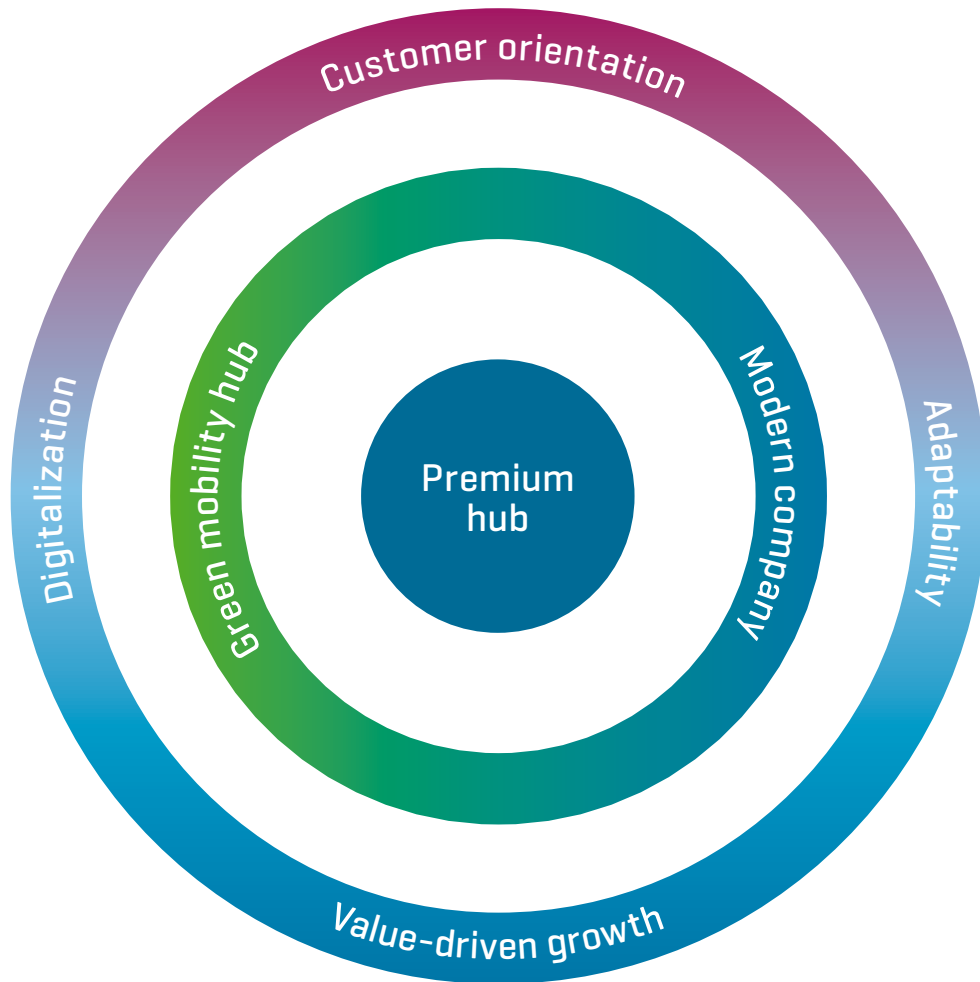
Green mobility hub

As a green mobility hub, the company will expand the integrated and intermodal mobility offering on the land and air sides in the interests of more efficient infrastructure and resource use and, together with partners, assume ecological responsibility.

Modern company

The airport is developing into a flexible, performance-oriented and modern company with economic, digital and value-creating structures as well as a wide range of prospects and development opportunities for employees.

Positioning



Customer orientation

Decisions are consistently made in all areas on the basis of customer needs.

Value-driven growth

The company is growing in value through the further development of its product and service portfolio as well as through diversification independent of location and air traffic.

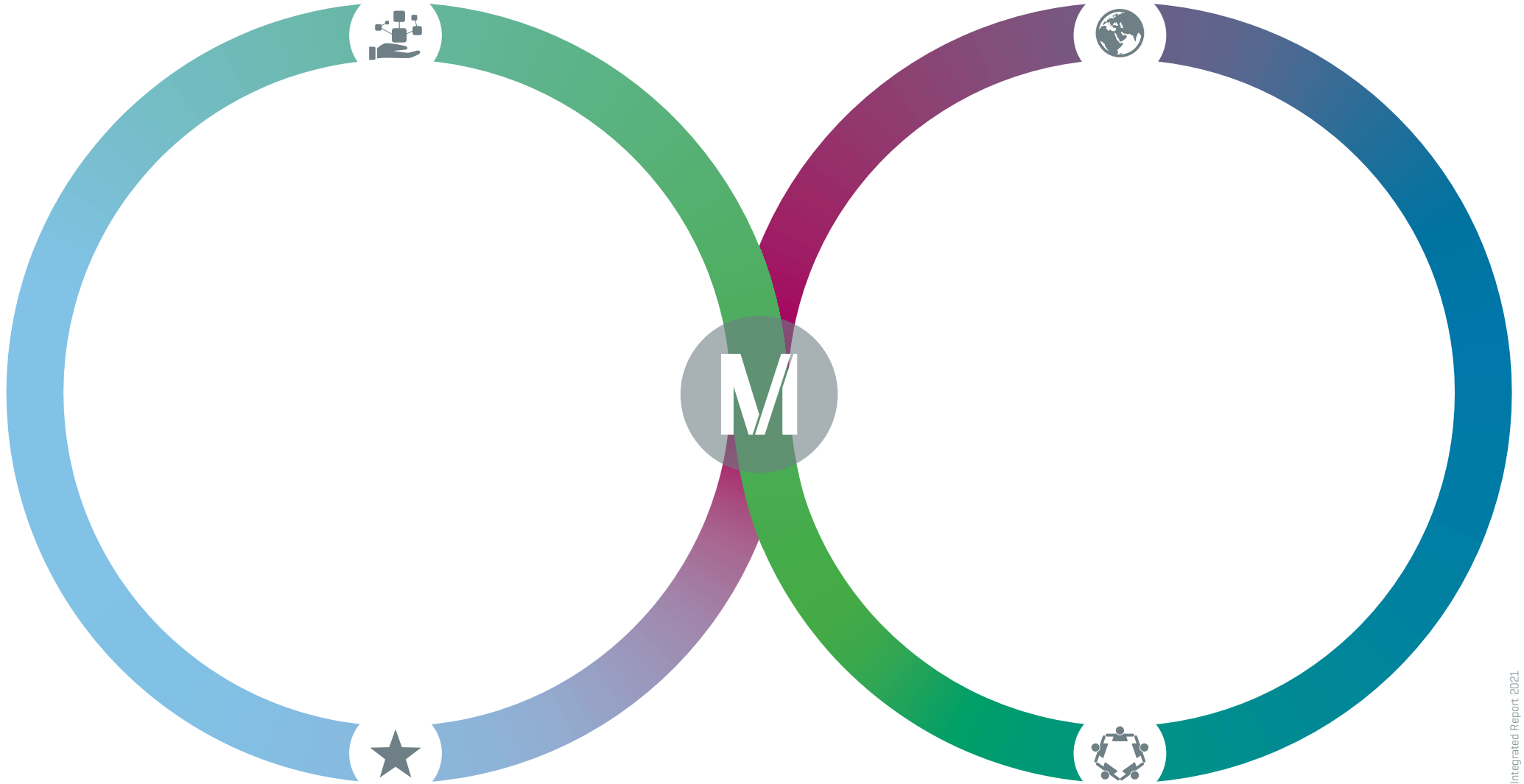
Digitalization

Munich Airport is making targeted use of the opportunities offered by digitalization to leverage sustainability and productivity potential and specify customer requirements.

Adaptability

To be ready for the challenges of the future, Munich Airport is increasing its responsiveness and evolving into a more flexible and adaptable organization.

Guiding principles and objectives



Munich, as a premium hub, operates efficiently, delights its customers, and becomes an industry-wide role model for sustainable air traffic – a modern company with sustainable connections.



A role model in sustainable infrastructure

Munich Airport is an industry-wide role model for sustainable air traffic. Only those who manage to operate consistently in the interests of stakeholders and the market and to grow sustainably will remain successful in the long term: economic efficiency is just as important as social and ecological responsibility.



Innovative competitor

The company invests in innovations that are geared to the needs of its stakeholders. Smart, digital solutions increase adaptability and differentiate Flughafen München GmbH (FMG) from international competitors. Digitalization helps to optimize processes, increase efficiency, and also generate new revenues in off-campus growth.



Trustworthy brand

High quality and economic success are not contradictory, but rather consolidate the positioning as an international premium hub. Air travelers and visitors experience this claim in a high quality of stay and process. The airport maintains trusting and long-term relationships with its partners. The brand ensures consistency, serves as a guideline for action, and provides direction both internally and externally.



Modern employer

FMG is a responsible corporate group and promotes «change» across all hierarchical levels. FMG understands attractive employment conditions to mean not only a modern work and management culture, but also the ongoing qualification and skills development of employees. This includes a high willingness to change and mutual motivation.

New horizons

Munich Airport has broken down the strategic goals of the Strategic Vision 2030 into its business segment strategies.



Ensure competitiveness and expand profitability as a premium hub

- Maintain and expand hub positioning with system partnerships
- Add value to infrastructure offering to exploit opportunities in the marketplace
- Holistic development of cargo/logistics business
- Ensure efficient cost structure and operations while maintaining market-driven quality and service levels



Secure and increase value contribution in the face of changing consumer behavior

- Optimize space efficiency and improve frequency and the willingness to make purchases at consumption points
- Make cost structures more flexible and further develop partnerships
- Understand customers as a whole and address them consistently across channels
- Dynamically adapt offerings and enhance quality of stay through experiences
- Actively shape mobility and transport connections for customers with integrated supply and revenue management



Market airport expertise for value-creating growth beyond the airport site

- Identify further opportunities via consulting and management of other airports' operations
- Market airport expertise in third-party business to achieve opportunities for value-added domestic as well as international growth and risk reduction
- Exploit synergies between the business units at the Munich site for expertise and innovation



Secure airport infrastructure and position real estate business on the third-party market

- Support infrastructure in a modern, needs-based, and holistic way
- Cost-efficiently align lifecycle and requirements management with demand development
- Position real estate business as third-party business and ensure efficient real estate management
- Increase flexibility of infrastructure and accelerate implementation
- Optimize land transport connections

BUSINESS MODEL

Input



Finances

- Cash and cash equivalents: €77.7 million
- Loan portfolio: €2,322.2 million
- Equity: €2,065.0 million



Infrastructure

- Buildings: terminals, office/technical buildings, parking structures, Munich Airport Center, hotels, logistics centers
- Open spaces: commercial/industrial and green spaces, two runways, aprons
- Transport links: Autobahn access, S-Bahn, regional and long-distance bus links, regional train connection.



Expertise

- Qualification: in-house professional development center «Airport Academy»
- Off-campus: international management, consultancy and training services
- Quality/innovation: InnovationPilot, rating by air travelers



Employees

- Employees: 8,693 employees in the Group (excluding apprentices, part-time employees, temporary workers, interns)
- Employer: personnel expenses of €419.1 million in the Group
- Training/personnel development: 20 formal vocational training tracks and dual vocational training and academic study programs



Environment

- Climate protection: program to reduce emissions [CO₂ and others]
- Resources: waste avoidance, increased recycling and closing of material cycles, efficient water management
- Noise protection: strict night-flight curfew, aircraft noise monitoring at 16 fixed stations, additional voluntary mobile measurements



Society

- Stakeholders: various dialogue platforms (e.g. website, social media), dialogue at European, federal, and state level and in Munich
- Value creation: location factor for attracting companies to the region, retaining and building economic relationships.
- Community engagement: regional office, airport association

Business units – output

Different products and services are generated [output] in the four business units. The value creation process is based on six forms of capital [input], which the airport uses to generate new values [outcome].

AVIATION

is our traditional core business and covers all services related to the correct handling of air travel at Munich Airport. This business unit provides and markets the infrastructure and services for airline customers and air travelers.

COMMERCIAL ACTIVITIES

markets the commercial space at the airport and is responsible for services having to do with parking, serving advertising partners, and the event business. The Group subsidiaries Allresto and eurotrade provide the products and culinary offerings as lessees and franchisees.

REAL ESTATE

develops, operates, and markets all of the airport's property and real estate, some of which is located outside the airport campus. The portfolio includes maintaining existing properties and acquiring new land for future expansion activities as well as responsibility for the real estate strategy.

PARTICIPATIONS, SERVICES & EXTERNAL BUSINESS

provides landside and airside services related to aircraft, passenger and cargo handling, screening and security services, as well as relocation, management and terminal operation services [ORAT] at airports worldwide.

Measures 2021

- Safeguarding liquidity through in-depth liquidity management and creation of additional financial flexibility
- Continuation of strict cost management in the areas of expenses and capital expenditure
- Continuation of the «Restart» program
- Continuation of construction work on two office buildings on the LabCampus
- Runway rehabilitation
- Completion of the rail tunnel for the Erding Ringschluss
- Focus on digital methods of learning and teaching in the Airport Academy
- 31 active international projects
- Implementation of effective hygiene and safety measures
- Continuation of measures from the «Restart» program to boost efficiency and adjust personnel capacity
- Continuation of short-time work and implementation of initial measures from emergency collective agreement, voluntary programs
- Offer of employment to all apprentices
- 12 individual measures and investment of a further €550,000 in climate protection
- Treatment of de-icing agents and increased use of industrial water instead of drinking water
- Increase in noise-based landing fees
- Ongoing provision of public information through media relations work
- Neighborhood Advisory Council, exchange on «Inside Airport – digital»
- Procurement of diverse products and services
- Support for projects in the region in the areas of sports, social affairs, education, culture, and nature

Outcome short-term

- Cash and cash equivalents: €51.9 million
- Loan portfolio: €2,600.8 million
- Equity: €1,815.2 million
- Opening of the first office building on the LabCampus expected mid 2022
- Modernization and maintenance of infrastructure
- Improvement of road and rail accessibility
- 27,400 participants in web-based training courses
- Expansion of in-house consulting expertise
- Only 5-star airport in the EU
- ACI World certificate for commitment against the spread of the pandemic
- Structural, organizational, and personnel realignment of the company
- 500 early retirement contracts at FMG and AeroGround
- 247 apprentices in the Group
- Decrease in CO₂ emissions to 78,340 t
- Recycling rate of the glycol contained in the deicing agent at around 60 percent
- Utilization of the permissible noise volume at night only 14 percent
- Transparency on airport issues
- €468 million [net] procurement volume
- Decline in gross value added due to pandemic-related decrease in traffic

long-term

- Ensuring liquidity in subsequent years
- Stabilizing the equity ratio
- Future economic recovery depends on further development of the pandemic
- Enhanced mobility on- and off-campus for employees and air travelers
- Positioning as an innovation location with efficient connections to long-distance rail passenger services
- Global networking of Bavaria as a business location
- Increased expertise among employees
- Increased efficiency through process optimization
- Enhanced amenities through quality initiative
- Value-creating growth off-site
- Further development of corporate culture and leadership culture
- Greater diversity by offering a nondiscriminatory work environment and commitment to the «Charta der Vielfalt»
Securing qualified employment in the region
- Carbon-neutrality by 2030
- Use of natural resources, e.g. through more photovoltaic systems
- Sustainable mobility: more electric vehicles in the fleet, alternative drive concepts
- Perception as a corporate citizen through social commitment
- Purchase of goods and services as well as tax payments and social security contributions ensure prosperity in the region and beyond
- Promotion of tourism as an essential economic factor in Bavaria



Strategy and management

The Corona pandemic also had a drastic impact on the global aviation industry in 2021. With its new Strategic Vision 2030, Flughafen München GmbH is demonstrating how it intends to operate Bavaria's mobility hub in a forward-looking manner and achieve a position as a sustainable premium hub at the top of Europe's airports.





Leading the way for the airport: Strategy 2030

Strategy

Strategy 2030

The impact of the Corona pandemic on the entire aviation industry persists at Munich Airport, whose structures are designed to handle some 50 million air travelers a year. In the industry's biggest crisis to date, Flughafen München GmbH (FMG) continues to pursue responsible, sustainable value creation. The Group's business activities have a significant impact on many different areas and stakeholders: the business locations of Munich, Bavaria and Germany, the airport region and its inhabitants, employees, travelers, and the companies based at and around the hub.

The Group Strategy 2030 includes economic, ecological, and social targets to meet the needs of all the Group's stakeholder groups. The company must act consistently, taking into account its key stakeholders and the market, and grow sustainably in order to be successful in the long term: Economic efficiency is just as important as social and ecological responsibility. At the same time, growing social pressure and tougher competitive conditions can be felt in the industry.

The Strategic Vision 2030 charts Munich Airport's path to the future within the top group of European and global hub airports: As the operator of a premium hub, FMG manages its business efficiently and aims to become a role model for sustainable air traffic throughout the industry. In partnership, a modern company with sustainable connections is created that acts as an innovative competitor and trustworthy brand close to its stakeholders. High quality, economic success and the exemplary role as a green mobility hub with social responsibility do not contradict each other.

Efficient and needs-based action – always with a view to the impact on the Group as a whole – leads the company to long-term, value-driven growth rather than short-term, selective gains. Market requirements and customers are the focus of business activities. In this context, the «M» brand forms a common framework, ensures consistency and provides orientation both

internally and externally. «Living ideas – Connecting lives» means promoting cooperation and creating synergies. The restructured organization is thus faster and more adaptable.

The goals and measures from the sustainability program play a major role in implementing the strategy and thus in bringing about the further development of the airport. FMG measures the success of its implementation using defined key performance indicators.

In spring 2022, Munich Airport initiated the Group-wide «Top 22 for 22» process. «Top 22 for 22» includes forward-looking measures, cross-divisional initiatives and central projects that make a significant contribution to focusing and prioritizing the implementation of the new Group strategy.

New aircraft and sustainable aviation fuels are the essential building blocks for CO₂-neutral aviation.

Commitment to climate protection

Munich Airport is responding to the rapidly increasing demands for climate protection at both the national and international level with its committed climate protection strategy. In 2016, Munich Airport set itself an ambitious goal: to achieve carbon-neutral operation of the airport starting in 2030. To accomplish this, the airport is reducing the greenhouse gas emissions that can be attributed directly to its operations by at least 60 percent using various technical measures.

The remaining 40 percent of emissions are to be balanced out by suitable compensation measures, preferably within the region. Flughafen München GmbH will be investing €150 million to accomplish this by 2030. Beyond that, Munich Airport has also committed to another ambitious climate action goal as part of the «Net Zero Carbon Initiative»: the reduction of CO₂ emissions that can be influenced by the airport itself to net zero by 2050 at the latest. The idea is to keep emissions from arising in the first place through actions such as switching to renewable energy sources. In the reporting year 2021, the company analyzed various options for implementing the requirements of the «Net Zero Carbon Initiative» at Munich Airport.

Traffic in Munich has been increasing noticeably since the spring of 2022.



The partnership between Flughafen München GmbH and Deutsche Lufthansa AG is also making a contribution to climate protection: Both groups see continuous investment in new aircraft and sustainable aviation fuels (SAF) as essential building blocks on the road to CO₂-neutral aviation. Following a thorough technical inspection, in summer 2021 the tank farm at the site was certified for climate-friendly fuels of the future. This allows SAF to be delivered, stored and refueled at Munich Airport.

Long-term HR policy for a successful restart

FMG believes in the importance of an HR policy that focuses both on people and on the company's performance. Its long-term personnel concept is based on the current business situation and the revised corporate strategy. Social trends such as demographic shifts and the digital transformation, as well as the necessary cultural change within the Group, are examples of key HR policy challenges. As part of its organizational development, FMG is streamlining its management level. Cross-departmental cooperation is strengthened by the company pooling competencies, sharpening the understanding of roles and breaking down organizational barriers within the Group.

Changes in the skills employees need to have also mean it is necessary to support the staff with personnel development concepts as they learn to work with new technologies and in more dynamic ways. In addition, new forms of digitalized and automated work processes are leading to an increased need for qualifications. At the same time, young professionals have different expectations of cooperation and management in the company – for example, they favor flat hierarchies or sustainable business practices on the part of the employer when looking for a job. A contemporary HR policy has to reflect these principles as well.

FACTS AND FIGURES Munich Airport creates regional compensation project

FMG invests €2.5 million into a climate forest. Existing forests in Lower Bavaria and the Upper Palatinate are being optimized on around 2,000 hectares so that the trees can store as much CO₂ as possible. In addition, the redesign aims to create a forest that is as climate resilient as possible and more resistant to pests and extreme weather than the current tree population. While the capacity of the MUC climate forest to offset CO₂ is not yet high at the beginning of the project, it will grow to approximately 7,000 tonnes of CO₂ per year by mid-century. Over the entire project period of initially 30 years, a total of around 90,000 additional tonnes of CO₂ will be stored.

With the onset of the Corona pandemic in the spring of 2020, the company responded quickly and consistently to the massive drop in traffic and implemented various, high-impact ad hoc measures. For example, short-time working was able to reduce personnel costs in large parts of the Group by around €100 million in 2021.

[munich-airport.com/
climate-protection-264236](https://munich-airport.com/climate-protection-264236)



TARGET

By 2024: implementation of a holistic business continuity management system

Specific goals to emerge from the crisis

The strategic goals of the Strategy Vision 2030 were applied to the airport group’s business areas. These business areas are also subject to overarching guidelines: cost efficiency, digitalization, manufacturing scope and depth, risk diversification, and sustainability.

Aviation business unit

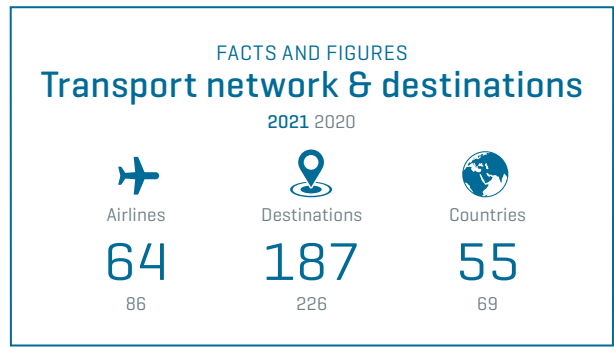
The coronavirus pandemic caused the biggest crisis ever in the history of commercial aviation. Munich Airport had been operating close to the limit of its capacity up to the start of 2020. After that, overall traffic figures plunged to less than a quarter of their pre-crisis level. Thanks to vaccination and comprehensive testing opportunities, many travel restrictions – especially within the European Union – were eased during 2021 and international air travel was revived.

While long-haul traffic to and from Munich was the slowest to recover, bookings and load factors for flights within Europe to tourist destinations and private travel in general increased significantly, especially in the summer months and at vacation times.

The unilateral opening of the European Union to U.S. citizens led to significantly higher load factors on U.S. routes in the summer. However, it was not until the United States opened its borders to fully vaccinated air travelers from the Schengen area in the fall of 2021 that a breakthrough was achieved for business and leisure travel on long-haul transatlantic routes. The focus is now on re-establishing lost connections to destinations in the Asian region in order to be able to resume and expand its role as Bavaria’s gateway to the world after the crisis.

TARGET

End of 2022: introduction of digital destination information





Long-haul traffic is a cornerstone of the Aviation strategy.

Munich Airport ensures connectivity for the people and businesses based here. It can be assumed that Bavaria and the southern German region will continue to develop positively as an incoming destination after the crisis due to their economic strength and year-round attractiveness.

As a gateway for this region, Munich Airport plays a key role. The goal is to achieve lasting stability in its position as one of the leading hubs in the European aviation market, which is experiencing further consolidation. Long-haul and transfer traffic will therefore be an essential cornerstone of the aviation strategy in the medium to long term, too. Further destinations in point-to-point traffic from Munich are to increase the variety and attractiveness of the service. One crucial aspect here will be keeping infrastructure and process quality at a high level and thereby strengthening the company's position as it competes with other airports. The development of the cargo and logistics business is also designed to accommodate the growing importance of global supply chains.

Commercial Activities business unit

The effects of the pandemic continued to have a major impact on Flughafen München GmbH's commercial business in 2021. In the retail, restaurant, parking, and advertising segments, the low traffic figures have led to significantly lower demand and, as a result, to some vacancies due to business closures or terminations. Discussions were held with all partners to secure contractual relationships and develop future opportunities

for the period after Covid-19. Despite the extremely difficult situation of many tenants, business relations remain based on partnership and a relationship of trust that has grown over time.

A particular focus of the business area in 2021 was on solidifying the existing brand partnerships with various automotive groups and with major customers from the telecommunications sector.

FMG aims to operate an attractive and sustainable location.

Parking transactions and sales remained at a comparatively low level in the past fiscal year. In addition, the structure of the customer base for parking has changed. Fewer conventions and major events as well as the lower volume of business travel led to a decline in the previously high volume of business parking. On the other hand, new products and promotions, such as e-charging services, were established for vacation travelers.

The goal of the Commercial Activities business unit is to secure and expand FMG's value proposition in the face of changing consumer behavior. The focus will continue to be on optimizing space efficiency and the portfolio of offerings as well as increasing customers' willingness to make purchases. Changing retail structures and consumer habits also call for new marketing and acquisition concepts. Another objective of this business unit is to offer customers at Munich Airport a special experience. Staging in the terminal areas, the presentation of strong brands, and extraordinary events in the Forum of the München Airport Center [MAC] visibly contribute to the airport's attractiveness.

TARGET

End of 2022: stronger integration of sustainability criteria in the selection of future tenants



166,713 t

Air freight [+14.9%]

TARGET

End of 2022: evaluation and development of a regional office in the Asia Pacific region

31

active international projects

Real Estate business unit

The airport's development as a real estate location is highly important to Munich Airport. The Real Estate business unit secures the airport infrastructure and positions the real estate business on the third-party market. It supports the infrastructure for business development in the areas of Aviation and Commercial Activities in a demand-oriented and holistic manner.

Using real estate as a means of securing the core business of aviation

FMG aims to operate an attractive and sustainable location. The airport is actively using the pause in growth brought on by the pandemic to modernize the existing infrastructure, some of which dates back to when the airport was first commissioned, and meet passenger and visitor expectations in terms of amenities. In order to continue to grow as a major airport, Munich Airport – in line with its aviation strategy – is making investments in modern aviation infrastructure, such as the construction of the new pier at Terminal 1.

Making optimal use of capacity in space already used for commercial purposes

This strategic objective focuses primarily on the central zone. Pandemic-related effects are constantly evaluated and taken into account accordingly.

Generating substantial contributions to profits by developing real estate

In real estate development, FMG focuses on generating new sources of revenue outside the traditional portfolio. This is particularly evident in various major projects, such as the sale of airport-owned land for the realization of a concert arena by third parties, the conception and construction of the LabCampus as a smart city, and cooperative ventures with companies researching future-oriented technologies there.

Taking account of regional interests

The marketing of airport real estate focuses on target groups and companies that prefer proximity to the airport and an international environment when choosing a possible location. The real estate strategy is carefully calibrated to accommodate the interests and concerns of the airport area in terms of both the development of Munich Airport as a whole and the many construction projects that are planned. FMG maintains an intensive dialog with the region.

International business

Flughafen München GmbH markets its expertise worldwide. In this way, it promotes value-driven growth beyond Munich, taps into new business models, and continuously expands its own expertise. With the involvement of the Group's subsidiary Munich Airport International GmbH [MAI], the company has evolved from a consultant for airport relocations and start-ups into an airport manager with international operations. MAI is a valued partner for investors and airports around the world, not least because of the five-star quality at its home base.

Together with its subsidiaries, MAI successfully completed its existing projects and acquired new customers in 2021. For example, operations were taken over at Sofia Airport in Bulgaria, the new cargo terminal was opened at the Saudi Arabian capital's Riyadh Airport, and the new Palmerola International Airport in Honduras was successfully put into operation.

Plans for 2022 include not only expanding the consulting and management segment, but also strengthening MAI's global presence with a new sales location in Asia.



Planning and expanding in line with requirements

Prompted by the global aviation crisis, all construction projects at the airport were reviewed, with lower-priority activities being postponed. The strategically most important projects, such as the expansion of Terminal 1, the completion of the first LabCampus building, or the improved transport links to the airport, will be continued – always with a focus on quality and the changing needs of customers. Negative effects on the environment and the airport area will be kept to a minimum, for example by applying compensating and noise protection measures. The goal is to minimize the adverse impact of contaminants or resource and energy consumption on the environment by adopting sustainable building concepts, and then afterwards through sustainable operation of the buildings.

In view of the dramatic effects of the Corona pandemic, FMG and Lufthansa formulated a joint declaration of intent in the fall of 2020 that explicitly affirms the long-term continued development of Munich Airport as a hub for intercontinental aviation. At the end of 2021, for example, the airline announced plans to base four more state-of-the-art Airbus A350 long-haul aircraft at Munich Airport. With a total of 26 long-haul aircraft based there, Lufthansa can offer even more intercontinental flights at its Bavarian hub, further consolidating Munich's excellent global connections.

LabCampus becoming a reality

To the northwest of the airport, the LabCampus is a cross-industry innovation center with workspaces, showrooms, project and conference areas for networked research and development work. International innovators will particularly benefit from the proximity of the airport at this location, which is designed as a smart city. In the summer of 2022, the first office building, «LAB 48», was opened. With an area of approximately 30,000 square meters, the building offers a variety of possible uses throughout four floors.

Construction work on the new Airport Academy, which is also being built on the LabCampus site, is on schedule. From the beginning of 2023, work and networking will be possible on 14,000 square meters in high-quality equipped seminar rooms and stylish rest areas, as well as with a spacious dining area. As the first LabCampus customer, Argo AI, a U.S. tech company specializing in autonomous driving, will move into a large test and workshop area in the southwest part of the airport, in addition to office and showroom space. This contract highlights the potential of the LabCampus as a think tank and test lab for forward-looking mobility concepts at Munich Airport.

TARGET

End of 2026: implementation of life cycle cost analyses for new buildings

labcampus.de/en



The structural work for the new pier is mostly complete.

Upgrade for Terminal 1

The expansion and modernization of Terminal 1 through the construction of a new pier is one of the strategic expansion projects that will secure the future and competitiveness of Munich Airport. In the meantime, the shell of the pier has been largely completed and work on the facade is underway. Interior work is scheduled to begin in spring 2023. In view of the ongoing Corona crisis and the associated consequences for both air traffic and the construction industry, it is not yet clear when the new terminal area with the additional passenger capacity will be put into operation.

Third runway remains an option for the future

Although the development of air traffic in the coming years is still likely to be dominated by the effects of the Corona pandemic, experts believe that long-term mobility requirements and thus global air traffic will continue to grow in the future. Munich Airport's task is to ensure the availability of capacity for air traffic in line with demand. In this respect, FMG believes that the construction of a third runway remains an important long-term option for the future viability of the airport.

Ongoing progress in connecting the airport

FMG is hard at work improving its road and rail connections. After three years of construction, the shell of the rail tunnel extension required for the Erding ring closure (Erdinger Ringschluss) was completed on schedule in September 2021. This marks another milestone for the train connection from Freising via the airport to Erding. The tunnel shell can now be equipped with the necessary technical equipment by DB Netz AG.

The study commissioned jointly with the Bavarian State Ministry of Housing, Construction and Transportation on connecting the airport to interregional rail passenger services was completed in spring 2022. Improved rail links to Munich Airport are to be achieved via a four-stage concept that takes account of local, regional, and long-distance traffic. A FMG and Deutsche Lufthansa AG working group is also addressing the overarching issue of intermodality at Munich Airport.

Construction of the Freising western bypass in the immediate vicinity of the airport has been completed since January 2022. In addition, traffic has been flowing on the new three-lane expansion of the eastern airport bypass between the ED 7 and B 388 junctions since August 2021.

PARKING GARAGES

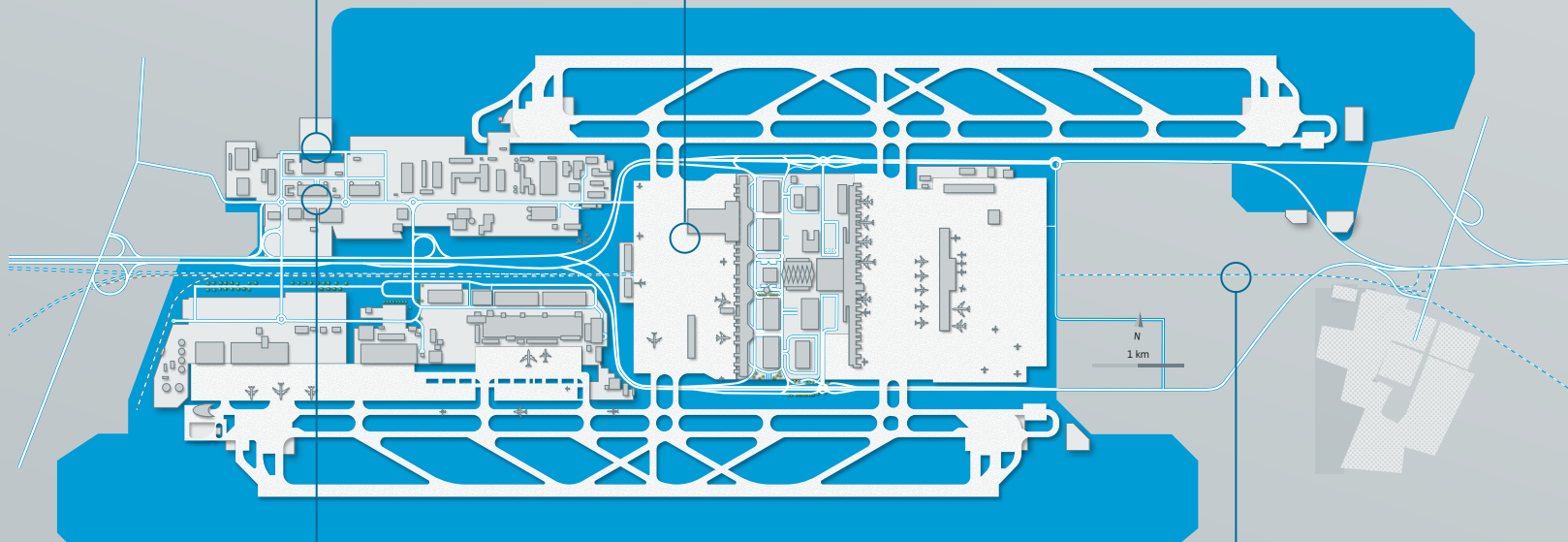
The new P44 parking garage with around 2,000 spaces opened in August 2021 to the north of the LabCampus site. A further parking garage with around 1,800 spaces is also being planned there.

T1 EXTENSION

The shell of the new, 360-meter-long pier is mostly complete and work on the facade is underway. Interior work is scheduled to begin in spring 2023.

LOOKING AHEAD

The projects with the greatest strategic importance on the airport campus are being continued.



LABCAMPUS

The hub of innovation is taking shape: The first office building LAB 48 is expected to open mid 2022, and the new Airport Academy is scheduled to open in the first quarter of 2023.

RAIL LINKS

The rail tunnel under the airport was completed in September and subsequently handed over to DB Netz AG. This section of railway is due to open at the end of 2025.

Management

«Restart»: modern management and cooperation

Faced with this challenging situation and steep revenue and earnings losses across almost all business units, Munich Airport took action by implementing consistent crisis management practices. In order to manage medium- and long-term changes, the company launched the «Restart» program in the first year of the crisis in 2020 and successfully completed it at the end of 2021. FMG's goal with «Restart» is to pursue a holistic, sustainable approach with an eye to ensuring future viability. That makes this program much more than just a short-term crisis response. The Group has repositioned itself from the ground up to adjust strategically to the changing situation in the aviation sector. The existing business areas were analyzed, the organizational structure was scrutinized and streamlined, and the use of resources was optimized. Capital expenditure and material costs are still under intense scrutiny. For the first time in the company's history, FMG had to downsize.

«Restart» included three areas of action:

1. Organization: streamline structures and management, bundle synergies.

The structural, organizational, and personnel realignment of the company has been in effect since January 1st, 2022. With an organizational structure that makes do with fewer management functions and promotes cross-departmental cooperation, the company will be able to respond more flexibly to unexpected events and different requirements in the future.

2. Efficiency: the relationship between effort and results put to the test.

The focus here was on revising the strategy and Group portfolio, optimizing service relationships within the Group, and analyzing the personnel capacity. Material and non-material cost efficiency projects are expected to generate savings of €130 million by 2024.

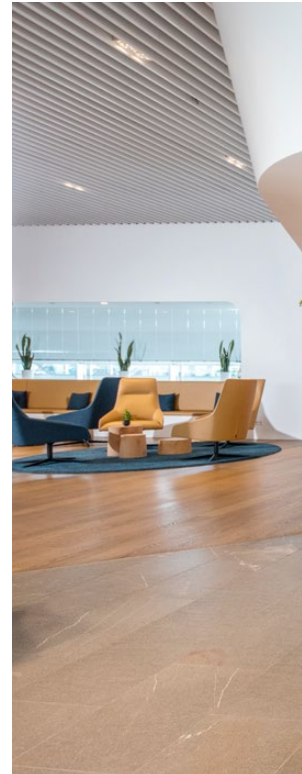
3. Personnel: sensibly shaping capacity adjustments.

The objectives of this area of action were to reduce personnel costs on a sustainable basis and to adjust personnel capacity to the changed framework conditions in a socially responsible manner. Vacant positions will not be filled until further notice. The internal job market is thus becoming increasingly important. Around 500 FMG and AeroGround employees signed early retirement contracts up to December 31st, 2021. This instrument contributed significantly to the reduction of the identified overcapacities. Around 230 employees have accepted other offers to leave the company voluntarily. FMG subsidiaries also took advantage of natural turnover and the hiring freeze to reduce staff numbers and did not renew fixed-term contracts. In addition, around 130 eurotrade employees signed severance agreements through a voluntary program. Overall, the Group-wide workforce was reduced by around 1,500 employees from the end of March 2020 up to the end of the past fiscal year.

Lasting change can only be created if suitable overall conditions are met. The entire airport community is needed to ensure that the further development into an even more flexible, performance-oriented company is successful. The change in leadership and corporate culture towards more efficient action, cross-divisional thinking, and an increased commitment to performance and change among the workforce and management is being continuously fostered.

Digital Airport

The digital transformation has shaped entire industries and value chains, including the aviation industry. Digitalization is an important factor for Munich Airport in ensuring competitiveness and generating additional revenue through adapted business models. Within the Munich Airport Group, numerous services for air travelers and customers already operate digitally: Payment systems in stores, virtual menus in restaurants, and online booking portals for parking and tours.



TARGET

End of 2024: digitalization and personalization of the customer experience

Munich Airport is once again the
«Best Airport in Europe».



Digitalization is an important factor
for Munich Airport in securing its
long-term competitiveness.

The challenge for the company in the further development of digital services is essentially to identify digitalization potential and evaluate the associated business cases. In keeping with this, change processes must be initiated and the relevant projects prioritized and managed across different fields. Accordingly, the newly created digitalization unit also focuses on the needs of business partners and employees as well as on overarching Group interests.

Prioritized topics and exemplary pilot projects

1. Digital Workflows

The intelligent linking of tools is intended to automate and accelerate numerous administrative processes. Before the official launch, it is important to verify the user-friendliness and efficiency gains and to successfully complete the pilot phase.

2. Value from Data

With the help of an internal data management system, process inefficiencies are identified and workflows optimized. This results, for example, in demand-driven management of staff deployment, the range of goods on offer, and marketing on the stores' digital advertising spaces.

3. «MyAirport»

An interdisciplinary project team is creating the basis for the overarching evaluation of data as well as the development and integration of partner and cross-selling offers to ensure a targeted digital approach to customers.

Five-star quality

Munich Airport is particularly well known for the quality of the infrastructure and services it offers. The same high standards apply across all areas.

Munich remains world-class

Munich Airport is the only 5-star airport in the European Union and one of only ten hub airports worldwide that are allowed to bear this seal of approval. That is still the case following a successful recertification audit in 2020. At the annual «World Airport Awards» presented by the London-based aviation research institute Skytrax, the Bavarian aviation hub was once again awarded the title of

TARGET

End of 2025: establish-
ment of group-wide data
management





→ Group Management Report
See page 59



«Best Airport in Europe» based on a passenger survey in 2021. The airport achieved sixth place in the global ranking – five Asian airports are ahead of Munich. Due to the Corona pandemic, traveler surveys on the Passenger Experience Index (PEI) and Airport Service Quality (ASQ) metrics took place only in the second half of 2021. Measured by PEI, Munich Airport recorded a significant increase in passenger satisfaction compared with the previous year, when the indicator was also only surveyed over a limited period. One of the reasons for the higher value is that the passenger processes functioned very reliably when traffic volumes were low.

Measures create safety

Munich Airport was again awarded the «ACI Airport Health Accreditation» certificate by Airports Council International (ACI) in 2021. The accreditation program certifies the hub's successful implementation of effective health and safety measures during the Corona pandemic, such as disinfection and cleaning, hygiene compliance precautions in passenger areas, wayfinding, and the provision of information to air travelers.

Munich Airport follows the recommendations of the Council's Aviation Recovery Task Force of the International Civil Aviation Organization (ICAO) and the EASA/ECDC Aviation Healthy Safety Protocol. In addition, the ACI Europe guidelines for safe and healthy air travel are consistently implemented at the site.

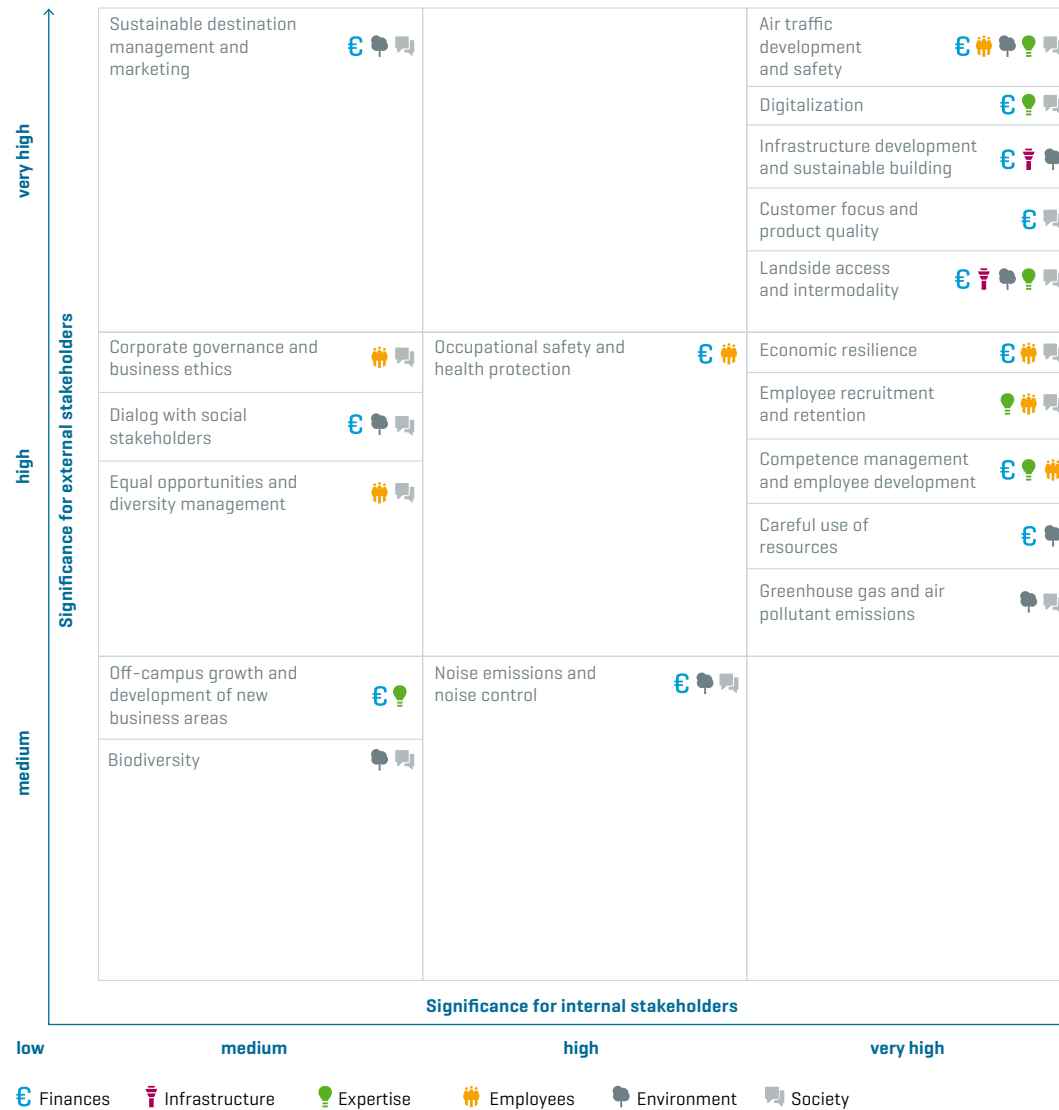
Sustainable corporate governance

FMG is committed to business practices that are inextricably linked with environmental and social objectives. Generating added value for the airport and the region, ensuring environmentally conscious operations, and assuming social responsibility are key premises of the Group's strategy.

Materiality process: identifying and integrating topics

Munich Airport sees dialog with stakeholders as an opportunity to continuously develop its business practices. The company's sustainability management incorporates the concerns of the stakeholders into the strategic planning and operational implementation. In a materiality process, FMG annually identifies and prioritizes relevant issues from external and internal perspectives. In doing so, it is guided by the standards of the Global Reporting Initiative. The resulting materiality matrix is an important tool for strategic sustainability management. On this basis, management can decide on the central course for the sustainable development of the Group.

MATERIALITY MATRIX 2021¹⁾



In 2021, existing topics were updated, expanded, and partially summarized.

1. Identification:

FMG conducts an annual survey of its main stakeholder groups and Munich Airport management when it publishes its integrated report.

2. Prioritization:

The results of this survey are presented in a materiality matrix with two axes. The two axes each depict the importance of the individual topics for internal and external stakeholders. These topics are discussed with the experts in the company. The topics are also incorporated into the targets process.

3. Validation:

Members of the management team discuss the relevant topics as part of the annual strategic target agreement process. The stakeholder survey also provides feedback on the content of the integrated report. Fields of actions and targets are adapted, expanded, or incorporated for the first time. In addition, FMG’s key issues are compared with external developments and validated by an AI-based benchmark.

4. Implementation:

Specific goals and measures are outlined within the strategic sustainability program for each material topic as well as the progress made implementing these. Following the decision and approval of management, the respective executives are responsible for the objectives of the sustainability program and the implementation of the associated measures. Every year, dedicated discussions are held to update the sustainability program with the relevant units and assess achievement of targets.

¹⁾ Some of the names of the key topics have changed in 2021 as part of the integration of the sustainability program with the content of the ACI sustainability strategy. An overview of the changes is shown [here](#). In addition to the high-priority topics of «Customer focus and product quality» [previously «Customer focus»], «Air traffic development and safety» [previously «Air traffic development and Security and safety in air traffic»], «Digitalization», and «Landside access and intermodality» [previously «Landside access» and «Seamless travel»], the importance of the topic of «Infrastructure development and sustainable building» increased for internal and external stakeholders in 2021. The topics of «Economic resilience» and «Sustainable destination management and marketing», which were newly included in the 2021 reporting year, were of very high priority for internal and external stakeholders, respectively.

Responsibility

The focus on sustainable business practices that are in harmony with environmental and social goals ensures Munich Airport's long-term corporate value.

A responsible approach to the environment, reliability as an employer, and economic practices that create lasting value form the basis for a modern company with sustainable connections.

Ecological responsibility

Climate protection

Targeted measures reduce absolute CO₂ emissions

The sharp drop in traffic volumes and the temporary closure of Terminal 1 and the Terminal 2 satellite in the wake of the Corona pandemic led to a significant decrease in CO₂ emissions attributable to the airport to 78,340 tonnes in the reporting year 2021. However, this effect is not permanent and emissions will rise again as demand grows. For this reason, the focus of this year's report is once again not on a comparison of CO₂ emissions with previous years, but on the technical measures taken to specifically reduce CO₂ emissions. In 2021, Flughafen München GmbH invested around €550,000 to reduce greenhouse gas emissions by 1,083 tonnes over the long term through an additional twelve individual measures. Thanks to the 306 individual measures already implemented since 2005, Munich Airport's CO₂ emissions have been reduced by more than 51,500 tonnes per year.

The Corona pandemic also continues to have an impact on CO₂ emissions per passenger: This airport-specific indicator remains at the uncharacteristically high level achieved in the previous year. This is because the energy needed to run the airport infrastructure does not generally depend on the number of passengers. Energy is always needed for lighting, heating or cooling,

and ventilation of the airport's buildings. The lack of heat input from air travelers meant that the terminals had to be cooled less in the summer, but the necessary heating output in the cold period increased as a result. In addition, the operation of the runway lighting must be permanently guaranteed during the evening and night hours, regardless of how many aircraft are taking off or landing at the time.



Munich Airport aims to be carbon-neutral by 2030.



→ Group Management Report
CO₂ reductions
See page 59

→ [cdp.net](https://www.cdp.net)

Footprint: complex math problem

The operation of a large infrastructure facility involves emissions from a wide variety of pollutants. They are all included in the balancing of an airport's greenhouse gas emissions. Emissions from air traffic in the landing-and-takeoff cycle (LTO cycle: aircraft landing and taking off at altitudes up to 3,000 feet) account for the largest share. The carbon footprint provides the basis for recording all forms of emissions and lends itself to comparison. It breaks down all greenhouse gas emissions that can be attributed to the airport into three different sources (scopes) according to an international standard, the «Greenhouse Gas Protocol».

Scope 1 and Scope 2

REGENERATIVE ENERGY CONCEPT

In 2019, Munich Airport set itself the goal of making almost its entire energy supply carbon-neutral by 2030, using as many available resources in the region as possible. To this end, for example, additional photovoltaic systems are to go into operation on the parking garages and on suitable open spaces outside the airport from 2023. In the future, biogas is to be used to supply the combined heat and power plant, and the existing supply of biomass heat from Zolling is to be expanded if necessary.

TOP 3 MEASURES

ENERGY-SAVING LED LIGHTING

Munich Airport has already shifted the entire apron lighting to energy-saving LED technology. All measures taken in the area of lighting have brought savings amounting to about 17,500 tonnes of CO₂. The next step will be to convert all outdoor lighting in the public areas of the airport to LED technology. In addition to the switch to modern LED lighting along the terminal road, this efficient technology was also introduced in the P6 and P9 parking garages as well as in the storage areas near the cargo. Brightness sensors and motion detectors provide additional savings.

REPLACEMENT OF THE VENTILATION SYSTEMS ON THE ENTIRE AIRPORT CAMPUS

More than 200 ventilation systems are in operation throughout the airport campus, supplying the buildings with fresh air. In line with the climate protection strategy, these are gradually being replaced by fans of the latest generation. In a first project, a total of 64 units in a hotel, Terminal 1, and other buildings are up for exchange in 2021 and 2022. The project, which had a budget of around two million euros, got off to a slow start due to delays in deliveries, with the result that only six systems could be completely renewed in 2021 (supply and exhaust fans). As the supply problem still exists, the planned completion of all plants by the end of 2022 cannot currently be guaranteed.

CLIMATE-NEUTRAL BUS IN REGULAR OPERATION

The bus, which was converted during a pilot project and originally ran on diesel, now regularly transports passengers at Munich Airport as part of the vehicle fleet. With the climate-friendly, patented «CMF drive» concept, it is particularly energy-efficient and, when fueled with bio-methane, even climate-neutral. The advantages of «CMF drive» are particularly evident in passenger buses with long operating times and frequent starts and stops, such as those used on the apron: Braking energy is recovered and temporarily stored in the buffer battery. In contrast to conventional electric buses, one tank of fuel will last up to 800 kilometers.

EXCERPT FROM THE ELECTRICITY SAVINGS PROGRAM PROJECTS COMPLETED IN 2021 (SCOPE 1 AND 2)

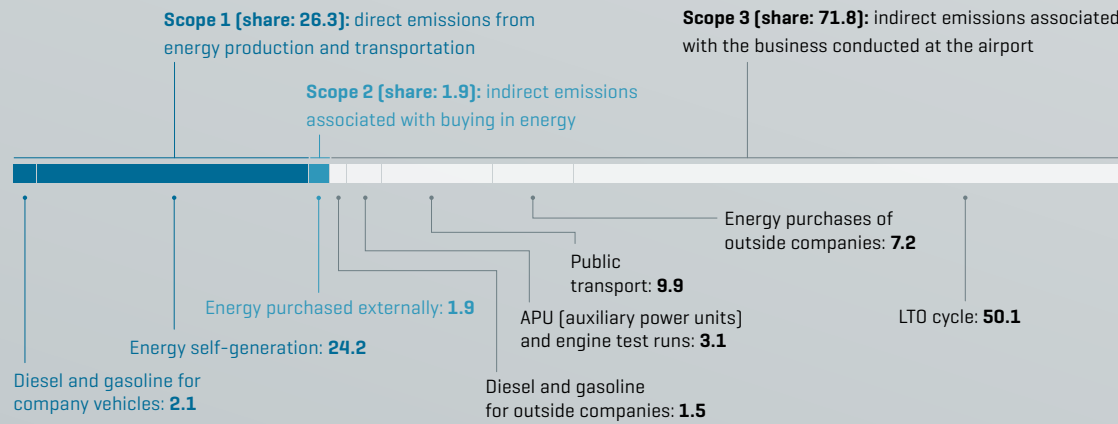
Issue	Measure	Carbon reductions per year
Lighting	Switch to modern LED road lighting – terminal road	107 t
	Replacement of lighting with LED technology in parking garage P6	238 t
Air conditioning	Conversion of the ventilation systems in Terminal 2 to multiple-motor technology	267 t
	Conversion of the ventilation systems in the MAC to multiple-motor technology	123 t
Other energy efficiency	Dismantling billboard lighting	20.5 t

TARGET

End of 2029: expansion of photovoltaic systems on building roofs and ground-mounted systems

Greenhouse gas emissions at Munich Airport 2021

In percent (rounded)



FACTS AND FIGURES

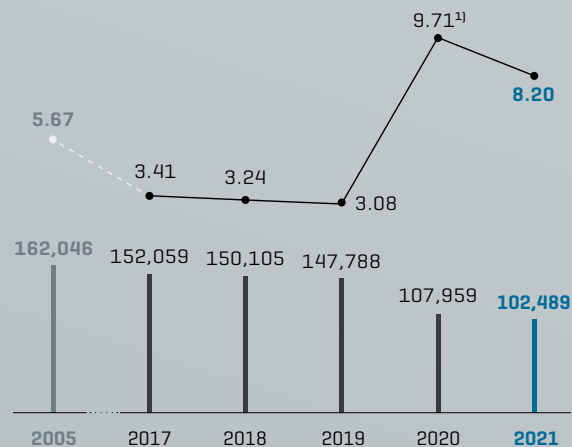
New photovoltaic systems

- 20 MW on roof areas within the airport
- 30 MW on open areas outside the airport
- Over 50,000 MWh of solar power
- Equivalent to the electricity consumption of nearly 15,000 households
- Over 19,000 tonnes of CO₂ savings per year

CO₂ emissions at Munich Airport

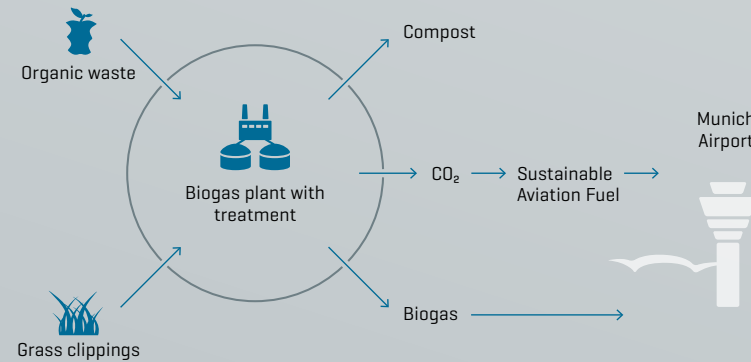
Scope 1, 2, and Scope 3 without the LTO cycle, APUs, engine test runs, and public transport in tonnes per year

● Specific carbon emissions per passenger in kilograms



Baseline year

¹⁾ Errors identified during the review of the data were subsequently corrected.



FACTS AND FIGURES

Biogas plant

Munich Airport plans to use biomethane from biowaste as fuel for its combined heat and power plant in the future. This lighthouse project preserves the principle of cogeneration at Munich Airport.

TARGET

End of 2030: operation of the vehicle fleet with regenerative energy

EFFICIENT DRIVES WITHIN THE FLEET

Munich Airport operates a total of 131 cars and vans and 295 handling and special vehicles with electric drives. By 2030, electric vehicles should comprise the lion's share of the vehicle fleet. Since hardly any new vehicles were procured in 2021 due to the pandemic, the current figure is still around 30 percent. With an eye to advances in technology, the airport assumes that improvements in battery technology, green hydrogen, synthetic fuels, and other alternative drive concepts will further diversify the vehicle mix between now and 2030.

Scope 3

FMG's Scope 3 strategy is predominantly aimed at reducing emissions from flight operations. Climate protection measures include the environmentally friendly approach [CDO; Continuous Descent Operations] or the optimized taxiing guidance system [ACDM; Airport Collaborative Decision Making] to reduce taxiing times. In addition to these and other established Scope 3 measures on the airside, such as pre-conditioned air systems, there was also progress in reducing Scope 3 emissions on the landside. In 2021, for example, the transshipment area was converted to energy-saving and brighter LED technology together with the freight forwarder LUG-Aircargo. More carriers will follow in 2022.

The office buildings known as LAB 52 and LAB 48 are the first realized real estate projects on the LabCampus. They have been built in accordance with the Gold Standard of the German Sustainable Building Council (DGNB). Thanks to maximum energy efficiency, CO₂ emissions are kept as low as possible by tenants throughout the entire operating phase. In addition, both buildings have photovoltaic systems for the production of environmentally friendly electricity.

Air quality**Fewer pollutants, lower landing charge**

FMG charges emissions-based landing charges. This gives engine and aircraft manufacturers a long-term incentive to invest in the development of aircraft that produce less in the way of pollutant emissions. Munich Airport is thus actively contributing to better environmental quality in its environs. With the information on the aircraft types that have landed, the airport can record the pollutants – including CO₂ – for the specific engines, and directly map the technical progress.

Measurements in real time

munich-airport.com/airquality-measurements

munich-airport.com/air-quality



Together with its system partners, Munich Airport is committed to climate protection on the ground and in the air.

At a glance: Nitrogen oxides, sulfur dioxide and particulate matter

In terms of air pollutants, as with CO₂, the aircraft cause significantly more emissions than the ground traffic on the aprons, feeder roads, and service roads. It is not possible, however, to differentiate between the immissions metrologically. Nitrogen oxides, sulfur dioxide, and particulate matter are key factors in assessing air quality at the airport and in its environs. Concentrations of these substances are continuously measured at two points. The measuring stations in the west and east of the airport record the effect of pollutant sources from road and air traffic and other airport operations – superimposed on the background pollution of the Munich metropolitan area and the natural background concentration in the atmosphere.

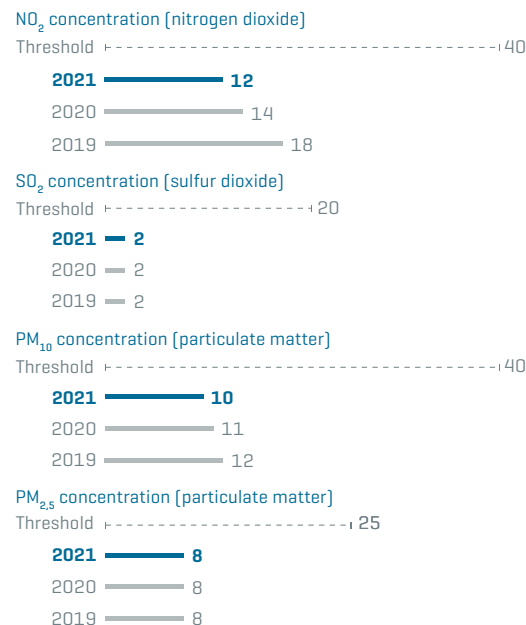


The share of electrically powered handling equipment is expected to increase further.

Due to the Corona crisis, traffic-related emissions at Munich Airport have decreased. This is reflected in a decrease in NO₂ concentrations compared to the previous year and especially to 2019. Overall, the applicable statutory limit values were observed in 2021. Mobile measurements were taken on the north runway at Munich Airport in 2021. The concentrations were significantly below the statutory limits.

CONCENTRATION OF POLLUTANTS AT THE MEASURING POINT ON THE EAST SIDE OF THE AIRPORT PREMISES

Annual averages in µg/m³



Ultrafine particles: smaller than 0.1 micrometer

There is no standardized procedure at present to measure ultrafine particles [UFP], no objective benchmark for their assessment, and also no limit values. Munich Airport is carefully monitoring ongoing projects, however, which address the topic of pollution caused by ultrafine particles in air traffic. In the vicinity of Frankfurt Airport, the Hessian State Office for Nature Conservation, Environment and Geology is currently carrying out intensive UFP measurements. In the vicinity of Munich Airport, the University of Bayreuth has also been measuring UFP concentrations at two locations since spring 2021 on behalf of the Bavarian Ministry of the Environment. FMG supports the Ministry of the Environment's measurement program, but does not carry out any measurements of its own.

Continuous monitoring of pollutants

Long-lasting pollutants can accumulate in the environment and therefore seep into the food chain. Munich Airport has been monitoring this situation for many years using a variety of methods. In 2021, plant pots containing Italian ryegrass and kale as well as pots for collecting dustfall were set up at eight measuring points around the airport site. Work also continued on the honey monitoring project in 2021.

Resource management Even more of a focus on waste

Waste and recyclable products are generated in all areas of airport operations. These are collected at the point of origin in various separation systems, handed over to certified specialist companies near the airport, processed in sorting plants and then recycled or recovered. The situation on the disposal and recycling market did not improve significantly in the reporting year due to an oversupply of mixed recyclables compared with scarce capacities at recycling plants. Since the start of the pandemic, waste management has also been challenged in unusual ways. In dialog with customers and employees, waste management will be aligned with the currently relevant EU targets, which focus on waste avoidance, increased recycling, and the closing of material cycles.

«Environmental statement»
[munich-airport.com/
publications](https://munich-airport.com/publications)

TARGET
End of 2023: development of a concept for reducing the use of disposable plastics

TARGET

End of 2025: increased use of process water instead of drinking water through the construction of process water wells

Responsible water management

The aim of water management at Munich Airport is to affect 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.

Process water instead of drinking water

Munich Airport is increasingly using process water where drinking water quality is not required: for concrete work and construction site moistening, for cleaning runways with high-pressure equipment, for wet sweepers, for cleaning sewers, and for watering green areas, shrubs and trees. In addition, the West and East power stations have been supplied for several years with near-surface quaternary groundwater [process water] from specially drilled wells instead of valuable tertiary groundwater [drinking water]. Water is needed there for evaporative cooling towers that are used to draw away condensation heat from cooling generators and to cool the combustion engine and steam boiler systems. This led to a saving on drinking water of around 200,000 cubic meters in 2021, with total savings now amounting to some 2,400,000 cubic meters since the practice of using process water began in 2010. In order to be able to save an additional 50,000 cubic meters of drinking water per year, additional process water wells are being planned and prepared for construction; one well was able to be put into operation at the end of 2021.

By 2019, drinking water consumption at Munich Airport hovered consistently at around one million cubic meters in recent years despite growth in passenger numbers. In 2021, the airport sourced a total of only 562,510 cubic meters of drinking water from the Moosrain water utility company due to Corona. As in 2020, this is around 45 percent less than before the crisis.

Aircraft de-icer cycle

De-icing vehicles keep aircraft free from ice and snow before take-off. The de-icer dripping off the aircraft during this process finds its way via slit drainage gutters and channels into underground basins. It is then mechanically and chemically treated in the airport's own recycling plant, its water content reduced, and then converted back to its original state with the use of additives. The recycling rate for the active glycol component in de-icer, used for reconstituting type 1 de-icer, was around 60.3 percent for the 2020/2021 winter season. The recycling rate has ranged between 41 and a maximum of just under 60 percent since the 2000/2001 winter season, depending on the weather and taking into account a level of energy consumption suited to the environmental footprint.



Noise protection Mitigating aircraft noise

Munich Airport strives to minimize the impact of flight noise on residents and employees. It applies a range of steps to achieve this, including operational, technical, and financial measures.

MUC: a homebase for low-emission aircraft

The Airbus A320neo, currently the most efficient and quietest short- and medium-haul aircraft, also serves Munich Airport. It is equipped with the latest generation of engines that reduce fuel consumption by 15 percent compared with older models. This is also accompanied by a reduction in carbon dioxide emissions and noise. The Airbus A350-900 is considered the world's most environmentally friendly long-haul aircraft. Compared to its predecessor, the A340, it creates significantly lower noise levels: up to 7 dB(A) less on take-off and up to 3 dB(A) less on landing. In contrast to the A340 series, the A350-900 series noise contour is around 40 to 50 percent smaller and its noise level does not exceed 85 dB(A) outside the airport premises. This results in lower aircraft noise pollution in the airport region. Thanks to its cutting-edge engines and lightweight materials, as well as curved wing tips, the A350-900 series consumes 50 percent less kerosene overall and thus emits 50 percent less CO₂. Lufthansa is adding four more Airbus A350s to its fleet at Munich Airport in 2022, bringing the total number of these fuel-efficient and low-emission long-haul aircraft to 21.



FMG also continuously determines the level and quality of groundwater.

Landing charges: the quieter, the cheaper

To ensure that airlines benefit even more from the use of quieter aircraft, Flughafen München GmbH has further developed the instrument of noise-based charges and significantly increased their share of total charges since June 1, 2021. With 13 instead of the previous eleven noise classes, the new schedule of charges also makes an even greater distinction between quieter and louder aircraft types. Since FMG attaches great importance to the use of quiet, modern aircraft, especially at night, it now levies surcharges on the basic noise charge for flights during nighttime hours. These increase with each half hour from 10 p.m. to midnight until the highest surcharge is reached between 0 a.m. and 5 a.m. at 120 percent.

Close monitoring of aircraft noise

From 16 fixed noise measuring points, FMG continuously monitors aircraft noise within a radius of about 20 kilometers around Munich Airport. The significant decrease in air traffic compared to the pre-crisis year 2019 was also reflected in the measured noise levels. For example, lower noise levels were recorded in 2021 than in 2019, as was the case in 2020.

Noise action plan for Munich Airport

The Government of Upper Bavaria has drawn up 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. With the noise action plan, the government is implementing the EU directive on the assessment and management of environmental noise for Munich Airport. Following the public survey, FMG issued a comprehensive statement on the feedback received. The noise action plan was then finalized, voted on with the affected municipalities, and published by the end of 2021.

→ **Group Management Report**
Night-flight curfew
See page 56

TARGET

Ongoing aircraft noise monitoring using innovative technology and associated online communication in real time

«Aircraft noise and aircraft noise control»

↗ munich-airport.com/publications

↗ munich-airport.com/noiseprotection

↗ munich-airport.com/active-noise-protection

107

curlew breeding pairs nested on the airport meadows in 2021.

«Bird sanctuary and airport operations»

munich-airport.com/publications

munich-airport.com/bird-sanctuary

Biodiversity

Landscape design benefits the environment

To integrate Munich Airport into its environment in the best possible way, FMG set about – from the very outset – creating structures that would upgrade the environment in the wider area of Erdinger and Freisinger Moos and link it together. In line with applicable green space planning, a three-zone area was created: Zone I comprises the airport grounds, including the take-off and landing runway system, buildings and roads; Zone II is composed of the wooded green belt with structural diversity around the airport premises; and Zone III is made up of ecological compensation measures.

Successful balancing of breeding sites

Starting in the fall of 2017, FMG has taken steps to compensate for the loss of breeding sites on approximately 73 hectares as a result of large-scale infrastructure projects to the east of the airport. In order to create new habitats, especially for the curlew, lapwing, skylark, little ringed plover, and gray wagtail, around 3.5 hectares of woodland were cleared, around 65,000 cubic meters of soil were removed for terrain depressions, and around 35 hectares of meadows were replanted with native herb and grass mixtures. In addition, the abandonment of fertilization and adapted mowing enhance the existing meadows. The mapping that has been running in parallel since the start of the construction measures has documented the success: The number of breeding sites of almost all bird species even exceeds the required amount. With the acceptance of these areas by the responsible nature conservation authorities, their creation will be completed in 2021; adapted maintenance for the future is ensured.

Bird sanctuary on airport premises

Munich Airport is an inherent part of the 4,525-hectare «Nördliches Erdinger Moos» European bird sanctuary, which is home to 40 species of bird, some highly endangered. The 658-hectare meadow areas next to the runways and the compensation and replacement areas outside the airport premises serve as a refuge for meadow-breeding grassland birds, rare plants, reptiles, and insects.

About two thirds of the airport site consist of green areas.



Social responsibility

A responsible employer

An airport that makes an impact across the region

With its 8,693 employees¹⁾, the Munich Airport Group is the second biggest employer at the site, after Deutsche Lufthansa AG. The neighboring Freising employment agency district, which also includes the districts of Dachau, Ebersberg, and Erding, continues to have one of the lowest unemployment rates in Germany, averaging 2.5 percent. Nationwide, the unemployment rate fell slightly by 0.2 percent to 5.7 percent. In the last employment survey in 2018, one in four jobs subject to social insurance contributions in the districts of Freising and Erding was at the airport. New data for 2021 is expected in mid-2022. Wage levels at Munich Airport are above the average values in related sectors in the transport or services industry.

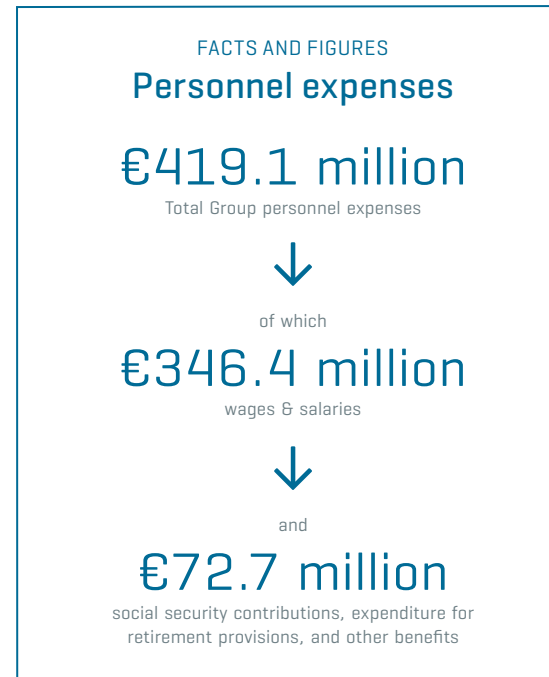
For diversity in the working world

Munich Airport benefits from the diversity of its workforce. The company respects all of its employees, regardless of age, sex or gender, nationality, cultural background, sexual orientation, and worldview, and takes their diverse interests and needs into account. As a signatory to the German Charta der Vielfalt, Munich Airport is committed to a prejudice-free working environment. The «MStars» women's network, which supports ongoing dialog among successful career women within and outside the company, and the «Queerport» LGBTQ+ initiative are examples of equal opportunities in action at the airport.

Housing for employees

As a responsible employer, FMG provides housing for employees. There are furnished apartments [also for temporary use], residential houses in various configurations and price categories in Munich and the region, as well as 132 «serviced apartments» in the neighboring community of Hallbergmoos. Despite the drop in employee demand during the pandemic situation, the airport is maintaining this offering and adjusting its housing portfolio to meet the anticipated demand.

¹⁾ Excluding apprentices, workers in minor employment, temporary workers, and interns



TARGET

End of 2025: strengthening of the employer image in the region and nationwide

TARGET

End of 2022: development of measures similar to the various aspects of diversity set out in the Diversity Charter

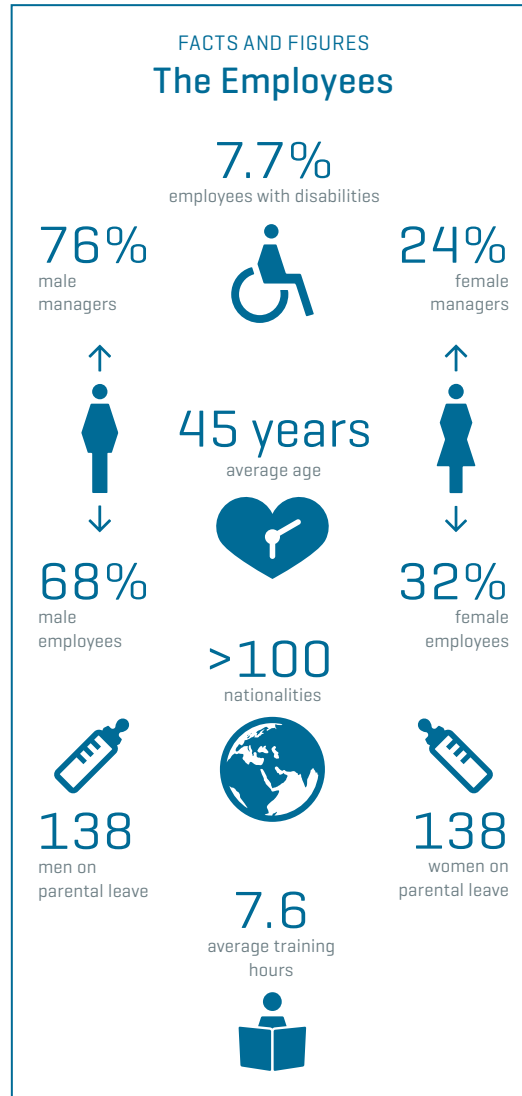
→ **Group Management Report**

Proportion of female staff
See page 54

↗ charta-der-vielfalt.de/en

Collective pay scale: using judgment to emerge from the Corona crisis

Flughafen München GmbH is a member of the regional public employers' association and, as such, is bound by the TVöD collective pay scale agreement for public sector employees. FMG employees receive a company retirement provision, which is governed by the pay scale agreement and covered by the Bavarian supplementary pension fund for public sector employers. In view of the Corona crisis, the collective bargaining partners have negotiated a nationwide emergency collective agreement for airports, retroactive to September 1st, 2020. It includes, among other things, a reduction in working hours and remuneration by a maximum of six percent – depending on traffic trends and the company's economic situation.



Under the agreement, no compulsory redundancies will be made until the end of the term of the agreement, up to a maximum of December 31, 2023.

The company's arrangements to reduce working hours and remuneration at FMG by 2.56 percent and at AeroGround by 1.33 percent have been suspended for the short term until at least the end of October 2022. From June 2022, the 1.4 percent pay increase will take effect, with a minimum of 50 euros. The second increase is scheduled to take effect in April 2023. For the companies covered by the emergency collective agreement, a «Collective Agreement on Corona Special Payment at Airports 2020» was concluded, under which aid to mitigate the effects of the Corona pandemic was paid out in 2021. This aid was scaled according to pay group and amounted to up to €800.

Focusing on family and health

Management believes that a family-friendly work environment promotes good performance. Many initiatives are also aimed at maintaining or improving the employability of employees. Additional employer benefits aimed at fostering healthy work-life balance supplement the options offered. The Corporate Health and Social Management division offers a wide array of services, ranging from occupational medicine and employee catering to advice for people living in difficult circumstances.

Prevention as an important building block for healthy employees

In occupational health and social management, prevention takes precedence over rehabilitation in order to prevent work-related chronic illnesses. Since the introduction of the BETSI program [Participation-Oriented Employability Assurance] in 2014, 194 employees have taken advantage of this offer. The focus is on preliminary health, physical impairments, and risks that could lead to more serious illness. 2021 also saw the launch of the new ENERGIE VITAL prevention program with eight participants to strengthen the psychological immune system with important content such as strengthening resilience, managing stress, practicing relaxation techniques, and regular exercise. Both programs are included in the German pension insurance portfolio, and Munich Airport sponsors participation for its employees.



Back to work step-by-step

Munich Airport supports all employees after longer periods of incapacity to work as part of its company integration management program. This is a voluntary and confidential support process at the personal, health, and vocational levels to restore, promote, or maintain work and employability. To this end, all FMG and AeroGround colleagues eligible for BEM were contacted in April 2021. By the end of the year, more than 200 colleagues had taken advantage of support via BEM.

Training and continuing education to safeguard the future

Commitment to the next generation

Munich Airport is sticking to its training program despite the significant impact of the global Corona pandemic on air traffic. In difficult times, it thus assumes social responsibility not only for its employees, but also for young people who want to enter the workforce. With twenty different apprenticeship programs and dual degree programmes, the Group is one of the largest training companies in the region. FMG received 1,046 applications for the start of training in 2021. On September 1st, 2021, 20 apprentices began their careers at Flughafen München GmbH as skilled workers for security and safety, mechatronics engineers, plant firefighters, real estate specialists, and office management assistants. 13 young professionals opted for a dual bachelor's degree program in electrical engineering and information technology, real estate management, information technology, air traffic management, or business information systems. That meant the Group had 247 young people enrolled in some form of formal training program as of December 31, 2021. At the same time, 48 young people completed their apprenticeships at FMG in the year under review. All trainees were offered a job.

Munich Airport was once again voted the industry winner among German airports as one of the country's best training companies.



33 young professionals started their careers at Munich Airport in 2021.

Stories about partner airports on Instagram: @munich_airport > Highlights > Sister Airports

munich-airport.com/sister-airports



→ Group Management Report
LTIF
See page 59

Virtual contact with sister airports

International exchange programs serve the personal, professional, linguistic, and cultural development of specialists and managers as well as Munich Airport's own corporate advancement. No reciprocal visits could take place in 2021 due to the pandemic. However, intensive contact was maintained with the seven sister airports and the European partner airports via virtual conferences and meetings. In so-called «CEO Talks» the CEOs exchanged ideas and experts worked on specific topics and projects. The aim was to discuss current challenges. In 2022, face-to-face meetings are to be held again – taking into account infection and travel regulations.

Airport Academy: expertise in education and training

Munich Airport operates an in-house training center with just under 50 employees. The Airport Academy is a «certified training provider» according to DIN ISO 9001:2015 and AZAV as well as an accredited training institute of the Airports Council International [ACI]. As a result of the coronavirus pandemic, training measures were scaled back to the activities required by law and critical to operations. This led to a decline in the number of days spent at in-person events by internal and external customers to 9,670 [2020: 14,660]. The Airport Academy's focus on digital teaching and learning increased the number of participants to 27,400 [2020: 10,540]. In particular, topics from the areas of aviation and security were in demand. In addition to the implementation of remote solutions with web-based training, webinars, and virtual reality formats in the area of aircraft handling, a so-called Learning Management Solution with new functionalities was implemented. In the first quarter of 2023, the Airport Academy will move to a new building on the LabCampus site.

TARGET

End of 2023: development of a new qualification program for managers

Occupational health and safety: firmly embedded in corporate culture Health and safety first

Munich Airport actively works to counter health and workplace risks. There are defined indicators for systematically monitoring occupational health and safety, which are analyzed on an ongoing basis. Since 2021, the key figure LTIF [Lost Time Incident Frequency] has been calculated to show the frequency of accidents at FMG and AeroGround. The intention behind this is to reduce occupational accidents and raise awareness of the issues of accident prevention and accident-related downtime.

Fighting the virus together

The crisis management, occupational safety, occupational medicine, and occupational health management teams, the works council, and the infectious disease task force of the Bavarian State Office of Health and Food Safety worked very closely together during the coronavirus crisis, coordinating the SARS-CoV-2 occupational health and safety standards in dialog with all parties. Overall, protecting employees remained a high priority in the second year of the crisis: For example, FMG and AeroGround enabled their employees to work up to one hundred percent from home and in an extended flexitime framework, as well as to undergo on-site testing free of charge. A vaccination campaign by the company medical service ran from the beginning of March to mid-August 2021. Almost 2,100 employees at the airport took advantage of this offering. In the fall, eligible employees received the option to receive a third dose of the vaccination.



FACTS AND FIGURES

With ergonomics to robot-based baggage unloading

Together with Siemens, FMG, AeroGround, and the Terminal 2 company have launched a pilot project for automated baggage unloading in 2021. In 2022, a new global prototype will demonstrate the extent to which it can improve ergonomics and process flows.

Reducing mental stress

Since July 2019, FMG and AeroGround have had a works agreement on the identification and assessment of mental stress in the workplace as part of the risk assessment process. A scientifically validated, multi-stage screening process is now to provide information about the situation in the company. In cooperation with AOK Bayern, FMG and AeroGround will first survey their employees. Due to the Corona pandemic, this first step has been postponed until mid-2022. The aim is to use the results of the survey to derive measures to reduce the psychological stresses employees experience in the workplace.

The safe operation of aircraft and the operational readiness of infrastructure and systems are of key importance to airports.

Experience community in a new way in the lobby at the Airport Academy on the LabCampus [visualization]

Security

Managing the safety and security of flight operations

The European Union has set common standards for airport planning, operation, and maintenance, and FMG is obligated to implement these standards on a binding basis. Munich Airport's operating license is directly dependent on renewal of its EASA (European Aviation Safety Agency) certification, which was granted in December 2017. 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. Munich Airport has a safety management system as one way to achieve these aims. Through the system, the airport continuously monitors ongoing flight and handling operations with an eye to risks and trends in order to identify targeted action early on. To meet the requirements, FMG makes structural changes in the infrastructure relevant to flight operations or to the operational and organizational processes in keeping with EASA specifications, utilizing safety risk assessments and compliance checks in the process. This approach helps to minimize potential accidents and thus to continuously and actively improve the safety of flight operations.

Drones: a possible danger to flight operations

Unmanned aircraft systems (drones) are currently invisible to air traffic control and therefore pose a threat to flight operations at and around airports. To maintain the safety of flight operations and be able to initiate even more effective protective measures in the future, clear detection and identification of drones is necessary. In 2020, Deutsche Flugsicherung GmbH (DFS), in close cooperation with Munich Airport, tested drone detection systems at FMG on behalf of the German Federal Ministry of Transport. These tests provided insight into the current state of the technology, particularly with regard to the possible detection range and the general performance of the systems available on the market. Based on the findings, DFS developed concepts for the technical and procedural approach to drone detection at German airports and is now planning the path forward.

Occupational health and safety annual report

[munich-airport.com/publications](https://www.munich-airport.com/publications)

TARGET

End of 2024: implementation of a project to raise awareness of behavioral occupational safety

TARGET

End of 2022: determination of mental stress and definition of suitable measures to reduce it





Biotope management provides protection from bird strikes

Collisions between aircraft and heavyweight birds or flocks of birds can endanger the safety of flight operations. Munich Airport uses special biotope management to prevent possible collisions:

- The nutrient-poor meadows are mowed only twice a year. The long grass makes it difficult for predatory birds to find prey. Swarming birds, in turn, avoid these areas because of the lack of visual contact with each other.
- The terrain at and around the airport is designed to prevent bird species that pose a critical risk to air traffic from settling there in the first place.
- The drainage channels near the runways are spanned by steel ropes in order to make access difficult, particularly for waterfowl.
- The wildlife management team at the traffic control department monitors the bird population at the airport grounds and in relevant biotopes within the vicinity in order to ward off potential dangers from bird flight movements at an early stage.

FMG works closely with the relevant partners and institutions on the topic of bird strike prevention, particularly with the airlines, German air traffic control, regional and higher-level authorities, and the DAVVL [the German Bird Strike Committee]. DAVVL statistics have shown a comparatively low wildlife strike rate for Munich Airport for many years. In 2021, it was around 76 percent higher on average in Germany than at the Munich airport site [Area 1].

FMG reconciles flight operations and bird protection.

Flood protection

The existing watercourse system protects Munich Airport from flood runoff, which occurs on average once every hundred years. In recent years, it has rained more frequently in flash floods – sometimes with devastating effects. This development prompted Munich Airport to review its flood protection. An initial study in 2019 showed that Munich Airport is well protected from extreme flooding from the south, even during flash floods. In a second step, the performance of the drainage system within the airport during heavy precipitation will be put to the test in 2022. The focus is on the safe operation of the instrument landing systems in the area of the runway heads and possible flooding on the operating site. In particular, the aprons as well as the channels and stormwater detention facilities will be integrated into the 2019 flood model for this purpose. Where necessary, appropriate flood protection measures will be developed.

The Munich Water Management Office had the Isar river remeasured and flood discharges calculated in 2019. They show that the existing flood protection dikes along the Isar River in the airport's sphere of influence can also hold back extreme flooding.

Community engagement

In the second year of the Corona crisis, associations with existing cooperation agreements could once again rely on the airport's financial support. It primarily benefited youth development in sports clubs. As in previous years, however, Munich Airport is also involved in other areas. Among other things, it has supported the brass class at Paul-Gerhardt Elementary School in Freising and the association Prop e. V. Erding und Freising, which has developed a low-threshold service for the prevention of and help with addiction problems among young people with its youth consultation offering. The regional office continues to maintain contact with many clubs that could no longer be supported under the regional sponsorship program due to the difficult economic situation during the reporting period.

TARGET

End of 2022: evaluate impacts of heavy precipitation

FACTS AND FIGURES

Help for people in need – for 25 years

The Airport Association stands for helping people in an emergency quickly and unbureaucratically, collecting donations for those most in need, or supporting the region in the event of a disaster, as well as crisis areas around the world. FMG employees and friends founded it 25 years ago. During this time, the 700 members launched hundreds of aid projects and individual case assistance. Since 2016, the association has carried the DZI seal of quality and trust in the German donation system.

Economic responsibility

Value creation – Munich Airport as an economic factor Economic benefits

Munich Airport has regional economic impact at a number of different levels. A basic distinction is made between the effects resulting directly from airport operations on the one hand and the effects of its use on the other.

Value-added effects resulting from airport operation

The value-added effects generated by the operation of the airport are divided into direct, indirect and induced effects due to consumption from income payments. The most recent study of gross value added reflects the year 2018. At that time, all businesses located on the airport campus generated direct added value in the amount of €3.78 billion. Around one-hundredth of every Euro generated in Bavaria in 2018 traced back to Munich Airport. Gross value creation at Munich Airport has decreased considerably in recent months due to the traffic reductions brought by the coronavirus.

Effects resulting from use of air traffic

Effects resulting from the use of Munich Airport are known as location effects. These include positive economic effects, such as an increase in productivity and investments, plus a high level of employment and innovation. Proximity to the airport is seen as an important criterion for companies deciding to settle in the area, particularly those operating on an international scale. The airport also offers impressive advantages for the tourism industry.

Procurement of services: Sustainability is becoming increasingly important Group-wide product management

Munich Airport does not have a conventional supply chain, but procures a wide range of products and services needed to operate and expand an international hub airport. The range of essential products is comparable to the requirements of a small town: The 132 product groups range from things like office supplies and road construction to vehicles and buildings. In 2021, the Munich Airport Group's procurement volume amounted to around €468 million [net].

That put this figure about 27 percent below the same period of the previous year. To tap into synergies, all procurement processes involving specialist departments and subsidiaries are handled by the central Group-wide category management system. Only merchandise, food & beverage, and medical equipment are procured directly by subsidiaries.

In 2021, the Munich Airport Group's procurement volume amounted to around €468 million [net].

Legal provisions in respect of procurement

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. A party submitting a tender must confirm it complies with the statutory provisions in order to rule out anything that would prevent it taking part in public procurement or tendering procedures. They must also provide evidence that they comply with the standards relating to quality assurance and environmental management.

«Sustainability indicators»

[munich-airport.com/
sustainability-263986](https://www.munich-airport.com/sustainability-263986)

TARGET

End of 2022: implementation of the requirements of the Supply Chain Due Diligence Act in the relevant procurement processes



Munich Airport is an important location factor for internationally operating companies.



Responsibility in the supply chain

Munich Airport awards contracts on the basis of cost-effectiveness and places particular emphasis on the utilization of materials and products that are both durable and use low levels of natural resources. For investment goods, any subsequent costs for servicing and maintenance [life cycle costs] are also considered. To design procurement processes to be as sustainable as possible across all areas of the company, those responsible within the specialized departments increasingly already stipulate ecological, economic, and social standards. This applies to IT, maintenance of buildings and construction of new buildings, the vehicle fleet, and purchasing of promotional materials. When procuring promotional materials, the origin of the item, resource-friendly production, and recycling capability are important criteria. For vehicles and equipment for the FMG vehicle pool, care is taken to ensure that environmentally friendly vehicles, specifically those with low CO₂ emissions, are procured.

Supplier structure and supplier management

Around 3,500 suppliers work for the Munich Airport Group. The supplier structure during 2021 was relatively consistent with the previous year. As Munich Airport is mainly supplied by business partners from the region, transportation distances are short and CO₂ emissions are reduced. For example, the subsidiary Allresto purchases mainly seasonal produce throughout the year: nearly all of which originates from Bavaria, and a good 50 percent of which comes from the area directly around the airport. An evaluation of the other parties to framework agreements was not performed in 2021 due to the coronavirus pandemic.

Verification and documentation of observance of human rights

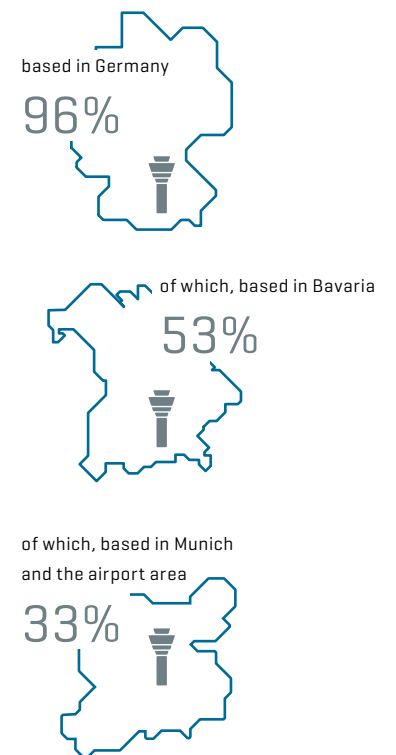
The Munich Airport Group's business operations are primarily confined to Germany. Here, human rights are enshrined in law. In calls for tender for international services, it is ensured that national and international laws and agreements are applied. This is documented again when contracts are signed. The company is currently developing further measures to implement the National Action Plan for Business and Human Rights and to comply with the Supply Chain Sourcing Obligations Act. Results and recommendations for action from this are to be integrated into the risk assessment. This shows the high priority attached to the topic. The ongoing provision of information on human rights specified in the German General Equal Treatment Act takes place via the intranet and managers, who receive regular training on this subject.

Strict requirements for precluding child labor

When sourcing product groups where the likelihood of child labor is high, steps are taken in particular to ensure that none is involved. Manufacturers of products in areas known to be high risk in terms of using child labor are required to present independent certification that they do not. Clauses to this effect are integrated in the calls for tenders and awards documentation.

SUPPLIER STRUCTURE

Of the airport's total procurement volume, the following percentages go to companies



Finances

- 53** Group management report
 - 53 Situation of the Group
 - 59 Report on economic position
 - 73 Events after the balance sheet date
 - 74 Outlook, opportunities, and risks report
- 92** Abridged consolidated financial statements
 - 92 Consolidated statement of profit or loss
 - 93 Consolidated statement of comprehensive income
 - 94 Consolidated statement of financial position
 - 96 Consolidated statement of changes in equity
 - 97 Consolidated statement of cash flow
- 98** Note on the audit opinion
- 99** Supervisory Board report

INFORMATION ON THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT FOR THE FISCAL YEAR 2021

The online report published in full on the Internet is decisive for the audit of the consolidated financial statements. In addition to the unconditional independent auditor's report, the full consolidated financial statements and the Group Management Report for the fiscal year from January 1 through December 31, 2021 are generally accessible at: report2021.munich-airport.com. The version published there was audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. The present printed Group Management Report 2021 corresponds to the audited version. The consolidated financial statements are presented in abridged form in the printed report. This includes the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of financial position, the consolidated statement of changes in equity, and the consolidated statement of cash flow. The Group notes under IFRS are published only in the online report.

GROUP MANAGEMENT REPORT

Situation of the Group

Business model of the Group Situation

Flughafen München GmbH (FMG) is headquartered in Munich. As the parent company of Munich Airport Group (Munich Airport), it is the operator of Munich's commercial airport.

Munich Airport is active via the business units Aviation, Commercial Activities, Real Estate and Participations, Services & External Business. The service profile of the Group covers virtually all the services available on the airport campus – from flight operations to passenger and cargo handling through to retail, hotel, and catering. This integrated business model and depth of added value sets Munich Airport apart from its European competitors.

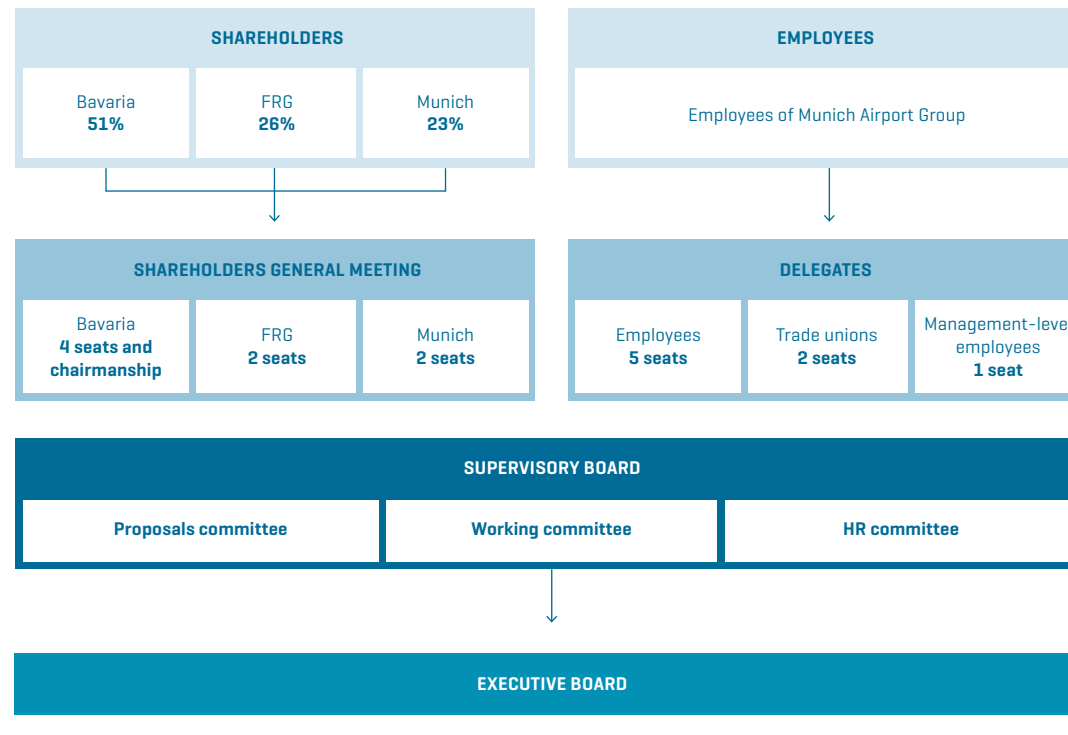
Munich Airport is committed to a corporate policy of sustainability. The orientation toward economic, ecological, and social goals ensures acceptance of the airport and consequently the viability of its business model.

Main features of management and control

The owners of FMG are the Free State of Bavaria with 51.0%, the Federal Republic of Germany with 26.0%, and the City of Munich with 23.0%.

The shareholders' general meeting is the highest monitoring and decision-making body. It decides unanimously on the Group's business fundamentals, including such matters as airport expansion and borrowing. With the exception of central decisions, resolutions are adopted by simple majority.

GOVERNANCE STRUCTURE



Supervisory Board

FMG has a Supervisory Board pursuant to Sections 1 [1] and 6 of the German Codetermination Act [MitbestG]. The Supervisory Board exercises monitoring and co-determination rights. It appoints members of the Executive Board and determines their remuneration. Transactions exceeding certain thresholds or terms require Supervisory Board approval. The

employees' representatives on the Supervisory Board are elected by the Group employees. The shareholders' representatives are appointed by the shareholders' general meeting. The term in office of the Supervisory Board members ends with the shareholders' general meeting that resolves on the formal discharge of the members for the fourth fiscal year after the start of their term in office.

The Supervisory Board has appointed a proposals committee, a working committee, and an HR committee. The proposals committee, working committee, and the HR committee were entrusted with the following tasks among others:

COMMITTEES IN THE SUPERVISORY BOARD

Proposals committee	<ul style="list-style-type: none"> • Right of proposal for the appointment of a member of the Executive Board in the event that voting in the Supervisory Board does not achieve the requisite two thirds majority vote for the member of the Executive Board to be appointed in the first ballot
Working committee	<ul style="list-style-type: none"> • Opinion on draft resolutions of the Executive Board requiring the approval of the Supervisory Board • Approval in lieu of the Supervisory Board of certain legal transactions that exceed set thresholds or terms
HR committee	<ul style="list-style-type: none"> • Drafting of management contracts (with the exception of remuneration), general representatives and authorized signatories • Approval of the establishment and amendment of remuneration rules outside the collective wage agreements of the Group, the recruitment or amendment of the salary level of certain employees above a specified salary level or remuneration level, and the introduction or amendment of company pension benefits, including the company pension scheme

Executive Board

As a rule, the members of FMG's Executive Board are appointed for five years; reappointment is permitted. The Executive Board consists of three members, represents FMG externally and is responsible for corporate policy and the strategic direction of the Group. It presents the business plan and manages business development.

FMG's managing directors receive non-performance-related compensation (fixed salary) and performance-related compensation with short- and medium-term incentives (bonus). The bonus is primarily linked to the consolidated earnings before taxes.

Female quota

In the context of ensuring equal participation of women and men, the Supervisory Board and Executive Board of the parent company FMG stipulate targets and deadlines for the proportion of women on the Supervisory Board, Executive Board, and on the first two management levels.

A target of 25% women has been set for the Supervisory Board by June 30, 2024. The employee representatives on the Supervisory Board are elected, while the shareholder representatives are mainly appointed on a function-specific basis. In this respect, the possibility of directly influencing the proportion of women on the Supervisory Board is limited.

The current proportion of women on the Executive Board of 33% is to be maintained until June 30, 2024.

Based on the premise that structural and personnel changes will take place at the two highest management levels as part of the «Restart» change program, a target for a proportion of women at the first management level was set at 25% by June 30, 2024. For the second highest management level, the target value was set at 30%.

Activities

Organizational structure

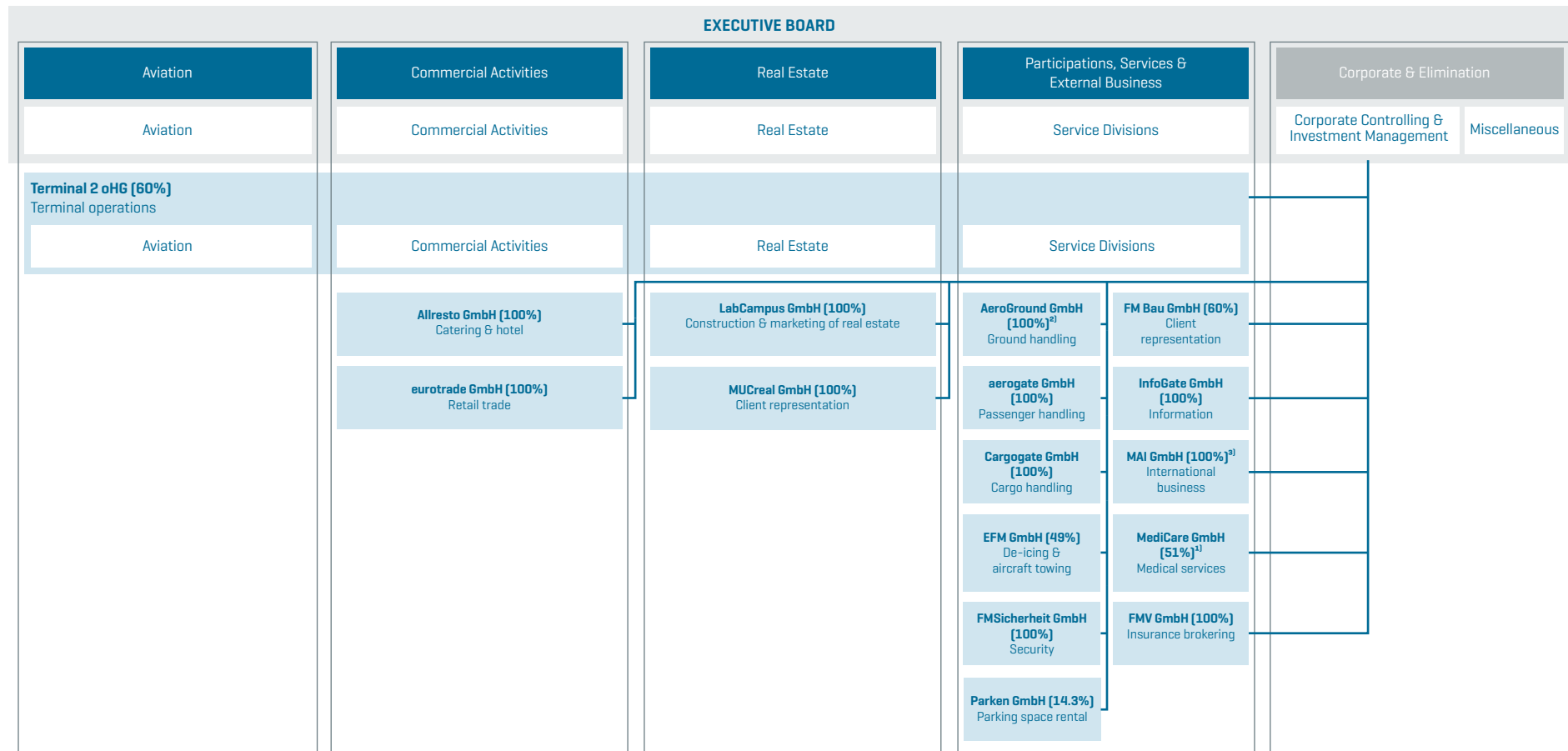
The Group's organizational structure is divided into FMG's business, service and corporate divisions. The management and internal reporting of the business units is primarily handled by FMG's group management. The business units shown in the figure comprise the business and service divisions of FMG and the Group companies integrated in the business units. The business units are explained in the following sections.

There have been no fundamental changes to the legal and organizational structure in the 2021 fiscal year, compared with the previous year. There have been no material increases or reductions in shares. A detailed overview of the ownership structure is included in the notes to the consolidated financial statements.

In total, the Group comprises 16 fully consolidated companies, two associates, a joint operation, and four companies that are not consolidated. These are directed by Corporate Controlling and Investment Management in line with the business division strategy assigned in each case.

The organizational measures were implemented with the «Restart» change program on January 1, 2022.

ORGANIZATIONAL STRUCTURE OF MUNICH AIRPORT



■ Business unit ■ Company □ Division

[As of Dec. 31, 2021]

¹⁾ MediCare Flughafen München Medizinisches Zentrum GmbH has a 100% equity interest in Munich AirportClinic GmbH.

²⁾ AeroGround Flughafen München GmbH has a 100% equity interest in AeroGround Berlin GmbH.

³⁾ Munich Airport International GmbH has a 100% equity interest in Munich Airport US Holding LLC, a 60% equity interest in amd.sigma strategic airport development GmbH, and a 50% equity interest in ORAT AMS Group V.O.F.. Munich Airport US Holding LLC in turn has a 100% equity interest in Munich Airport NJ LLC (formerly EWR Terminal One LLC) and a 51% equity interest in Reach Airport LLC.

Aviation business unit

INFRASTRUCTURE FOR AIRLINES AND PASSENGERS:

The Aviation business unit covers the operation of Munich Airport's air traffic infrastructure.

The following airport charges are levied for the provision and operation of the air traffic facilities:

AIR TRAFFIC CHARGES

	Assessment basis
Take-off and landing charges	Maximum take-off mass of the aircraft (MTOM) on take-off and landing
Noise-oriented basic charge	Fixed amount per take-off and landing depending on the noise class and the time of day/night
Pollutant-oriented basic charge	Nitrogen oxide equivalent emitted per landing
Passenger charge	Number of passengers on take-off
Cargo charge	Number of traffic units on take-off/landing
Parking charge	Maximum take-off mass (per 24 hours or part thereof, from 16 hours)
Security charge	Number of passengers and/or traffic units at take-off
Charge for passengers with reduced mobility (PRM charge)	Number of passengers on take-off
Waste disposal charge	Number of passengers on take-off

In the 2021 financial year, the new framework agreement on charges came into force with uniform provisions for all airlines, which fundamentally regulates the development of air traffic charges up to and including 2030 and thus ensures the financing of infrastructure to a defined extent.

Due to the long duration, three breakpoints were defined in order to be able to counter forecast uncertainties by monitoring and, if necessary, readjusting the development of charges. No increase in charges has been priced in for 2021 due to the crisis. Structural adjustments to the charge structure led in particular to a greater emphasis on environment-related charge components, with a simultaneous reduction in weight-based MTOM charges.

For example, extended noise classes now lead to a more differentiated classification of aircraft types. In addition, surcharges on the noise charge during nighttime margins were defined – and separately for each take-off and landing, in order to precisely allocate the polluter.

Munich Airport operates two runways with a maximum capacity of 90 aircraft movements per hour during daytime operations at normal capacity. This capacity was exhausted for long stretches in normal operation in the years before Corona. As a general rule, between 10 p.m. and 6 a.m., flight operations are only permitted to a very limited extent and only with particularly low-noise aircraft. Scheduled and charter traffic is restricted to 28 planned aircraft movements per night. Cargo can also be transported during this time only in exceptional cases due to the strict night flight regulations. Relief is only available for so-called homebase airlines and delayed flights. In the period between 12 midnight and 5 a.m., only night airmail and survey flights by German air traffic control are permitted. Other exceptions to the curfew include, for example, emergency and medical aid flights, landings required for reasons of air safety, as well as flights in justified exception cases that are approved by the Bavarian Ministry of Housing, Building, and Transport as the responsible authority.

The terminals will be continuously optimized and expanded as needed. The planned pier at Terminal 1 is designed to meet future requirements for efficient security checks and terminal infrastructure. Against the background of the massive impact of the coronavirus pandemic, the schedule for the expansion project has been stretched. Individual areas of the terminals were also affected by closures in 2021.

Munich Airport is strategically well positioned thanks to its central location in Europe, in the middle of the Munich metropolitan region, which is characterized as a center of innovation, knowledge and business with a broad-based economic structure. However, growth in population and employment in the economically important airport region has slowed as a result of the coronavirus pandemic. In the years before Corona, Munich Airport had the highest proportion of business travelers among Germany's major hubs and was thus predestined for particularly high-value scheduled services. Despite downturns, the demographic and economic conditions in Bavaria and especially in the airport catchment area suggest that transportation demand at Munich Airport will continue to grow in the medium to long term. Further comments on this can be found in the section «Economic and industry-specific conditions».

Over the years, Munich Airport has developed into a major international aviation hub in cooperation with Deutsche Lufthansa AG (hereinafter referred to as Deutsche Lufthansa). Jointly supported expansion measures such as Terminal 2 and the satellite building, the plans for the «T-Stiel» of the satellite building and Lufthansa's commitment to station the Airbus A350 long-haul fleet in Munich are the foundations of a sustainable partnership that stands for long-term growth. However, according to current reports, the A380, which has been stationed in Munich to date, is no longer expected to return, as Deutsche Lufthansa will no longer operate this aircraft type. Even during the coronavirus pandemic,

Deutsche Lufthansa reaffirms its commitment to Munich Airport and secures worldwide flight connections for Bavaria as a business location in the medium term.¹⁾

Thanks to its promising market position and successful cooperation with Deutsche Lufthansa, Munich Airport had one of the most extensive networks of intercontinental connections in Europe, measured in terms of the number of destinations, before the Corona crisis. Highly frequented transfer connections ensured that Bavaria is optimally connected to Europe and the world. The combination of a dense network of German domestic and European links and a strong local demand made it possible to offer an attractive portfolio of long-haul flights from Munich. Due to the attractiveness of the location for tourists and the growing surrounding area with an affluent population, Munich Airport became increasingly interesting for point-to-point connections. However, according to the current forecast by the International Air Transport Association (IATA), a return to the traffic level of 2019 is not expected until 2024. Deutsche Lufthansa assumes that it will then operate a hub again at Munich Airport with approximately 30 long-haul aircraft stationed there.²⁾

In addition, the German air traffic tax and the lack of traffic rights or protectionist measures in Asia are hampering future market-driven growth at Munich Airport. China's zero covid policy further limits travel, while other Asian countries impose a mandatory fourteen-day quarantine in a special hotel.³⁾

The cargo business at Munich Airport is heavily dependent on the development of passenger traffic. The reason for this is that, as a rule, the majority of airfreight at Munich Airport – over 80% – is transported as bellyhold cargo on normal long-haul flights. Globally, the share of airfreight volume accounted for by additional cargo is a good 50%.⁴⁾

Commercial Activities business unit

FIRST-CLASS SERVICE AND PROMOTIONS ALONG THE PASSENGER ROUTE

The Commercial Activities business unit is responsible for developing, marketing, and managing space throughout Munich Airport that may be used for commercial purposes. This includes both strategic planning of the sector mix with regard to the retailing, service, and catering space, as well as the issue of leases and concessions to third parties and Group companies.

Munich Airport maintains around 18,500 m² of catering space [previous year: 21,000] and approximately 20,700 m² of retail and service space. Changes compared with the previous year resulted from mostly temporary closures of individual units. FMG subsidiaries operate their own retail or catering businesses on approximately 71% of the total area.

Commercial Activities is also responsible for the five-star hotel in Munich Airport's central area. It has 551 rooms and 30 conference rooms.

This business unit also develops and markets demand-oriented parking capacity. At present there are approximately 34,600 parking spaces, of which some 20,800 are close to the terminal.

Commercial Activities also markets the advertising media and spaces at Munich Airport. The offer of what is known as out-of-home advertising at Munich Airport is characterized by high-profile advertising spaces with little wastage, which are tailored to clients' individual requirements.

The business unit's portfolio also includes the event business.

Real Estate business unit

REAL ESTATE LOCATION WITH ATTRACTIVE APPEAL

The Real Estate business unit develops, operates, and markets all real estate and property owned by Munich Airport, both on and off-campus. The real estate location is divided into location-specific areas, which are marketed under the AirSite concept.

Munich Airport has a lot to offer as a real estate location: an attractive environment, good road connections, excellent parking, and a comprehensive range of goods and services for daily needs. The existing rail traffic access was extended to the east by the Erding ring closure in order to achieve better accessibility to the airport. In addition, the commissioning of the two additional lanes of the eastern airport feeder road at the end of 2020 means that road access is now even better. The bridge over the Zentralallee (traffic junction West 0), which was put into operation in December 2020, is of particular importance for the development of the AirSite West and the western parking center.

In accordance with the high demands placed on the entire area, an urban planning concept was developed that is continuously updated and is already visible with the construction of the first high-rise buildings.

¹⁾ A350_data_and_facts_EN_fuel_LufthansaGroup_background

²⁾ IATA forecasts solid long-term aviation recovery – The Moodie Davitt Report; Lufthansa backs Munich – aeroTELEGRAPH

³⁾ China: Travel and safety information – Auswärtiges Amt; Japan: Covid-19_information – Auswärtiges Amt

⁴⁾ Annual Statistical Report 2019; China: Travel and safety information – Auswärtiges Amt; Air cargo traffic by type- belly cargo & main cargo 2019 – Statista

Participations, Services & External Business

PARTICIPATIONS & EXTERNAL BUSINESS: FULL-SERVICE-PROVIDER

The other companies in the Group complement the range of services offered by the airport. The most significant subsidiaries are:



MATERIAL SUBSIDIARIES

AeroGround Companies	The companies AeroGround Flughafen München GmbH [AE München] and AeroGround Berlin GmbH [AE Berlin] provide landside and airside handling services for airline customers at the Munich and Berlin locations. The main business units include the classic ramp-side ground handling services of aircraft loading and unloading [ramp and baggage handling], transport services for passengers and crews, and ramp-side cargo transport.
aerogate	aerogate München Gesellschaft für Luftverkehrsabfertigungen mbH offers passenger handling, operation services with ramp supervision, ticketing services and lost & found with baggage delivery and arrival services at Munich Airport. The range of services is completed by general aviation services as well as consultancy and training.
Cargogate	As a regulated agent, Cargogate Munich Airport GmbH performs services related to the handling of air cargo and the processing of the associated customs formalities. Cargogate also offers handling services for all common special goods, such as hazardous substances, refrigerated goods, and valuable goods. Since September 2018, Cargogate is the only airfreight handler on the campus certified according to the Pharma Good Distribution Practice [GDP]. As a proven specialist, the company operates the border inspection post prescribed by the EU as well as the animal reception center on behalf of FMG.
MAI	Munich Airport International GmbH and its affiliates provide management, consulting and training services for the aviation industry worldwide. It has evolved from a consultant for airport commissioning projects [ORAT] to an international airport operator.

SERVICES: ENERGY, IT AND DIGITAL FOR ALL TENANTS AT THE AIRPORT

Besides the business units and subsidiaries, Munich Airport's service divisions are also involved in external sales. The largest contribution comes from the following service divisions:

SIGNIFICANT SERVICE DIVISIONS

Technology	The service division is responsible for the secure, economical, and technical operation of airport infrastructure. Among other things, this includes the supply of energy and heating/refrigeration, maintenance of buildings and airport-specific equipment, as well as vehicle management for series vehicles and handling equipment. In addition, this division plays a key role in implementing Munich Airport's CO ₂ strategy as part of its energy management activities.
IT	The IT service division offers its customers at Munich Airport a range of services in the fields of media and communications technology, IT workstation equipment, and server, database and storage system technology. The division's core competencies lie in the integration of different technical IT platforms and the provision of customized technical system solutions to support logistics processes at Munich Airport. As part of the digital transformation, the IT service division actively supports change processes for the further or new development of digital business models and for linking value chains to create value networks. In this context, compliance with security-relevant requirements (cyber security) and uniform Group-wide standards are becoming increasingly important.

The activities in the Participations, Services & External Business segment (excluding handling services) account for a small share of the Group's external sales, therefore a detailed explanation is not provided in the section on the economic environment. The impact of the coronavirus pandemic on business activities is explained in the Course of Business. Developments relating to handling services in the Group have been included in the passages covering Aviation business.

Control system and values management

Munich Airport measures the performance of its managers using financial and non-financial indicators. The most important of these are the indicators that measure corporate sustainability and quality. Earnings before taxes [EBT] cover the economic perspective, while the Passenger Experience Index [PEI] focuses on the customer via the achievement of quality targets, which include increasing customer satisfaction as a strategic thrust. The carbon reductions cover the ecological perspective. With the inclusion of the Lost Time Incident Frequency [LTIF] as a social performance indicator in the management system from 2022, the Group will use indicators from all three perspectives of classic sustainability management (economy, ecology, and social).

FMG surveys internal and external interest groups each year to determine and regularly affirm the relevance of the most important performance indicators for stakeholders.

Earnings before taxes [EBT]

Earnings targets for managers are formulated on the basis of earnings before taxes [EBT].

EBT is the input factor for determining profitability. It relates to the consolidated earnings before taxes, calculated by applying the International Accounting Standards in the version adopted into European law by the European Commission.

Carbon reductions

The key figure «carbon reductions» measures the reduction in emissions in tonnes resulting from the targeted implementation of CO₂-saving measures. But it can also be used to take into account factors such as the conservation of resources or the efficient use of energy. Only measures that result in annually recurring savings are counted (for example, replacement of lighting). One-off savings effects, such as the purchase of a defined quantity of biodiesel, are reported but not taken into account in the balance sheet. At the end of 2016, Munich Airport set itself the climate target of making its operations carbon-neutral from 2030. At least 60% of emissions are to be effectively reduced with the remainder being offset by high-value compensation measures. Emissions caused directly by Munich Airport itself through energy supply and fuel consumption (Scope 1) and emissions arising from purchased energy (Scope 2) are factored into the calculation.

Passenger Experience Index (PEI)

The PEI is a measurement model for customer satisfaction, which allows Munich Airport to derive location-specific targets adjusted to the needs of target groups, and to assign the fields of action for improving service to existing customer contact points. Responsibility for determining these values lies with an independent external service provider for reasons of objectivity. Using questionnaires, the provider surveys the satisfaction of departing and arriving travelers on a regular basis over the course of the entire year. On a quarterly basis and at the end of the year, Munich Airport thus receives a great deal of detailed information about the satisfaction of its passengers in ten categories along the passenger experience chain. The measurements originally planned for the whole year 2021 took place only in the second half of 2021 due to the ongoing coronavirus pandemic.

Lost Time Incident Frequency (LTIF)

The LTIF represents a benchmarkable accident frequency rate. It relates the number of occupational accidents to the number of hours worked. Only occupational accidents with a lost time of one day or more are included in the determination of LTIF. Commuting accidents are not taken into account here. Pursuant to Section 8 SGB VII, occupational accidents are accidents suffered by insured persons as a result of an activity justifying insurance cover pursuant to Section 2, 3 or 6 (insured activity). Accidents are temporary events that affect the body from the outside and result in damage to one's health or death. This indicator is collected in the first year for the two largest Group companies (FMG and AeroGround Munich). Further companies will be included in the future.

The control intention is to reduce the frequency of occupational accidents, accident-related absenteeism and the associated accident costs, as well as to raise awareness of the accident issue as a whole.

Innovation and idea management

Innovation management should systematically promote the innovation culture in the company and support the implementation of innovation projects. The main emphasis is on new services and products that contribute to the company's economic success and strengthen its competitiveness.

For this purpose, Munich Airport uses a digital cross-departmental trend scouting platform, via which relevant market and technology trends are tracked and analyzed together with experts from the specialist departments. The goal is to identify trends early on that have the potential to change Munich Airport's business and to identify development opportunities for new products and services. Trend management is also intended to provide focus and orientation as well as essential inputs for the Group's strategy work.

Munich Airport also operates the digital idea management platform «InnovationPilot», which all employees can use to submit suggestions for improvements to internal processes as well as ideas for new types of services for customers and passengers. The platform is also used to launch open campaigns and surveys that also address external stakeholders.

Specific ideas that address trends of relevance for Munich Airport culminate in innovation projects, which are implemented jointly with the relevant departments and external partners up to the proof-of-concept stage. This also includes a number of ideas for digitalization and its commercial use.

Report on economic position

Economic environment

Macroeconomic environment

THE ECONOMY IS RECOVERING FROM THE SLUMP CAUSED BY THE CRISIS

Both national and international economic growth are crucial for an international air traffic hub such as Munich Airport.

The global economy is slowly recovering from the Corona crisis. However, the effects of the coronavirus pandemic continued to weigh on economic development. In addition to the known containment measures, increasing supply and capacity bottlenecks have slowed global economic development since the beginning of the year. Global real gross domestic product (GDP) grew by 6.0% in 2021 (2020: -3.0%). The growth rate was thus 0.5 percentage points above the prior-year forecast.⁵⁾

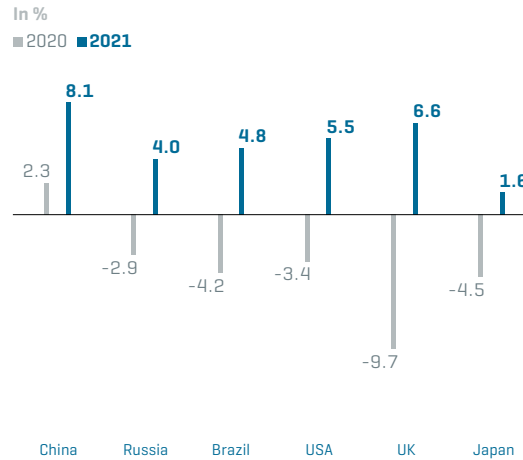
⁵⁾ ifo Institute, Economic Forecast Winter 2021, December 2021; German Council of Economic Experts, Annual Report 2021/22, November 2021

In the emerging markets, the economy grew at an overall rate of 7.3% [previous year: -0.4%]. Looking at individual countries, the economy of the People's Republic of China recovered comparatively quickly from the crisis-induced slump and already reached pre-crisis levels in the early course of 2020. However, the Chinese economy was also hit by the effects of the crisis in 2021. The service sector was considerably restricted at times due to the pandemic. Industry was adversely affected by persistent shortages of intermediate products, temporary production stoppages in connection with locally rising infection rates, and power rationing in large parts of energy-intensive production. Overall, however, the growth rate for 2021 was a solid 8.1% [2020: 2.3%]. India was also hit particularly hard by a new wave of corona infections in the spring. This slowed down the recovery of the Indian economy, which had been strong up to that point. The real GDP growth rate in India in 2021 was 7.4% [previous year: -6.9%].⁶⁾

Economic output in the industrialized nations recovered from the previous year's slump and returned to its pre-crisis level for the first time in the third quarter of 2021. Overall, the advanced economies recorded a 4.9% increase in GDP in 2021. The U.S. economy grew by 5.5%. Private consumer spending made a major contribution to the economic recovery. The British economy even expanded at a rate of 6.6%. The main pillar here was the recovery in private consumption. Industrial production, on the other hand, was also adversely affected by global supply bottlenecks for important precursors. In addition, as a result of the pandemic and Brexit, there was an exodus of foreign workers, particularly in the hospitality and transport sectors.⁶⁾

In the euro zone, GDP [+5.0%] recovered significantly compared with the previous year, and economic output expanded by 4.9%. Growth is distributed comparatively heterogeneously across the member states. The services sector was impacted in the first quarter by the restrictions imposed

ECONOMIC GROWTH IN SELECTED DESTINATIONS WORLDWIDE

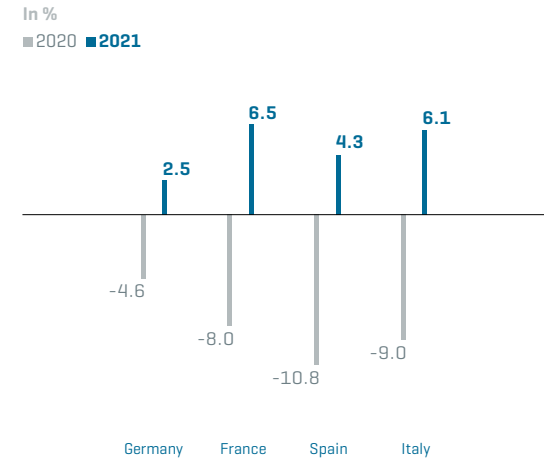


GDP growth in 2020 and 2021⁷⁾

in the wake of the pandemic and gradually recovered as the year progressed. On the other hand, industrial production initially quickly overcame the slump in 2020, but increasingly suffered from supply bottlenecks for key intermediate products in the course of 2021. The widespread use of short-time working prevented a significant rise in unemployment. At the same time, inflation increased sharply in the course of the economic recovery. Nonetheless, the monetary policy of the European Central Bank (ECB) remains expansionary in nature.⁶⁾

The German economy is also in the recovery phase. The service sector developed positively following the easing of the Corona measures in early summer. However, limitations occurred with the increase in infection activity in the fall. The global supply bottlenecks for corresponding precursors had a

ECONOMIC GROWTH IN SELECTED DESTINATIONS THROUGHOUT EUROPE



GDP growth in 2020 and 2021⁷⁾

significant impact on manufacturing, trade, and industry. The average inflation rate for the year was 3.1%, with November recording the highest rate in 30 years at 5.2%. Compared with the previous year, the recovery was evident in private consumption [+0.4%], imports and exports [+7.8%/+7.3%] and gross fixed capital formation [+1.6%]. The unemployment rate fell by 0.2 percentage points year-on-year to 5.7%. Overall, German gross domestic product rose at a rate of 2.5% in 2021.⁷⁾

In 2021, the oil price [Brent] fluctuated in a range between \$51 and \$86 per barrel. The low was recorded at the beginning of the year, the high at the end of October. At the end of the year, the oil price was around \$79 per barrel.⁸⁾

⁶⁾ ifo Institute, Economic Forecast Winter 2021, December 2021; German Council of Economic Experts, Annual Report 2021/22, November 2021

⁷⁾ ifo Institute, Economic Forecast Winter 2021, December 2021

⁸⁾ IATA, Losses Reduce but Challenges Continue - Cumulative \$201 Billion Losses for 2020-2022, October 4, 2021

Economic environment Air traffic [Aviation]

SECOND YEAR OF CORONA IN AIR TRAFFIC

The second year of severe, pandemic-related restrictions showed a significant impact on air traffic. A large proportion of the world's airlines have had to resort to government support measures. In the course of the year, however, Deutsche Lufthansa succeeded in refinancing the only partially utilized state aid completely on the free market. Airports also suffered greatly from the economic impact of the slump in traffic. It was not until later in the year that the situation brightened and demand returned, although it remained well below the 2019 reference year.⁹⁾

An IATA [International Air Transport Association] passenger survey showed that 86% of passengers had a high level of confidence in Covid-19 measures on board aircraft. Passengers accepted the rules in place and were therefore receptive to the measures. This conclusion was also confirmed by a survey conducted at Munich Airport.¹⁰⁾ However, according to IATA, 60% of travelers said that government restrictions on travel had gone too far, 75% complained about a loss of quality of life, and 86% were in favor of opening the borders.¹¹⁾ A request that was also supported by analyses of the World Health Organization WHO.¹²⁾ A large part of the traffic downturn in the past two years and the resulting economic loss to the airline industry can be attributed to travel restrictions imposed at short notice and the resulting uncertainty among customers.

Global traffic declines continue to be devastating, according to IATA reports, with a -58.4% drop in revenue passenger kilometers [compared to the 2019 reference year], down from -65.9% last year. However, compared with the previous year, a significant increase has been achieved since April. Inter-

national passenger traffic was and is particularly affected [-75.5% on 2019], where pandemic-related travel warnings and restrictions had the greatest impact. In contrast, domestic traffic worldwide proved to be relatively resistant to the crisis at -28.2% as of 2019. For example, the development of domestic connections in Russia was even higher than in 2019 at +24.2%. The Chinese domestic market developed similarly until various Corona outbreaks hampered development. Nevertheless, 75.6% of the pre-crisis level was still achieved. The U.S. domestic market approached all but 76.2% of 2019 results, with airports in regions without Covid restrictions [Miami, for example] having already fully emerged from the crisis.¹³⁾

Demand for airfreight remained high worldwide in 2021. In addition to economic developments, this was driven by bottlenecks in container shipping. With high freight rates, airfreight, measured in freight ton kilometers, grew by 6.9% year-on-year in 2019 – as much as 18.7% year-on-year, achieving the best annual result since 1990. The supply of freight ton kilometers improved by 13.8% compared with the previous year, partly due to the gradual return of additional cargo transported on long-distance passenger routes.¹⁴⁾

According to European air traffic control provider Eurocontrol, European air traffic recovered in 2021 but remained well below 2019 levels [-44%] at 6.2 million flights. At country level, Germany was affected more than average, reaching only 50%. An examination of traffic figures at airports showed that Munich, with a loss of -64% of traffic, was the hardest hit airport after Manchester, along with Düsseldorf, of the top 40 airports. Europe's major passenger hubs, which were affected by both local and global Corona restrictions, suffered particularly. Airports with a high proportion of private and leisure travelers and heavy domestic traffic were less affected.¹⁵⁾

The airports organized in the German Airports Association [ADV] recorded significantly better traffic figures in 2021 than in the previous year. A total of 78.5 million passengers [+23%] were handled, although this was 68.6% lower than the 2019 result. On the other hand, cargo volumes [airfreight and air mail] reached a new high of 5,405,841 tonnes [+17.4%] and exceeded 2019 by 13.0%.¹⁶⁾

The report on the state of the industry by the German Air Transport Association [BDL] shows below-average performance by German airlines. Compared to 2019 in Europe, revenue passenger kilometers declined by -70% in Germany, -61% in Europe as a whole, and -58% worldwide. The best performers were North American airlines, which lost -39%. By contrast, Asian airlines were hit just as hard, with -67%, and airlines from the Middle East, with -70%. In Germany, German airlines lost 2% market share, partly due to a continuous shift of traffic to non-European hubs.¹⁷⁾

⁹⁾ Federal government loans and deposits repaid early – the federal government

¹⁰⁾ FMG-Survey-Corona measures.pdf

¹¹⁾ IATA-annual-review-2021 [Updated October 2021]

¹²⁾ [https://www.who.int/news/item/19-01-2022-statement-on-the-tenth-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-coronavirus-disease-\(covid-19\)-pandemic](https://www.who.int/news/item/19-01-2022-statement-on-the-tenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic)

¹³⁾ IATA. Air Passenger Market Analysis, December 2021; compare Dec. 2019 with Dec. 2021 here: https://www.miami-airport.com/airport_stats.asp

¹⁴⁾ IATA Air Cargo Market Analysis December 2021

¹⁵⁾ Aviation Intelligence Unit Think Paper #15 – January 2022 [Eurocontrol]

¹⁶⁾ 12.2021 ADV-Monthly statistical report.pdf

¹⁷⁾ BDL-Annual figures2021_Management report.pdf

After declines of over 90% in some cases at the beginning of the year, demand stabilized in the summer months, according to the BDL, only to stagnate again at the end of the year, triggered by the «omicron variant». According to analyses by BDL [SRS Analyser], the number of aircraft movements was also weak, accounting for only 39% of flights in 2019. The development was thus significantly more restrained than in European reference countries. In particular, countries with high tourist volumes benefited, such as Turkey with 65% and Greece with 71% of the volume from 2019, as well as countries with strong domestic traffic. Domestic German traffic, on the other hand, is determined by distances that can also be covered by car or train. In addition, European hub traffic, which is dominated by international traffic, was particularly affected by the travel restrictions. At the same time, competition-distorting framework conditions led to relocations to non-European hubs.¹⁸⁾

The International Civil Aviation Organization (ICAO), a specialized agency of the United Nations, estimates monetary losses to airlines in passenger traffic worldwide at \$372 billion in 2020 and \$324 billion in 2021; equivalent to nearly \$1 billion in losses per day. Compared to 2019, airlines worldwide lost approximately -60% of their passengers in 2020 and -49% in 2021. Deutsche Lufthansa was also badly hit and, according to press reports, faced costs of up to one million euros per hour at peak times during the coronavirus pandemic.¹⁹⁾

Economic environment Commercial Activities

STATIONARY RETAIL CONTINUES TO SUFFER LOSSES

Despite the coronavirus pandemic, the German Retailers' Association predicts year-on-year sales growth of 1.8% to €587.8 billion. Most of this growth will come from online retailing [2021: +19.2%]. Stationary retail is suffering due

to the ongoing crisis. Apparel retailers in particular lost a further 9% of their sales compared to the previous year and thus -30% compared to 2019.²⁰⁾

In the retail sector, the business climate index fell significantly; by 4.5 points year-on-year in December 2021.²¹⁾

FOOD SERVICE AND HOTEL INDUSTRY – SALES STAGNATING

Real sales in the hospitality industry did not change compared to the previous year. In nominal terms, sales increased by 2%. Compared to 2019, however, sales were down 40% in real terms and almost 36% in nominal terms.²²⁾

The individual business sectors showed the following changes compared with the previous year: Sales at hotels and other lodging establishments fell by 3.0%, representing a price-adjusted decline of 4.3%. The food service sector recorded a real decline in sales of 8.6% and the catering sector of 3.2%.²³⁾

ADVERTISING INDUSTRY – OUTDOOR ADVERTISING REACHES NEW RECORD

In the out-of-home advertising category relevant to the airport, a sales record of €2.5 billion was achieved. Gross sales increased by 8% compared to the previous year, and even the best year ever in 2019 was exceeded by 1%.²⁴⁾

PARKING MANAGEMENT – DEPENDENCE ON PASSENGER VOLUME

Passenger declines due to the coronavirus pandemic continue to impact the parking business. Even if the proportion of trips made in personal vehicles generally increased due to hygiene reasons, the mobility restrictions that will persist in 2021 mean that the overall volume of trips will be significantly lower.

Economic environment Real Estate

MUNICH OFFICE LEASING MARKET ON AN UPWARD TREND

The office leasing market in Munich was able to end 2021 with a good final quarter, closing with take-up of 664,500 m², of which 55,200 m² was attributable to owner-occupiers. The upward trend from the previous quarter thus continued, and the weak first half of the year no longer had such a significant impact on sales. The 10-year average was underperformed by 15%, but take-up was 17% higher compared to 2020 (2020: 567,800 m²). In the segment between 1,001 and 5,000 m², it is noticeable that companies are again looking for office space after initially adopting a wait-and-see approach during the initial pandemic phase.²⁵⁾

At the end of 2021, there was 1,055,600 m² of vacant space, around 268,000 m² more than a year earlier. The vacancy rate in the financial year was 4.7% [2020: 3.5%]. The increase in the vacancy rate stalled in the last quarter, as there was almost no change in the amount of space available in the short term compared to the previous quarter. In the city area, the vacancy rate was 3.7%; in the surrounding area, 7.5% of the portfolio was vacant.²⁵⁾

¹⁸⁾ BDL Annual Balance Sheet 2021

¹⁹⁾ ICAO_coronavirus_Econ_Impact; <https://www.zdf.de/nachrichten/wirtschaft/corona-lufthansa-rekordverlust-100.html>

²⁰⁾ HDE, Annual press conference, February 2022; February 2022

²¹⁾ ifo Business Climate Germany by Economic Sector

²²⁾ Hotel and restaurant sales in 2021 expected to be unchanged year-on-year in real terms – German Federal Statistical Office

²³⁾ DEHOGA, Press release November 2021, February 14, 2022; Hotel and restaurant sales in 2021 expected to be unchanged in real terms from previous year – German Federal Statistical Office

²⁴⁾ Fachverband Außenwerbung e.V., Press release «New record for OOH» from January 18, 2022, February 14, 2022

²⁵⁾ Colliers: Strong final quarter on the Munich office market – press release dated January 7, 2022

Rental prices increased compared with the previous year. The average rent for the market as a whole increased by 9% to 23.50 euros/m² [2020: 21.50 euros/m²] and the prime rent by 5% to 41.50 euros/m² [2020: 39.50 euros/m²]. The development in prime rents resulted because new leases in prime locations were well above 40.00 euros/m². The proportion of space taken up by high-priced leases was relatively high and also led to an increase in the average rent. The average rent in the surrounding area was 13.70 euros/m² [2020: 13.10 euros/m²]. In terms of asking rents, a sideways movement in prices can still be observed.²⁶⁾

In 2022, there will be a significant amount of new construction space on the market. Nearly 600,000 m² will be completed, 56% of which is still available [2020: 276,000 m²]. High completion figures meet below-average demand, so rising vacancy rates must be expected in 2022 as well. Marketing will take longer because the new construction shortage of the pre-pandemic years is now gone. In general, however, new construction space is still very popular with tenants, as it is usually easier to implement new office concepts there.²⁶⁾

The German economy is recovering more slowly than originally hoped. As a result, it is likely to take some time for demand in the Munich office market to return to pre-coronavirus levels. However, the market has shown its strength in the last six months, even in times of crisis. Take-up is expected to reach 650,000 m² in 2022, with vacancy rates rising moderately. Market rents are expected to move sideways in most market segments, although prime rents may rise even further.²⁶⁾

Course of business

Key events in the past fiscal year

Impact of the coronavirus pandemic on Munich Airport

For the second year in a row, developments at Munich Airport have been dominated by the coronavirus pandemic. Drastic travel restrictions and repeated lockdowns in key foreign markets have greatly unsettled passengers and changed their booking and travel behavior. The significant easing of travel restrictions by mid-2021 led to a strong surge in demand in the summer months – following an extremely weak first half of 2021. The positive development of the summer continued in the fall with a noticeable expansion of services, which was also accepted by passengers. This upswing was dampened by the omicron variant that appeared at the end of November. For further information on traffic development, please refer to the section «Aviation business».

In contrast to the previous year, there were no general orders or closures of retail and restaurant units in 2021. In the first half of the year, individual tenants were able to decide for themselves how to open their units in view of passenger forecasts. As of July 30, 2021, a limited operating obligation has been introduced in core areas. For further explanations, please refer to the section «Commercial Activities business».

In order to counteract the continuing low earnings figures and secure liquidity, the countermeasures initiated in the previous year were continued in the Group in both the expense and investment areas. With strict cost management, the operating loss could be reduced in 2021.

With the onset of the pandemic, the satellite building was no longer used for passenger handling. A partial opening did not take place until December 1, 2021. Terminal 1 was also temporarily closed during this time to reduce costs. In addition, some of the maintenance and conversion work was also postponed until later in 2021. All non-personnel expenses that were not operationally essential were eliminated. In addition, some of the employees at the Munich site have been on short-time working since the beginning of April 2020.

The «Restart» change program initiated in the previous year was continued in order to sustainably reduce costs at the Munich site and to align Munich Airport with the changed market environment in the future. Organizational and efficiency-enhancing measures were developed, and efforts were made to adjust personnel capacity. As of January 1, 2022, these organizational changes were implemented as part of the realignment of the Group.

Many of the planned investment projects from the general expansion plan were examined, among other things, with regard to their operational necessity, their strategic importance and in the context of existing contracts. This review resulted in corresponding reductions or postponements. This did not affect projects with a high degree of completion.

In total, operating expenses remain at a low level in fiscal 2021.

To further expand liquidity and create additional financial flexibility, the Group took out loans totaling €425 million by the end of the year.

²⁶⁾ Colliers: Strong final quarter on the Munich office market – press release dated January 7, 2022

Milestone on the way to the Erding ring closure

After three years of construction, the shell of the tunnel extension of the Erding ring closure, as a continuation of the rail line from Freising via Munich Airport to Erding, was completed on schedule in September 2021.

The costs for the shell are being borne by Munich Airport and pre-financed in the form of an interest-bearing repayable subsidy from the Free State of Bavaria. Payment of the investment costs will fall due for Munich Airport when the tunnel extension is commissioned.

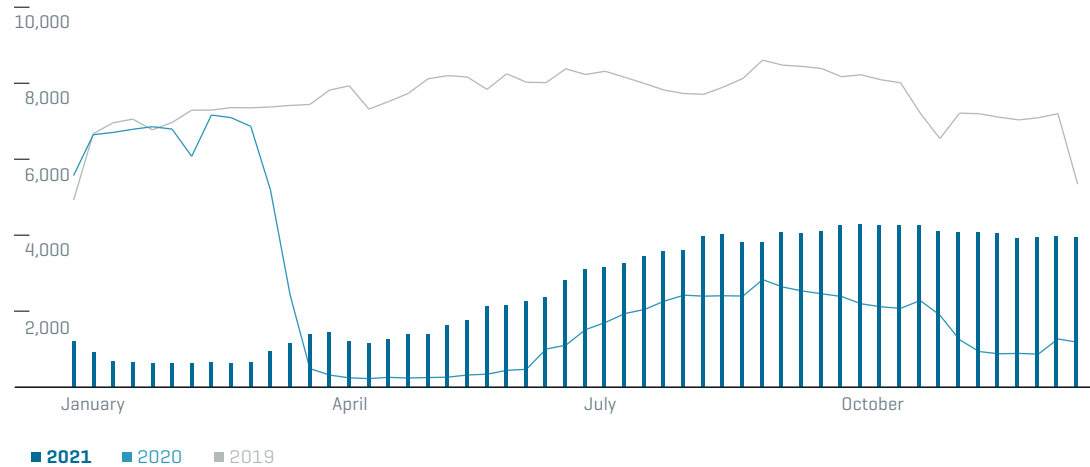
Progress on various construction measures despite coronavirus pandemic

In 2021, the expansion of the eastern apron in the area of Terminal 2 by a total area of 180,000 m² could be completed. As a result, 23 new parking positions are available.

The expansion of Terminal 1 by a pier also continued. The central goals of this expansion measure are to adapt the security controls in the non-Schengen area in particular to meet demand and to increase the quality of one's stay and the services in Terminal 1.

In addition, the «LabCampus» project is progressing on the AirSite West areal. The construction of the first two office buildings was consistently driven forward. Completion is expected in 2022/2023.

AIRCRAFT MOVEMENTS AT MUNICH AIRPORT DURING THE YEAR [COMMERCIAL TRAFFIC]



Aviation business Recovery of traffic figures in the second Corona year compared to the previous year

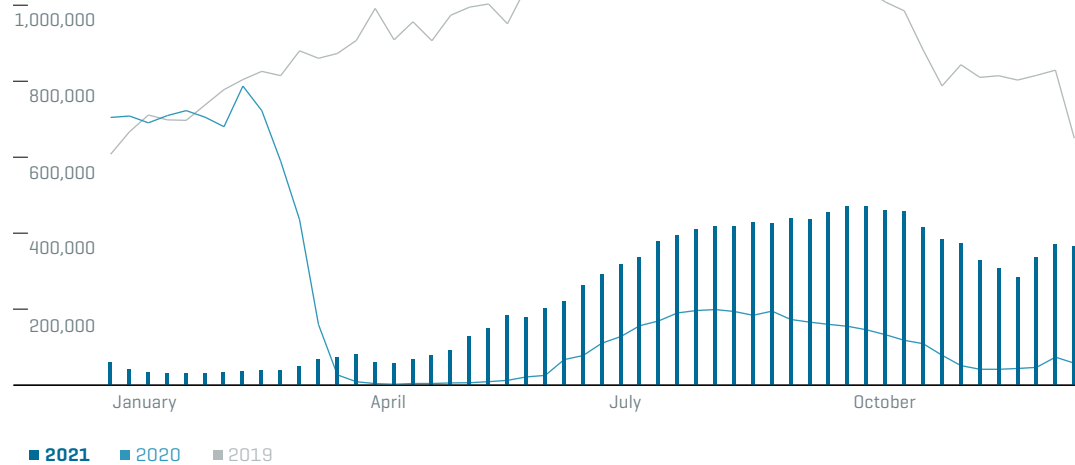
With 12.5 million passengers (+12.4%) and 153,097 aircraft movements (+4.3%), Munich Airport exceeded the traffic results of the first year of Corona. However, the traffic figures are still far below the results of the last regular operating year 2019: on the passenger side by about -74%, on the aircraft movements side by about -63%, and on the airfreight side by about -48%. The negative impact of the coronavirus pandemic is therefore far from over.

Unlike in the previous year, the Corona restrictions took effect from the beginning of the year. With the Easter vacations and especially from Pentecost onwards, a noticeable recovery set in, accompanied by travel facilitation measures, until the winter flight schedule. The sharp increase in Corona case numbers from mid-October onwards, as well as renewed tighter travel restrictions and concerns about the «omicron variant» that emerged at the end of November, dampened traffic development at the end of the year.

TRAFFIC FIGURES FOR MUNICH AIRPORT

Deviations possible due to rounding	2021	2020	Change	
			Absolute	Relative in %
Aircraft movements	153,097	146,833	6,264	4.3
Passengers (in millions)	12.5	11.1	1.4	12.4
Airfreight throughput (in tonnes)	166,713	145,113	21,600	14.9
Airmail throughput (in tonnes)	6,594	5,815	779	13.4

PASSENGER DEVELOPMENT AT MUNICH AIRPORT DURING THE YEAR [COMMERCIAL TRAFFIC]



In 2021, long-haul travel was the most affected by global travel restrictions. From the second half of the year, this segment slowly recovered. U.S. traffic initially suffered from the unilateral entry restrictions on EU citizens, but picked up significantly in November after they were eased. Connections to Asia remained extremely limited. In total, long-haul traffic fell short of the previous year with 1.2 million passengers [-31%], and was down by as much as -86% on 2019.

Domestic German traffic was initially the mainstay of traffic volumes with stable demand, but lost its top position to continental traffic as the year progressed. The introduction of the 3G regulation for passengers in the domestic German market further tightened the framework conditions. This resulted in passenger declines of -10% compared to the previous year. Compared to 2019, the 2.3 million domestic passengers achieved represent a decrease of -76%.

As European travel restrictions were increasingly reduced over the course of the year, continental air traffic in Munich picked up again and developed into the most successful segment with an increase of almost +32%. Nevertheless, 9 million passengers represents a drop of almost -70% compared to the 2019 result. It was not until the end of the year, when numerous countries reacted to rising case numbers with renewed travel restrictions, that this momentum slowed.

Over the course of the year, passenger and transfer traffic stabilized as a result of expanded services and the associated improved connectivity. This manifested itself in particular from the end of September with the reintroduction of the fourth transfer hub by Deutsche Lufthansa. On a year-over-year basis, the transfer passenger share was 36%, up from 34% a year ago but down from 38% in 2019. In December 2021, the share of transfer passengers even reached a peak of 48%, underpinning the strength and importance of hub traffic at the Munich location.

Airfreight remained an important pillar of traffic development in the second year of the pandemic, reporting a significantly improved result compared to the previous year [+14.9% and 166,713 tonnes of commercial airfreight handled]. The global disruption of traffic flows, especially container shipping, increased demand for airfreight. However, Munich's special status as a passenger hub with a historically high share of ancillary cargo of over 80% dampened this effect considerably. In principle, this offer disappeared when the long-distance passenger service was largely discontinued due to the pandemic. As a result, ancillary cargo again declined slightly year-on-year by -0.4% to 94,519 tonnes. All-cargo transported on all-cargo aircraft filled the large supply gap and grew massively by 43.7% to 72,194 tons. The proportions shifted sharply, and the share of ancillary cargo in freight volumes was only 57% in 2021.

Airmail throughput grew to approximately 6,594 tons [+13.4%], but remains -64.2% below 2019 results.

Compared with the airports organized in the ADV, Munich Airport's performance was slightly below average compared with the previous year, despite an increase in traffic figures. During the crisis, Deutsche Lufthansa bundled its traffic at the Frankfurt hub, so Munich was particularly affected as a second hub. In the course of the second half of the year, however, Munich Airport was able to catch up and in December was even above the ADV average, as Deutsche Lufthansa also expanded its services in Munich again.

In cargo traffic, the main beneficiaries were the pure cargo airports with 24-hour operations and Frankfurt Airport as the home base of Lufthansa Cargo.

TRAFFIC RESULTS 2021 IN COMPARISON²⁷⁾

In %	ADV	Munich
Aircraft Movements (total traffic)	+11.4	+4.3
Passengers (commercial traffic)	+23.0	+12.4
Cargo (airfreight and airmail including transit)	+16.9	+14.8

²⁷⁾ ADV, ADV Monthly Statistics 12/2021, January 2022

The ranking of the European airports with the highest passenger numbers has been subject to extreme distortions since the beginning of the pandemic. For example, London Heathrow, formerly the busiest airport, temporarily fell out of the top ten. Munich Airport was also badly affected, slipping to 20th place over the course of the year but improving to 16th by the end of the year. Airports in Russia and Turkey in particular were less affected due to strong domestic traffic. Thus, at the end of the year, the top ten included five airports from these countries.²⁷⁾

In order to achieve the necessary savings, the use of the terminal infrastructure was adapted to the fluctuating passenger volume and applicable spacing regulations. Until December 1, 2021, the Terminal 2 satellite was closed. The subsequent partial opening was based on the special inspection conducted there for USA flights. Terminal 1 was closed from December 1, 2020 to June 22, 2021.

As the pandemic-related traffic declines continued in 2021, Munich Airport took advantage of the situation to carry out fundamental renovation work on the runway system. Corresponding measures would otherwise have had to be carried out at night in the coming years and at considerably higher cost.

Ground handling services in a difficult economic environment

For the two subsidiaries AE München and AE Berlin, as for the entire German aviation industry, 2021 was marked by low handling figures in the first half of the year as a result of the global coronavirus pandemic.

There are two ground handling licenses at Munich Airport. One of these is permanently assigned to the subsidiary Aero-Ground Flughafen München GmbH [AE München]. In 2021, AE München recorded an increase in handling volumes of 10.4%. Market share increased by 3.9 percentage points to reach an average of 55.1% in 2021. This can be attributed, among other things, to a shift in market share at Deutsche Lufthansa, which also resulted in a higher market share in Terminal 2.

In Terminal 1, too, the stronger recovery of customers compared with the competitor Swissport-Losch also resulted in a slight increase in market share.

AE Berlin handled 17,661 turnarounds in the reporting year (2020: 10,077 turnarounds). The market share at the Berlin location increased year-on-year in passenger traffic to 43% (2020: 24%) and in freight traffic to 18% (2020: 3%). The increase in market share is attributable to the two newly acquired major customers Lufthansa Group and Eurowings, which AE Berlin has taken over from the opening of the new BER airport in November 2020.

Commercial Activities business

Compared to the previous year, revenue in the Commercial Activities business unit remained at the previous year's level due to the ongoing coronavirus pandemic and the resulting continued low passenger volume. Due to the passenger slump, terminal areas at Munich Airport were already closed in 2020 and gradually reopened in 2021:

- Opening of the check-in area in the central building on March 26 and check-in in Module C on May 19
- Reopening of departure areas in Terminal 1, Modules B, C and D, Module A from June 23 in peak times
- Partial opening of the Terminal 2 satellite on December 1

There were no ordered closures of retail and food service units during the fiscal year. In the first half of the year, it was up to the tenants themselves to decide whether to open their units in view of the passenger forecasts. Beginning July 30, a limited duty to operate in core areas from 7:30 a.m. to 4 p.m. was implemented.

In order to reduce the burden on tenants and retain them at the Munich location in the long term, adjustments were made in individual cases to rents and leases in line with 2020, primarily for passenger-dependent retail and gastronomy and differentiated according to the type and scope of the restrictions, where legally permissible and necessary.

Retail – sales development slumped more sharply than passenger numbers

Despite the increase in passenger numbers and the gradual opening of terminal areas, retail sales revenue grew at a disproportionately low rate. Included here is the full-year effect of the Corona crisis that occurred in 2021.

Gastronomy and hotel continue to suffer from the coronavirus pandemic

Sales in restaurants and bars, which slumped due to the coronavirus pandemic and related restrictions, increased slightly in absolute and per passenger terms compared to the previous year, despite the full-year effect of the crisis.

²⁷⁾ Airports Council International and self-survey, February 2022

The hotel once again recorded declines in revenue due to lower demand for overnight stays and conferences. The time could be used for modernization measures. At the 2020 Skytrax Awards, the five-star hotel in the central area of Munich Airport was named the second-best airport hotel in Europe.²⁸⁾ This award was suspended in 2021 due to the pandemic.²⁹⁾

Parking – demand increases with passenger volume

Passenger development at Munich Airport has a strong influence on the parking business. Although the proportion of trips made by car or car sharing has increased compared with the 2020 financial year, this is only a very small absolute amount. The tenant parking business, which is not directly passenger-dependent, recorded slight declines in sales.

Advertising – challenging market environment

Contrary to the industry trend in 2021, revenues at the airport have declined due to low passenger volumes, making it a less attractive advertising location. In addition, the number of long-term contracts [including passenger boarding bridges and smoking lounges] decreased due to the terminal closures, some of which will continue in 2021.

Real Estate business

Ongoing site and real estate development

The effects of the coronavirus pandemic were also felt in the Real Estate business unit. Various planned construction projects are still suspended or on hold. In ongoing projects, construction companies reported additional costs and obstructions. Overall, however, earnings were roughly on a par with the previous year. While rental income fell slightly, costs were reduced by deferring and prioritizing conversion

and maintenance measures. The requests made by various tenants in 2020 and 2021 for payment extensions and rent reductions were resolved amicably.

The development of the future LabCampus project on the AirSite West site is making progress. In the previous year, construction work began on the first two office buildings, which are scheduled for completion in 2022/2023. The marketing activities showed first successes.

Extensive development measures were required to improve access to AirSite West. These could be completed in 2021.

In the eastern area of the airport, Munich Airport continued the tunnel works related to the Erding ring closure to improve rail access to the airport. The existing tunnel, which currently ends at the level of the satellite building of Terminal 2, will be extended in an easterly direction by around 1.5 kilometers and supplemented by a 300-meter-long ramp structure via which the trains will return to the surface. FMG completed the tunnel shell in 2021. DB Netz AG is now equipping it with the technical equipment required for train operations.

Munich Airport is currently building a new pier at Terminal 1. The extension will help to improve the handling of wide-bodied aircraft and non-Schengen passengers, which was urgently needed due to the changing traffic structure. In addition, because the requirements for security checks have increased constantly since Terminal 1 was opened in 1992, checks on persons and luggage must be expanded. With the addition of this pier, the handling quality in Terminal 1 can once again meet the demands of passengers, airlines and authorities.

The overall concept for the extension includes a structure on three levels, comprising a core building adjacent to Terminal 1 and a pier. This will be connected to the existing Modules A and B and extend some 320 meters into the western apron of Munich Airport. Up to twelve aircraft will then be able to dock at the pier. The total area of the expansion, including the renovations in the existing arrival area B, is around 95,000 m². The shell construction work was largely completed in 2021. Work on the facades and roof was started in 2021. The four connecting bridges to Terminal 1 have been contracted. In 2022, the tenders for the interior construction and building services are to be issued, with the start of interior construction planned from the first quarter of 2023.

Residential properties of various types have been rented since 2019 in order to provide suitable living accommodations for employees already working at Munich Airport as well as for new employees. Apartment buildings owned by the airport have also been renovated and converted into residential facilities. The 196-bed hotel for employees opened in Hallbergmoos at the end of 2019 will also remain available. Due to the current personnel policy (hiring freeze, partial retirement and volunteer program), there is currently hardly any demand from employees. Nevertheless, the «FMG and Housing» project is to be continued in the long term as an HR marketing tool, but in the short term, apartments and rooms will be marketed to external parties to minimize the deficit.

In the AirSite West area, the P44 parking garage with 2,000 parking spaces was opened this year. Advancing real estate development at AirSite West [LabCampus, FMG corporate headquarters] requires more parking capacity to meet future needs.

²⁸⁾ SKYTRAX, World's Best Airport Hotels 2020, December 2020

²⁹⁾ SKYTRAX, World's Best Airport Hotels 2021, December 2021

Following a successful search for a location in Germany, the company Argo AI GmbH commissioned the first construction phase of a research and development site for autonomous driving in the southern development band in mid-2021. In addition to the approximately 55,000 m² site, a lease agreement was concluded for workshop and office space in the building currently under construction on the LabCampus. Construction of the second and thus final phase will start in 2022.

The modernization measures at the Hilton Hotel are progressing: In November 2021, the modernization of the

rooms and corridors in the east ward building was completed, and it is currently the turn of the west ward building and the replacement of the atrium roof glazing. Completion of the entire project is expected by the end of 2022.

Results of operations, assets, and financial position

Results of operations

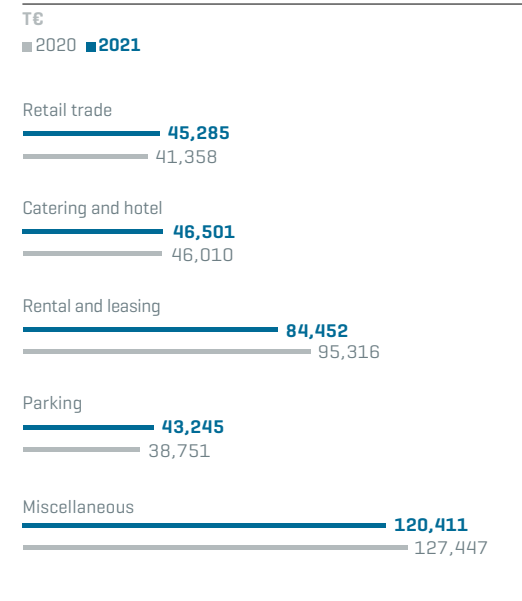
Earnings after taxes still impacted by coronavirus pandemic

In fiscal year 2021, Munich Airport's earnings after taxes (EAT) improved by T€ 60,105 to T€ -261,296. The developments are explained in detail below.

Revenue from handling operations also increased by a total of T€ 7,937 (+12.0%), primarily in the area of ground handling services. All airlines repeatedly adjusted their flight offers at short notice to the corresponding travel restrictions.

Revenue in the other divisions developed as follows:

BREAKDOWN OF REVENUE OF OTHER AREAS



RESULTS OF OPERATIONS

T€	2021	2020	Change	
			Absolute	Relative in %
Revenue	601,276	579,672	21,604	3.7
Other income	79,206	44,543	34,663	77.8
Total revenue	680,482	624,215	56,267	9.0
Cost of materials	-249,702	-232,577	-17,125	7.4
Personnel expenses	-419,095	-408,606	-10,489	2.6
Other expenses	-57,501	-144,870	87,369	-60.3
EBITDA	-45,816	-161,838	116,022	-71.7
Depreciation and amortization	-239,851	-242,016	2,165	-0.9
EBIT	-285,667	-403,854	118,187	-29.3
Financial result¹⁾	-50,590	-29,566	-21,024	71.1
EBT	-336,257	-433,420	97,163	-22.4
Income taxes	74,961	112,019	-37,058	-33.1
EAT	-261,296	-321,401	60,105	-18.7

¹⁾ This also includes the results from companies accounted for using the equity method.

The traffic recovery in 2021 led to an increase in revenue from airport charges from T€ 164,782 to T€ 187,437 (+13.7%). Nevertheless, sales are at a low level and continue to be affected by the coronavirus pandemic.

Other revenues include global management, consulting and training services for the aviation industry amounting to T€ 26,747 [2020: T€ 20,247].

Other income includes T€ 12,083 in non-recurring effects from economic aid [November and December aid] in connection with the coronavirus pandemic for a subsidiary.

After almost 30 years of operation, the need for renovation of the buildings from the first expansion phase of Munich Airport continues to grow. Accordingly, expenses for refurbishment, optimization, and conversion measures increased [+T€ 19,285], primarily in the course of the modernization to be carried out at the hotel in 2021. By contrast, the remaining costs in the cost of materials remained at the level of the previous year, despite the increase in air traffic, due to the continued cost-cutting measures in the Group.

Munich Airport's personnel expenses increased in particular as a result of the further staff adjustment programs launched and implemented throughout the Group in 2021. Overall, the average number of employees decreased from 9,384 to 8,569.

Adjusted for the expenses recognized in the previous year for provisions in connection with the «Restart» change program [T€ 76,868], other expenses decreased overall by 15.4% [-T€ 10,501] as a result of strict cost management in the Group.

Depreciation and amortization [T€ 239,851; 2020: T€ 242,016] includes impairment losses on assets of T€ 31,081 [2020: T€ 42,495]. In fiscal year 2021, these relate primarily to assets valued at T€ 26,300 as a result of newly concluded rental agreements. In the previous year, the impairment losses mainly included planning services of T€ 24,663 for the third runway, which have to be provided again due to the postponement in connection with the coronavirus pandemic.

The financial result [including the result from companies accounted for using the equity method] deteriorated by T€ 21,024 to T€ -50,590. This was mainly due to the non-cash effects of the revaluation of financial liabilities from interests in partnerships in other financial results.

Income taxes include actual tax expenses of T€ 2,587 [2020: tax income of T€ 704] and deferred tax income of T€ 77,548 [2020: T€ 111,315]. The high level of deferred tax income is mainly due to the recognition of tax losses carried forward, since the Group companies expect to generate positive results again in the coming years.

Assets and financial position

Assets – Munich Airport secures its liquidity in the second year of Corona

FINANCIAL POSITION

T€	Dec. 31, 2021	Dec. 31, 2020	Change	
			Absolute	Relative in %
Non-current assets	5,328,662	5,315,139	13,523	0.3
Current assets ¹⁾	164,483	213,451	-48,968	-22.9
thereof cash and cash equivalents	16,963	9,717	7,246	74.6
Assets	5,493,145	5,528,590	-35,445	-0.6
Equity	1,815,132	2,064,962	-249,830	-12.1
Other non-current liabilities ²⁾	2,754,453	2,530,126	224,327	8.9
Other current liabilities ²⁾	923,560	933,502	-9,942	-1.1
Equity and Liabilities	5,493,145	5,528,590	-35,445	-0.6

¹⁾ Including assets held for sale

²⁾ Including financial liabilities from partnerships

The increase in non-current assets [+T€ 13,523] mainly related to contract assets in the amount of T€ 8,939 and deferred tax assets in the amount of T€ 6,984.

In the 2021 fiscal year, Munich Airport's liquidity reserves decreased from T€ 67,985 to T€ 34,984 as a result of the crisis. The balance at the end of the year resulted from the raising of new funds to secure liquidity, which are included in the current assets. In addition, other assets [-T€ 13,523] decreased to T€ 19,263 due to the higher receivables from the tax authorities in the previous year.

The change in equity to T€ 1,815,132 is mainly due to the consolidated net loss for the current financial year of T€ 261,296.

The increase in non-current liabilities to T€ 2,754,453 is mainly due to the borrowing of funds totaling T€ 425,000 to secure liquidity.

Other current liabilities include repayments of loans due in the 2022 fiscal year. The total balance at the reporting date was T€ 172,673 [previous year: T€ 212,751]. In addition, liabilities decreased by T€ 33,409 to T€ 145,006.

Capital structure –
borrowing to secure liquidity

CAPITAL STRUCTURE

T€	Dec. 31, 2021	Dec. 31, 2020	Change	
			Absolute	Relative in %
Subscribed capital	306,776	306,776	0	0.0
Reserves	90,083	133,651	-43,568	-32.6
Other equity	1,418,253	1,624,515	-206,262	-12.7
thereof profit or loss for the year	-261,296	-321,401	60,105	-18.7
Non-controlling interests	20	20	0	0.0
thereof profit or loss for the year	0	1	-1	-100.0
Equity	1,815,132	2,064,962	-249,830	-12.1
Financial liabilities from interests in partnerships	348,177	334,619	13,558	4.1
Shareholder loans¹⁾	523,255	512,788	10,467	2.0
Fixed-rate loans	1,591,512	1,220,872	370,640	30.4
Floating-rate loans	514,238	603,417	-89,179	-14.8
Loans	2,105,750	1,824,289	281,461	15.4
Derivatives	1,297	16,341	-15,044	-92.1
Other liabilities	699,534	786,052	-86,518	-11.0
Financial liabilities	3,678,013	3,474,089	203,924	5.9
Equity ratio	33.0%	37.3%		

¹⁾ including deferred interest

The equity ratio decreased primarily due to the result for the financial year and the borrowing of funds to secure liquidity.

The main terms of Munich Airport's current and non-current financial liabilities can be found in the table below:

NON-CURRENT LOANS CONDITIONS

Method of funding	Currency	Interest rate	Residual debt in T€	Interest rate in %	
				from	to
Financial liabilities from interests in partnerships	EUR	Earnings-based	348,177	-	-
Shareholder loans	EUR	variable/ earnings-based	491,913	Base rate plus margin	
Loans	EUR	Floating-rate	516,536	3M- and 6M-EURIBOR plus margin	
Loans	EUR	Fixed-rate	1,592,366	0.16	3.46

[As at December 31, 2021]

The shareholder loans are available for an indefinite period and bear interest at the prime rate plus a margin.

The loans are subject to the usual non-financial covenants, including pari passu declarations. In addition, there are other general conventional agreements concerning repayment in the event of changes in shareholder structure. No financial covenants have been agreed.

Munich Airport uses interest payer swaps and forward exchange transactions to hedge against risks arising from interest rate and exchange rate fluctuations. Interest rate hedges are accounted for as a valuation unit.

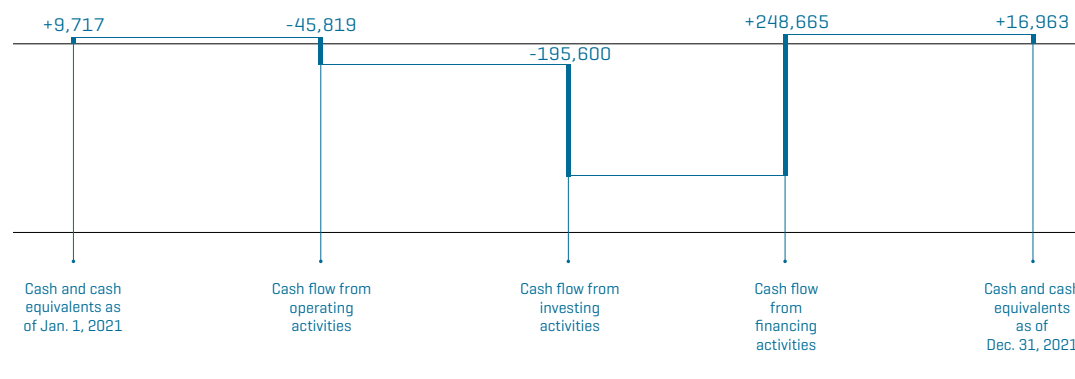
HEDGING TRANSACTION CONDITIONS

Hedge transactions	Notional amount	Currency	Fixed rate in %		Forward rate in EUR/USD		Underlying transactions
			from	to	from	to	
Interest payer swaps	55,000	T€	0.50	0.60	-	-	Syndicated loans
Forward exchange transactions ¹⁾	2,573	T€	-	-	1.18	1.22	Expected transactions

¹⁾ These hedging relationships are not accounted for.

CASH FLOW STATEMENT

T€



Liquidity

Due to the improved traffic development and strict cost management in fiscal year 2021, the cash outflow from operating activities [previous year: T€ 116,048] was significantly reduced in the second year of Corona.

The cash outflow from investing activities resulted primarily from investments in construction projects. The cash inflow from financing activities decreased by T€ 124,197 compared with the previous year to T€ 248,665, in particular due to the lower level of long-term borrowings to secure liquidity and the higher level of loan repayments.

Investments

In fiscal year 2021, investments in property, plant, and equipment for own use at Munich Airport was T€ 244,628 in total. This was offset by planned depreciation in the amount of T€ 199,553.

These investments primarily comprise costs for construction projects, which were not yet completed in fiscal year 2021. These included among others investments in connection with the development of AirSite West, including the «LabCampus» project, the expansion and modernization of Terminal 1, and the expansion of the rail tunnel for the Erding ring closure.

In addition, construction projects such as the east apron extension, the P44 parking garage and the test track for autonomous driving were completed and put into operation.

Further explanations on this are included in the section «Key events in the past fiscal year».

Target achievement and overall assessment

Year on year and in comparison with the forecast development, these performance indicators have trended as follows:

FORECAST/ACTUAL COMPARISON

	2020		2021		2021	
	Actual		Forecast		Actual	
			from %	to %		
EBT (in T€)	-433,420		Unchanged		-336,257	Exceeded
Carbon reductions (in tonnes) ^{1), 2)}	2,373	Decrease	-15.7	-10.7	1,083	Not achieved
Passenger Experience Index ³⁾	78.12	Unchanged	0.0	0.0	84.98	Exceeded

¹⁾ Actual value of carbon reductions 2021 without savings from use of PCA, i.e. only energy efficiency and supply

²⁾ Depending on the data basis, the savings are determined on the basis of measurements, product data sheets or performance data on nameplates and documented in the CO₂ database. In exceptional cases, experience values of comparable measures that have already been completed and verified are used.

³⁾ In 2021, only the value from the second half of 2021 could be used as the target value for overall satisfaction from the Passenger Experience Index, as passenger surveys were only conducted in this period.

Earnings before taxes (EBT)

Munich Airport's EBT in fiscal 2021 continues to be impacted by the effects of the coronavirus pandemic. Despite drastic countermeasures in both the areas of expenses and capital expenditure, it was not possible to fully compensate for the decline in earnings. Nevertheless, strict cost management enabled us to achieve a better EBT than planned.

Carbon reductions

To achieve the long-term climate protection goals, binding targets are defined annually for divisions and subsidiaries of the Group. These include stipulations regarding the implementation and recognition of efficiency measures, and special

targets for the development of CO₂-reducing technologies. Examples include the increased use of multi-motor technology in the ventilation systems in Terminals 1 and 2 and the switch to energy-efficient LED lighting. Due to the pandemic, among other things the high short-time work rate combined with considerable delivery delays led to a sharp decline in the implementation of carbon reduction measures. In addition, the emission factor published annually by the Federal Environment Agency influences target achievement. A decreasing emission factor means that more savings have to be made to achieve the same level of carbon reductions. In 2021, the emission factor of 0.427 kg/kWh was about 20% lower than in the previous year.

Passenger Experience Index (PEI)

In fiscal 2021, Munich Airport saw a sharp increase in passenger satisfaction as measured by PEI compared to 2020. Due to the coronavirus pandemic, passenger surveys were only conducted in the second half of the year. The significantly higher value for overall satisfaction compared to the previous year can be explained by the fact that, on the one hand, the processes ran very stably with relatively low traffic volumes compared to previous years. On the other hand, new constellations such as a changed passenger mix (for example, fewer frequent flyers who are better able to assess operations) and the joy of being able to travel again have made critical voices fewer.

In order to meet the requirements of a 5-Star airport, Munich Airport has again implemented quality improvement measures in 2021. In this regard, contactless automated technologies in the terminal area were expanded with the commissioning of self-boarding gates. In addition to Terminal 2, these can now also be found in Terminal 1, Module A. In addition, air travelers can view real-time information about current security and passport control wait times on the airport website.

Events after the balance sheet date

The consequences of the military actions in Ukraine since the end of February 2022 cannot be foreseen at present, but could have a negative impact on the assets, financial position, and results of operations. Reference is made to the further explanations in the sections «Forecast course of business» and «Risks».



Outlook, opportunities, and risks report

Outlook

Economic and industry-specific conditions

The military conflicts between Russia and Ukraine and their political and economic consequences currently pose an additional significant risk to the development of the global economy, the prices of important energy sources such as oil and gas, and the further recovery of the entire aviation industry. The following comments on the outlook for 2022 do not yet include the effects of the crisis, as these cannot be estimated at present.

The global economy is currently in the recovery phase. The ifo Institute forecasts economic growth of 4.4% and 3.2% for 2022 and 2023 respectively. The effects of the coronavirus pandemic will continue to shape economic development in 2022. It can be assumed that health policy measures are still being implemented in many countries. The economic recovery will be inhibited as a result. In the course of 2021, there were supply bottlenecks worldwide, particularly for important industrial intermediates. These have intensified until recently and will continue to weigh on the global economy in 2022. However, adjustments in production processes, an improvement in the pandemic situation and price allocation mechanisms should ease the situation for the foreseeable future. The majority of business sentiment in most countries is optimistic. Very high order backlogs in the industrial sector are also likely to accelerate investment momentum.³⁰⁾

According to the ifo Institute's forecast, economic output in the industrialized nations is likely to expand at a rate of 4.1% in 2022. Strong gross domestic product (GDP) growth of 4.4%

is expected for the USA. The economic recovery after the pandemic will be supported by expansive fiscal policy stimuli. However, persistent supply bottlenecks are holding back U.S. industrial development. Economic growth in the United Kingdom is also forecast to be high at 5.1% in 2022. The service sector and private consumption will only be marginally affected by the consequences of the pandemic due to the almost non-existent Corona measures. However, industrial development will still be hampered by supply bottlenecks in 2022. As a result of Brexit, there are labor shortages in some areas.³¹⁾

According to the forecast, the emerging markets group will achieve overall economic growth of 4.9% in 2022. After a strong recovery so far, the Chinese economy is expected to grow at a rate of only 5.1% in 2022. Delivery problems for industrial intermediate products, a less expansive monetary and fiscal policy, and a tougher course in the regulation of various sectors of the economy are slowing economic momentum in China. India was particularly hard hit by a wave of coronavirus (delta variant) infections in the spring of 2021. This led to an interruption in the economic recovery, which is now expected to continue. India's forecast growth rate of 9.7% is correspondingly high.³¹⁾

In the euro zone, economic output is expected to grow by 3.9% in 2022. In addition to the supply bottlenecks already mentioned, the economy is burdened by the increased incidence of infections in the fall and winter months. Since the fall of 2021, increasing infection dynamics were already evident in large parts of Europe. Many countries have therefore stepped up their health policy measures again. This is expected to weigh on the euro area economy, especially in the first quarter of 2022. However, economic losses are usually cushioned by government support measures. The summer months should

therefore see a strong recovery in line with the previous year. The ifo Institute expects gross domestic product (GDP) in France to grow by 3.5% in 2022. For Italy and Spain, growth rates of 4.4% and 5.5%, respectively, have been forecast.³⁰⁾

According to the forecast, the German economy will expand by 3.7% in 2022. Due to the high proportion of industry, the economic situation in the Federal Republic is particularly burdened by the continuing supply bottlenecks. The proportion of companies whose production is hampered by this is currently at a historically high level. This is also one of the key drivers of the current high inflation rate. However, adjustments in production processes, an easing of the pandemic situation and price allocation mechanisms should ease the situation by the end of 2022. An inflation rate of 3.3% is forecast for 2022. In 2023, consumer price inflation should normalize at a rate of 1.8%. The services sector will be impacted by measures to contain the coronavirus pandemic, particularly in the first quarter of 2022. Unlike in the previous year, however, it is not expected that there will be full-scale closures. A significant recovery in the service sector can then be expected in the summer half-year. Similarly, the recovery on the labor market is likely to stagnate in the first quarter and then pick up again. Overall, the unemployment rate is expected to fall from an annual average of 5.7% in 2021 to 5.2% in 2022. Fiscal policy will remain expansionary in 2022, albeit less so than in the previous year. In 2023, the pandemic-related measures should then expire and thus no longer have any fiscal relevance.³⁰⁾

³⁰⁾ ifo Institute, Economic Forecast Winter 2021, December 2021

³¹⁾ ifo Institute, Economic Forecast Winter 2021, December 2021; German Council of Economic Experts, Annual Report 2021/22, November 2021

The oil price (Brent) increased significantly in 2021 compared to the crisis year 2020. In 2021, the annual average oil price was \$70.40 per barrel [2020: \$41.80 per barrel]. Until the outbreak of the Ukraine crisis, the ifo Institute assumed that the oil price would only marginally increase its level to \$71.80 per barrel in 2022.³²⁾ Currently, market participants expect volatility to remain high in view of the Ukraine conflict.

The demographic and economic general conditions in Bavaria and especially in the airport catchment area mean that further strong growth in transportation demand can be expected at Munich in the medium to long term despite short-term slumps. According to the results of the regionalized population projection by the Bavarian State Statistical Office, Bavaria's population will grow by 3.9% by 2040 compared to 2020. A strong to very strong population increase is expected in the Munich region in particular. In the state capital of Munich, the figure is expected to be 8.2%; the rural district of Munich is likely to increase by 6.9%. Four of the fastest-growing districts are also located in the nearby catchment area of Munich Airport. Growth of 10.3% and 10.5% is forecast for the districts of Ebersberg and Dachau, respectively, and 11.3% and 11.8% for the districts of Pfaffenhofen a. d. Ilm and Landshut, respectively.³³⁾

The global aviation market is suffering severely from the coronavirus pandemic. The outlook for the near future is less positive than that of other sectors. The travel restrictions that remain in place continue to be a significant burden. During the crisis, however, air traffic was able to prove its systemic relevance by transporting medical goods, among other things. Until the outbreak of the Ukraine crisis, IATA projected that global air traffic demand would continue to recover in 2022, reaching 61% of pre-crisis levels worldwide. While domestic

air traffic is forecast to recover to 93%, international air traffic is expected to develop much more modestly and therefore reach only 44% of its pre-crisis level in 2022.³⁴⁾

Forecast course of business

To date, the aviation industry has been more severely and directly affected by the consequences of the spread of the coronavirus than other industries. Globally, coronavirus case rates behave differently from state to state. Nevertheless, Munich Airport expects a significant recovery in 2022, following the positive development of travel demand in 2021. The Group is currently expecting passenger numbers to more than double compared to the previous year. The expected passenger volume is thus around two-thirds of the pre-crisis level in 2019.

Based on current estimates, management expects to return to 2019 air traffic volumes in 2024. However, this assumption remains highly uncertain and depends heavily on how quickly the pandemic can be contained worldwide, particularly through global application of vaccines. Vaccination rates worldwide are not yet sufficiently high, so new virus variants could emerge. If these were to lead to rising incidence figures and extensive travel restrictions again, then this would result in a «material» negative impact on the Group's business performance, results of operations situation and all key financial figures.

Munich Airport assumes that the impact of the crisis will continue to have a lasting effect on the Group's economic development in all business segments in 2022. The extent to which the consequences of the military conflict between Russia and Ukraine and the sanctions already imposed will affect the assets, financial position, and results of operations cannot be estimated at present.

Depending on the further course of the war in Ukraine and the coronavirus pandemic, deviations from the following forecast are possible.

With regard to revenue from airport charges, the Executive Board assumes an increase in line with the development of traffic with reference to the newly concluded multi-year master agreement on charges.

Retail sales will also develop positively in line with the recovery in transport. In contrast to 2021, all stores are assumed to be open year-round in 2022.

Revenue from catering and hotels as well as from handling operations, parking and advertising is assumed to grow at a lower rate than growth in air traffic.

Revenues from rentals and leases are expected to remain essentially constant compared with 2021.

Other revenues, which include throughput charges for aviation fuel supply, revenues for utilities and fuel, and global management, consulting and training services for the aviation industry, develop significantly less than traffic growth, but also depend on it only to a limited extent.

In total, management expects sales to roughly double compared to 2021.

³²⁾ ifo Institute, Economic Forecast Winter 2021, December 2021

³³⁾ Bavarian State Statistical Office, Regionalized Population Projection for Bavaria to 2040, January 2022

³⁴⁾ IATA, Losses Reduce but Challenges Continue – Cumulative \$201 Billion Losses for 2020-2022, October 4, 2021

Overall, the cost of materials is expected to increase at a lower rate than sales. The maintenance and remodeling measures included in this figure will increase due to corresponding catch-up effects from 2020 and 2021 and, among other things, in connection with a modernization at the Hilton hotel.

Personnel expenses in the Group will increase by around one fifth. The main reason for this is, on the one hand, the reduced subsidization of short-time work by the public sector and, on the other hand, the reduced short-time work rates in 2022 due to the renewed increase in the use of personnel for projects and operationally relevant processes and tasks. However, this expense-increasing effect is also offset by expense-reducing effects. As a result of natural fluctuation, retirement and the «Restart» change program, the average number of employees in the Group will fall year-on-year. The emergency collective agreement for German airports applied in parts of the Group also has a cost-reducing effect.

Other expenses are also expected to rise as business picks up.

Depreciation and amortization will decrease due to asset impairments recognized in 2021.

The financial result is expected to deteriorate due to the annual compounding effects in connection with financial liabilities from interests in partnerships.

In view of the fact that revenue will continue to be rather low compared with pre-crisis levels and that countermeasures on the expense side are only possible to a limited extent (reducing expenses to the minimum necessary for

operations and required by law), Munich Airport expects that earnings before taxes (EBT) will continue to be negative in fiscal 2022, even after extensive countermeasures have been implemented.

Management is making massive efforts to secure liquidity and create additional financial flexibility. This will be achieved through cuts in all costs and investments. For example, construction projects that can be delayed, which are not operationally necessary or of great strategic relevance, are postponed to the future. Management remains committed to strategic projects such as pier T1 and LabCampus. The results of the «Restart» program will be implemented in 2022 and also in subsequent years, which includes in particular reducing measures in the personnel area through early retirement schemes and volunteer programs.

Munich Airport is in constant contact with its principal banks regarding any liquidity requirements that may arise. In the

course of 2022, the air traffic, earnings and liquidity forecasts will be continuously updated and, depending on the further course of the crisis, a decision will be made as to when and to what extent an increase in the existing credit lines must be initiated and, if necessary, new funds raised. This ensures that the Group has the necessary liquidity at all times.

The anticipated liquidity depletion assumes that the countermeasures for expenses, investments and personnel are implemented, air traffic recovers and reaches the expected level. If these assumptions do not come to pass in the manner outlined, this may lead to an increased liquidity demand and consequently to earlier consumption of the existing liquidity reserves. From its current perspective, Munich Airport will be able to cover any higher liquidity requirements on the capital market.

Projected major financial and non-financial key performance indicators:

PROJECTED MAJOR FINANCIAL AND NON-FINANCIAL KEY PERFORMANCE INDICATORS

	2021 Actual	2022 Forecast	
		from	to
		In %	In %
EBT (in T€)	-336,257	Increase 50.0	90.0
Carbon reductions (in tonnes) ^{1), 2)}	1,083	Increase 88.0	93.0
Passenger Experience Index Overall Satisfaction ³⁾	84.98	Unchanged	0.0
Lost Time Incident Frequency (LTIF) ⁴⁾		Decrease	-3.0

¹⁾ Actual value of carbon reductions 2021 without savings from use of PCA, i.e. only energy efficiency and supply

²⁾ Depending on the data basis, the savings are determined on the basis of measurements, product data sheets or performance data on nameplates and documented in the CO₂ database. In exceptional cases, experience values of comparable measures that have already been completed and verified are used.

³⁾ In 2021, only the value from the second half of 2021 could be used as the target value for overall satisfaction from the Passenger Experience Index, as passenger surveys were only conducted in this period.

⁴⁾ 2019 (LTIF: 21.96) was used as the comparison period.

Earnings before taxes (EBT)

Overall, Munich Airport expects EBT to improve significantly, but still to be negative. The exact trend depends above all on the progress of the coronavirus pandemic and is difficult to estimate at present. This means that in 2022, Munich Airport will still be significantly behind the record year of 2019 before the crisis.

Carbon reductions

Carbon reductions are expected to increase significantly in 2022 following the sharp decline in 2021. Due to supply delays, some measures planned for 2021 and already started will not be completed until 2022. Additional savings from efficiency measures are targeted for 2022. The planned measures should primarily reduce the energy requirement for lighting and air conditioning technology.

Passenger Experience Index (PEI)

The forecast value of 84.98 in the Passenger Experience Index (PEI) for 2022 is set at the 2021 level, as the impact of the ongoing coronavirus pandemic on PEI cannot be determined at this time. For 2022, the passenger development of the second half of 2021 is generally expected to continue.

Lost Time Incident Frequency (LTIF)

Due to the current Corona situation and its impact on air traffic, the current trend in the Lost Time Incident Frequency (LTIF) is difficult to predict. The forecast of accident numbers for 2022 is based on the forecast hours worked for 2022. This assumes a 3% improvement in LTIF.

To achieve this goal, measures are planned to minimize the potential impact on accident occurrence. The project to strengthen the occupational safety culture at AE Munich will be continued as soon as possible. The aim is to reduce occupational accidents by ensuring safe behavior in the workplace. In addition, work organization at FMG and AE Munich is analyzed in dialogue with managers, with a focus on accident occurrence/reduction and risk assessments, and optimized where necessary. In addition, training courses for managers are planned from the second quarter of 2022 as part of the mental risk assessments.

Opportunity and risk report Risk management system

The Executive Board of FMG and all subsidiaries and affiliated companies is responsible for the early detection and prevention of risks that jeopardize the continuity of Munich Airport and the investments. Group Management has overall responsibility for an effective risk management system and lays the essential foundation for it by communicating and defining corporate strategy and targets. It formulates specifications for the risk management process and the organizational structure of the risk management system.

The goal of the risk management system is to identify events and developments that may have a negative impact on the achievement of strategic and operational targets in good time and develop suitable countermeasures. It takes account of all aspects of entrepreneurial activity – economic as well as ecological and social.

The risk management guideline regulates the general principles of risk management in the Group as well as the tasks and responsibilities of the function holders involved in risk management. This is aligned in accordance with the internationally recognized framework model «COSO ERM» [Committee of Sponsoring Organizations of the Treadway Commission – Enterprise Risk Management].

The Risk Management Committee serves as an additional supporting management, control, and supervisory body within the risk management system. As the highest-ranking risk management body, it reports directly to the Executive Board and consists of the Chief Financial Officer and Chief Infrastructure Officer, the heads of the Aviation, Commercial Activities and Real Estate business units, the heads of the Legal, Corporate Bodies, Compliance and Environment, Group Controlling and Investment Management, Group Security, Group Development and Corporate Communication & Politics departments, the head of the IT service division, and the Risk Manager. The head of Compliance is involved in the Risk Management Committee as a guest. The task of the Risk Management Committee is to analyze the risks from a Group perspective and to monitor the effectiveness of countermeasures. It provides support for developing the risk management system and for risk identification, assessment, and control. The Risk Management Committee meets quarterly and issues the risk report, which is subsequently presented to the Executive Board and the shareholders.

The risk management process comprises the following steps. A coordination and communication platform has been established in the system to support this process.



Identification and communication of risks

All divisional managers and Chief Executive Officers of subsidiaries and shareholdings are responsible for the identification and assessment of risks. In the relevant divisions, all risk-relevant information is coordinated, administrated, documented, and passed on by the relevant risk managers. The risk manager checks the divisions' risk reports for plausibility and compliance with the Group-wide standards for risk assessment. The role involves combining the divisions' individual reports in a risk report, taking account of materiality for the Group, and reporting quarterly to the Executive Board and shareholders. Risks that jeopardize the Group's existence that have been identified for the first time must also be reported to the Executive Board on an ad hoc basis.

As a basis for dealing with risks responsibly, each individual employee is involved in managing risks throughout the company. Each employee is responsible for eliminating hazards in his or her own area and for reporting any indications of existing risks to his or her manager without delay.

Assessment of risks

The systematic risk assessment allows the company to determine the extent to which individual risks jeopardize the fulfillment of Munich Airport's corporate goals and strategies and which risks may possibly threaten its existence. For this purpose, the factors damage amount, and probability of occurrence/frequency, are presented in a two-dimensional risk matrix. The expected loss describes the impact on profits that can be expected if the loss event occurs. In the case of events that recur over time, the company works with the frequency with which they occur. The assessment first takes

place without considering measures to limit the risk (gross risks, see the section «Risks»). Subsequently, the risks are assessed after risk-minimizing measures are initiated or implemented (net risks, see section «Risks»).

Dealing with risk

Starting from the risk analysis, appropriate countermeasures for dealing with risk are specified according to corporate strategy and economic aspects. Risk management strategies include: control, insure against, minimize, eliminate, and transfer. The risk officers have the task of specifying and implementing countermeasures to manage risks in the respective division affected.

Risk monitoring

The risk manager continuously monitors the effectiveness of risk management. Risks are also monitored separately by Internal Audit.

Compliance management system

Compliance covers compliance with all Munich Airport-related laws, specifications, and regulations, national and international rules and standards, as well as in-house rules and guidelines. Munich Airport has established a Group-wide compliance management system, which encompasses all organizational provisions ensuring compliance with the aforementioned rules.

The Compliance Department submits reports on the current status of the compliance management system to the Executive Board on a regular basis and to the Supervisory Board on an annual basis.

Compliance risks are also communicated as part of the risk reporting to the Executive Board and shareholders if internal thresholds are exceeded. Regular dialog takes place between Risk Management and Compliance.

For the first time, a Code of Conduct was presented to management. This Code of Conduct contains the principles and guidelines for conduct within the Munich Airport Group that complies with values and the law.

Identifying and mitigating compliance risks

The Compliance department prepares the compliance risk analysis with input from the FMG divisions and combines it with the subsidiaries/affiliates compliance risk analyses every year.

Compliance risks are assessed in the same way as the risk management process. Once the compliance risk analysis has been carried out, the Executive Board is notified of the results in a report.

The annual Compliance Report to the Supervisory Board of FMG also includes the results of the compliance risk analysis. If, despite all countermeasures taken, a risk has a high potential for damage and at the same time a high probability of occurrence, then it is examined in more detail in the report.

After consideration of the implemented countermeasures, no significant compliance risks remain for the year 2021. In connection with the coronavirus pandemic, appropriate protective measures for the health of employees and customers were taken with the highest priority.

Preventing corruption

The Compliance Principles and the Gift/Invitation Policy support management, executives and employees in behaving lawfully and ethically in the workplace. They are published on the intranet and are therefore available to all employees. In addition, the principles refer to the observance of other internal company guidelines, such as compliance with public procurement law during procurement and procurement processes, data protection organization or information security. These ensure that processes and procedures are transparent and traceable, both internally and externally. In contracting and tendering procedures, Munich Airport requires bidders to submit a declaration of commitment stating that they will undertake everything necessary to preclude corruption. Compliance failures are subject to sanctions, such as exclusion from the contracting process.

The position of anti-corruption officer is exercised by the head of the Compliance department. There are no known confirmed cases of corruption in the Group for 2021.

Communication and training

A key task of the Compliance department is to train and advise employees, managers, and the FMG Executive Board in compliance matters as a preventative measure to stop compliance breaches from occurring.

Group compliance regularly provides training and publishes information to ensure that all employees and managers are familiar with the guidelines and any updates or amendments to them. As a result of the effects of the coronavirus pandemic, compliance training for employees in 2021 was conducted in a flexible manner, both in person and digitally. Participation in the training was documented.

In order to raise awareness of compliance issues and data privacy violations, management has decided that web-based compliance training is mandatory for all employees throughout the Group once a year, in addition to compliance instruction by the respective manager, and must be successfully completed with a test. The training course has been redesigned in terms of content and technically updated to meet the latest challenges. An English language version of the training could also go live in 2021.

Training courses under the Leadership Excellence Program had to be canceled due to the coronavirus pandemic and will be resumed in a modified form in 2022 in line with current developments.

The Executive Board addresses the issue of compliance in an ongoing process at frequent intervals, and the Supervisory Board is informed at regularly scheduled intervals.

Electronic whistle-blower system

Through an electronic whistle-blower system, the Business Keeper Monitoring System (BKMS®), Group employees, business partners, and customers can report behavior potentially damaging to our organization. As part of the advancing globalization and internationalization of business activities, the whistleblower system will also be offered in English from now on. Furthermore, documents can now also be forwarded electronically in anonymized form. People inside the Group and outside can also contact the Compliance department by other means of communication (telephone, e-mail, face-to-face discussions) if they wish to draw attention to compliance infringements and need advice. Tender documents inform potential bidders of the possibility of using the BKMS® should compliance infringements be suspected.

Data protection

Munich Airport has taken comprehensive measures to comply with the General Data Protection Regulation (GDPR) and the Federal Data Protection Act (BDSG). The subsidiaries and associated companies have appointed data protection officers to perform advisory and oversight duties in accordance with the GDPR. Data protection coordinators have also been established in FMG's specialist departments in order to identify and address the issues and risks faced by the departments. They are continuously trained, informed, and advised by the Corporate Compliance unit in cooperation with the Data Protection Officer. Since the outbreak of the coronavirus pandemic, this has also been handled flexibly at short notice via various media.

The Group-wide data privacy policy has been redesigned with the aim of ensuring a consistent and high level of protection for data subjects when their personal data is processed within the Munich Airport Group and to ensure compliance with data privacy laws.

Responsibility for data protection compliance in their respective processing operations is decentralized among the individual FMG departments and subsidiaries/affiliates.

FMG's Data Protection Officer is responsible for advising and supporting the departments and is directly appointed as data protection officer in most subsidiaries/affiliates. The data protection officer of FMG is assigned organizationally to the Compliance department and reports directly and independently to the Executive Board.

Due to the impact of the Corona pandemic, training measures for Group employees and managers to further raise awareness of data protection and data security took place almost exclusively on a digital basis in 2021. In addition, information was provided on an ongoing basis via the intranet. In individual cases, professional and individual advice was also provided to ensure greater security in the handling of personal data.

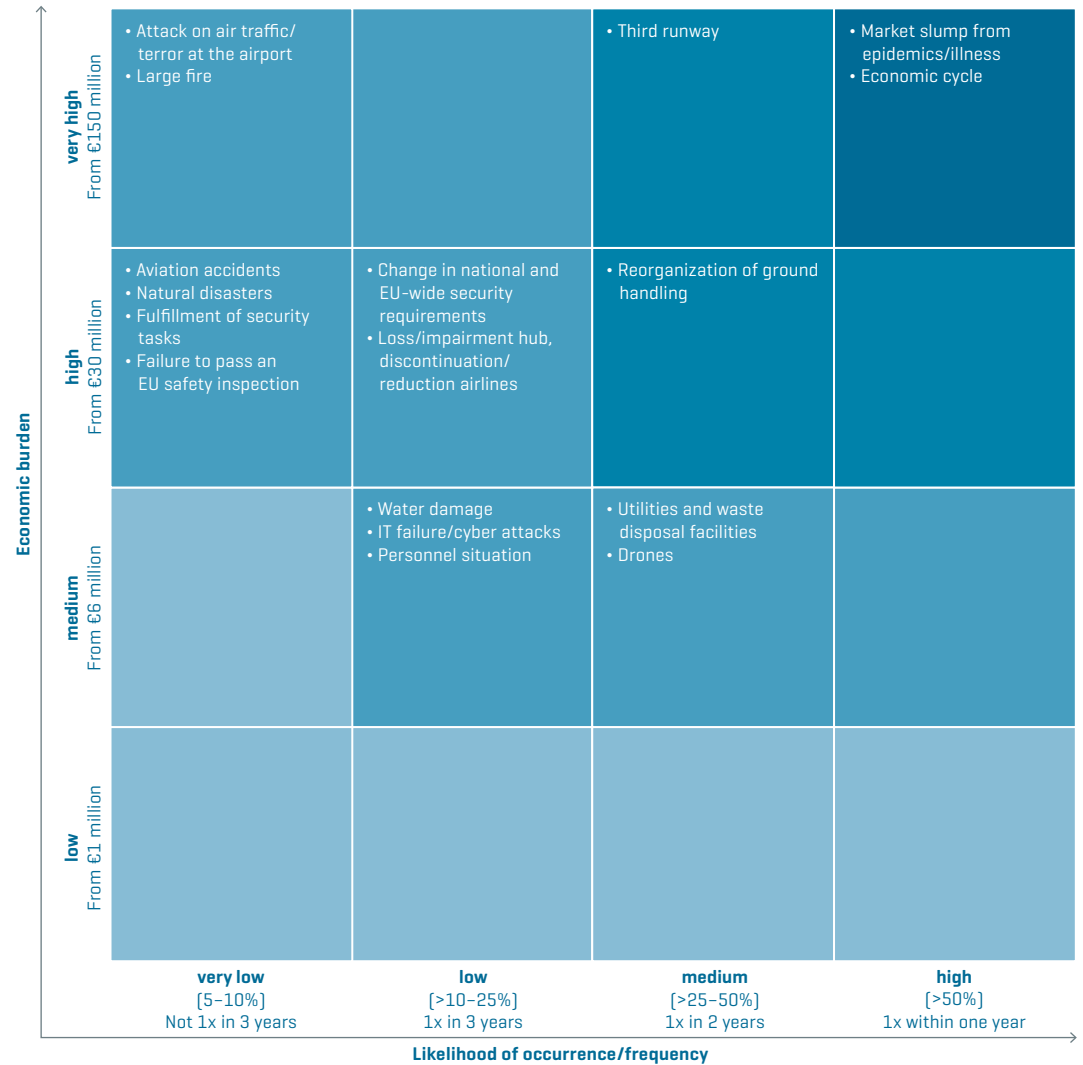
Risks

Risks that could have a material influence on the business activity or on the assets, financial position, and results of operations as well as the reputation of Munich Airport are explained below. In each case, the risks are shown before (overview of gross risks) and after consideration of suitable countermeasures (overview of net risks).

The risk assessment relates to the economic impact in the assessment period quoted. As of December 31, 2021, the following material gross risks have been identified for Munich Airport.

The current military actions in Ukraine and the sanctions triggered by them may have negative influences on the supply of raw materials and the global economy that cannot be foreseen at present. At the present time, the further development of the Ukraine crisis and its impact on the aviation industry is subject to a high degree of uncertainty and may have an impact on the assessment of risks in the Group.

OVERVIEW OF GROSS RISKS



RISKS RESULTING FROM FORCE MAJEURE

Risk	Description and analysis	Countermeasure(s)
Natural disasters	Persistent and intensive rainfall together with melting snow and ground saturation to the south of Munich as far as the Alps could cause flood run-off in the Isar. A resulting breach of the Isar dams and the flood protection dikes near Freising could lead to flooding in the airport vicinity.	The Water Management Office has remeasured the Isar River. Studies have shown that the existing flood protection dikes in the airport's sphere of influence are adequate for intense precipitation and flash floods, which can occur during appropriate weather conditions. In addition, a review of drainage safety within the airport will be conducted to establish the requirements for a «Hochwasser-TÜV» [a technical inspection agency for flooding]. On a permanent basis, Munich Airport monitors the wastewater discharge and carries out maintenance and repair measures. Countermeasures are being intensified at an operational level by means of crisis and risk management procedures at Munich Airport. Insurance to cover earthquakes, storms, hail, and flooding has been arranged.
Attack on air traffic/terror at the airport	Air traffic is subject to threats from terrorist attacks. Aircraft and infrastructure facilities are relevant targets. In addition to bodily injury and property damage, this would result, at least temporarily, in a decrease in the number of aircraft movements and passengers.	To avert a terrorist attack, Group security takes strategic, operational, and technical/organizational measures: Provision of sufficient and well-trained personnel resources, structural measures to ensure modern and approved security technology and infrastructure, monitoring of service quality through sustainable quality measures, and constant exchange with the relevant security authorities. Bodily injury and property damage as well as interruptions of operations are insured.
Fulfillment of security tasks	The airline companies are responsible for security tasks in transferred areas. In these areas, airline companies fulfill the same task as airport operators, but are not subject to the same supervisory authority. For Munich Airport, there is a risk that inspections will reveal defects in transferred areas and the airport as a whole will lose its security status as a result. Defective controls could lead to property damage and bodily injury as well as reputational damage.	At present, a subsidiary of FMG is responsible for operational security tasks in the transferred areas; its services rendered are subject to regular monitoring by FMG. Furthermore, a mutual, intensive exchange takes place with the responsible government and supervisory authorities.
Market slump from epidemics/illness	Munich Airport is an arrival, departure, and transfer point for millions of travelers and thus a potential gateway for bacteria and viruses from all over the world. Epidemic/sickness outbreaks can result in market downturns with reduced aircraft movements and passenger numbers. As a result of the coronavirus pandemic, this risk is becoming particularly important. It is currently evident that the coronavirus pandemic is causing enormous economic burdens at Munich Airport, which has caused a very high drop in earnings since the beginning of the pandemic. Worldwide, vaccination rates are not yet high enough, so new virus variants could emerge. The effects on future years cannot be reliably estimated at this time due to the high degree of uncertainty.	Munich Airport is subject to the Act Implementing the International Health Regulations [IGV-DG] and employs a subsidiary to fulfill the necessary functions. Likewise, the rules specified by EASA [European Union Aviation Safety Agency], which are regularly audited by the supervisory authority, are met. Examples of protective measures against infection include: touch-free access points and faucets, regular hygiene inspection tests, safety distances, and «eGates» for touch-free identification using facial recognition technology. The recommendations for safe travel in times of the pandemic issued by EASA as well as by the European Public Health Agency [ECDC] will be implemented. The Bavarian Ministry of Health's «Airport Infectious Diseases Task Force» is on site. With the «ACI Airport Health Certificate», ACI World confirms the successful implementation of effective security measures at Munich Airport. For explanations of the economic countermeasures, please refer to the «Economic cycle» risk.
Large fire	In the event of damage to or destruction of terminals or infrastructure facilities by a major fire, property damage and personal injury, as well as significant and long-term business interruptions, are to be expected.	To minimize the risk of a large fire, Munich Airport takes all necessary preventive and defensive fire protection measures. To this end, it operates its own airport fire department. The risk of a major fire is additionally minimized by a fire insurance policy [property and interruption of operations insurance] and public liability insurance [liability claims of third parties]. After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.
Aviation accidents	Aviation accidents or damage to aircraft can result in bodily injury and property damage, as well as interruptions of operations and secondary damage.	To minimize the risk, Munich Airport maintains an Airport Rescue and Firefighting service, a medical service, and a counseling team. The risk of aviation accidents is minimized through liability insurance and fully comprehensive insurance. After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.

MARKET RISKS

Risk	Description and analysis	Countermeasure[s]
Loss/impairment hub, discontinuing, reduction airlines	<p>The global coronavirus pandemic is having an unprecedented impact on air traffic, on the entire travel industry, and on other parts of the overall economy. Currently, the planning horizon of the airlines is very short term due to the internationally varying quarantine and entry restrictions in numerous destinations. The uncertainty is reinforced by the «omicron» variant that became known at the end of 2021.</p> <p>Irrespective of this, Deutsche Lufthansa underscores its commitment to Munich as a business location. In addition to a significant expansion of services in the 2022 summer timetable, further leased aircraft of the same type will be stationed in Munich in addition to the company's entire fleet of Airbus A350s. In addition, Airbus A340 aircraft will strengthen the premium segment.</p> <p>Even in the current crisis, the intensive cooperation with Lufthansa will continue in order to further develop the globally renowned hub.</p> <p>The future is uncertain for other airlines, which were already struggling with financial problems before the pandemic.</p> <p>The risk of losing the hub in the short-term is therefore rated as «low.»</p>	<p>Munich Airport's collaboration with Deutsche Lufthansa is based on joint investments and long-term cooperation agreements.</p> <p>Despite the coronavirus pandemic and its impact on air traffic, the cooperation between Munich Airport and Deutsche Lufthansa continues.</p> <p>The Letter of Intent between the two parties for the satellite expansion and the «MUC 2030 Partnership» project should be seen in this context.</p> <p>In addition, Munich Airport was again awarded the top rating of «5-Star Airport» by the Skytrax institute in 2021. This is the best prerequisite for a successful new beginning after the coronavirus pandemic.</p>
Economic cycle	<p>As a result of a weak economy, the growth parameters assumed in the planning process cannot be achieved, which has a negative impact on earnings development.</p> <p>During more significant economic crises, a collapse in loan finance markets may occur.</p> <p>Increasing protectionist tendencies could put a strain on global trade in general, but especially on European-American trade and consequently on the transatlantic aviation market. This could result in growth-inhibiting effects for Munich Airport.</p> <p>In addition to the above explanations, the outbreak of the pandemic is putting a heavy strain on the global economy. Since the second quarter of 2021, a slow recovery phase has been noticeable in the global aviation market.</p> <p>Since the further development of the pandemic is uncertain due to possible virus mutations, among other things, all forecasts are subject to very high uncertainties. At present, it is not possible to make a reliable estimate of the economic impact this will have on Munich Airport in the years to come. The greatest economic risk continues to be a worsening of the pandemic, which may lead to an expansion or reimposition of infection control measures and a dampening of consumer and capital spending.</p>	<p>The reduction of expenditures by means of cost-cutting measures in all areas, socially acceptable staff reductions, short-time working and a short-term cut in the investment budget in non-critical divisions aim to mitigate the consequences of economic slowdowns.</p> <p>To ensure solvency, revolving credit lines exist or loans can be taken out on the capital market.</p> <p>In the wake of the coronavirus pandemic, Munich Airport initiated these countermeasures at an early stage to reduce the economic impact. The aim is to safeguard earnings and liquidity.</p>

OPERATING RISKS

Risk	Description and analysis	Countermeasure[s]
IT failure/ cyber attacks	<p>Constant new technological developments and the increasing threat of cyber attacks worldwide lead to risks in relation to the security of IT systems and networks as well as data security. In the area of cybercrime, there is an increasing, abstract potential risk that requires constant monitoring and assessment.</p> <p>Failure of IT for traffic operations can lead to interruptions in operations. This would result in financial losses and reputational damage.</p>	<p>Critical corporate IT systems are fully redundant with systems located in physically separate locations. Property damage and business interruption are covered by all-risk insurance.</p> <p>To avert a cybercrime attack, strategic, technical, and organizational measures are specified and monitored by an information security management system, and managers and employees receive regular training. In June 2021, an audit confirmed the industry-standard security level as a critical infrastructure operator (CRI).</p> <p>In its own competence center against cybercrime, IT specialists at the airport work together with experienced IT security companies to develop new procedures for combating cybercrime. To reduce losses, FMG has taken out insurance against cyber risks.</p> <p>After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.</p>

OPERATING RISKS

Risk	Description and analysis	Countermeasure(s)
Water damage	Water damage caused by a break in the main drinking water or fire extinguishing water pipelines could lead to the failure of infrastructure systems important for air traffic.	Remotely controlled emergency shut-off equipment and additional protective devices in the pipeline connections limit the possible damage. Property damage and interruptions of operations are insured. After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.
Change in national and EU-wide security requirements	Munich Airport is subject to national and EU-wide aviation security requirements, encompassing the topics of airport security, air passenger and hand luggage checks, airfreight, airmail, and goods control, among others. Security requirements are adjusted continuously to the current circumstances. This can give rise to procedural and also infrastructural changes for Munich Airport. Corresponding financial burdens would then follow.	Munich Airport attempts to minimize these consequences through work in associations and on committees. Early information relating to ongoing legislative procedures ensures the timely implementation of security regulations. Additional expenses incurred as a result of infrastructural changes are used as the basis for the master agreement on charges.
Failure to pass an EU safety inspection	The EU's aviation authorities are conducting safety inspections at airports. Should it fail to comply with a safety standard and subsequently fail the follow-up audit, Munich Airport can lose its «Clean» status. The consequences would be a heightening of the safety regulations, considerable obstruction with operational processes, competitive disadvantages, and a loss of image.	Munich Airport conducts thorough and strict quality controls to manage the quality of all safety aspects at the airport. The quality controls carried out have shown that the countermeasures taken and the consistent monitoring are effective and that – in theory and practice – very well trained personnel are employed.
Utilities and waste disposal facilities	Insufficient availability of utilities required for operations, such as electricity, heating, cooling, drinking and fire-fighting water, wastewater and waste, can lead to property damage and business interruptions.	The service and maintenance programs, network redundancies, and storage reduce the risk of gaps in supply. Property damage and interruptions of operations are insured. After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.
Reorganization of ground handling	The success of the reorganization of the former Ground Handling business unit could be put at risk by the following uncertainties and circumstances: sustained reductions in traffic from existing customers, ground handling losses due to the transfer of part fleets to third parties, aggressive pricing policies of competitors, and increasing price decline at Munich Airport. Due to the coronavirus pandemic, this risk is becoming increasingly important as high traffic declines are experienced.	In the negotiations to extend the long-term contract with an important customer of AE Munich, a contract was concluded at the end of 2016 until October 2024. As a result, associated collective restructuring agreements could be extended. To compensate for declining ground handling volumes, talks with potential new customers are ongoing. In the event of a loss of ground handling, capacities and associated costs will fall. Constant monitoring and reporting of the renovation progress and renovation path is carried out. The «Restart» change program was implemented in order to make ground handling viable for the future in view of the significant slump in handling volumes caused by the pandemic.
Personnel situation	Given the background of the coronavirus pandemic, Munich Airport is in crisis mode. Due to the massive drop in air traffic, the Group is expecting significantly lower staffing levels in the future. Munich Airport is focusing on overcoming the crisis and is taking measures to ensure the health of its employees on the one hand and to cushion the economic consequences on the other. Regardless of the tight staffing situation, care is taken to ensure that sufficient qualified personnel are available to maintain operator responsibilities.	To safeguard earnings/liquidity, personnel capacity is adjusted to the reduced workload. The Group-wide «Restart» change program included the conclusion of early retirement agreements and a reorganization agreement with employee representatives. Once the option of short-time work has ended, the emergency collective agreement concluded between the Association of Municipal Employers' Associations (VKA) and Verdi/Beamtenbund dbb for Flughafen München GmbH also has the effect of safeguarding earnings and liquidity.
Drones	After the German government adopted stricter rules on the operation of drones in airport control zones in 2017, the EU Commission added a regulation on the safe operation of drones in 2019. At the national level, legal responsibility was regulated on this basis. German Air Traffic Control [Deutsche Flugsicherung – DFS] is responsible for all German commercial airports. Details of this were published in the Federal Law Gazette on June 17, 2021 and are in force. In the coalition agreement of the new German government, the detection and defense of drones is classified as a sovereign task. It therefore does not lie with the airport operator.	Munich Airport has taken measures to minimize the impact on operations in terms of safety and security. This includes, among other things, participation in the uniform regulation of drone traffic via associations [ADV, ACI, BDL] as well as participation in EASA initiatives, public education, and participation in a test project on «Technology for Future Drone Detection» with DFS. The systems demonstrated in the test project need to be further developed to ensure effective, reliable use at commercial airports. To this end, DFS, with the support of Munich Airport, is in close contact with system manufacturers. After taking the countermeasures into consideration, the net risk is below the risk tolerance limit.

LEGAL RISKS

Risk	Description and analysis	Countermeasure[s]
Third runway	<p>Due to the postponement of the decision to realize the third runway, all planning and land acquisition costs incurred to date must be examined for recoverability on an ongoing basis and written off if necessary.</p> <p>Effects from the moratorium agreed in 2018 and the coronavirus pandemic were accounted for in the balance sheet in previous years. 2021 there was no need for adjustment.</p> <p>Without an increase in capacity brought about by the construction of the third runway, there could be a significant loss of company value in the medium and long-term. This will be influenced primarily by a stagnation or decline in the traffic volume and the associated lower revenues in the Aviation and Non-Aviation divisions.</p> <p>The further development of the Corona pandemic and its impact on the aviation industry are subject to a high degree of uncertainty at this time and depend heavily on international travel restrictions and warnings. Based on current vaccination activity, the risk will be reassessed in 2022 and the classification revised.</p>	<p>The confirmation of the planning approval decision by the Bavarian Administrative Court (BayVGH) on February 19, 2014 and in the following year by the Federal Administrative Court limited the legal risks for project implementation.</p> <p>Diversification of the product range and expansion of foreign business are planned or already being implemented as countermeasures to the significant loss of company value. In previous years, the «LabCampus» project was launched, with which Munich Airport intends to create a unique location for innovation and cross-industry cooperation. Expansion in the USA continues to be implemented.</p> <p>The third runway remains a key strategic project for Munich Airport in the medium and long term.</p>
EU General Data Protection Regulation	<p>In addition to the legal risks listed in the risk matrix, there are risks in connection with the EU General Data Protection Regulation (GDPR). The GDPR expands the existing obligations arising from the Federal Data Protection Act (BDSG) and increases the legal, operational, and technical/organizational requirements for data protection. An infringement of these rights and obligations could incur high fines, claims for damages, reprimands, and reputational damage.</p> <p>Currently, Munich Airport is considering issues related to the use of closed circuit television (CCTV) video surveillance.</p>	<p>At Munich Airport, the project to implement the requirements of the GDPR has been successfully completed. As part of this, organizational structures and processes as well as their documentation were adjusted and awareness of data protection was heightened within the Group.</p> <p>In particular, the following measures were taken as countermeasures for data protection risks arising from CCTV: Role usage concept, re-signage to indicate video surveillance, renegotiation of the company agreement on CCTV, consolidation of the legal basis, implementation of a data protection consequence assessment.</p> <p>Munich Airport has also appointed data protection officers and data privacy coordinators who receive awareness training and other types of training on a regular basis from the Group's Compliance unit.</p> <p>The gross risk here is below the risk tolerance limit set by FMG and is therefore not represented in the risk matrix.</p>
Construction price increases	<p>Risks can arise in construction projects from increases in construction prices, supplier defaults, planning delays and external influences from the public, the environment, politics, changes in technology, rules of technology or other requirements, including the postponement of construction projects.</p> <p>In 2021, prices in the German construction sector recorded their highest increase since 1970. This was mainly due to price increases for raw materials and finishing work.</p>	<p>The investment projects are planned appropriately in terms of their commercial viability, their financial feasibility and the risks associated with the investments, and are monitored continuously during implementation.</p> <p>At present, only those projects are being implemented that are relevant and necessary to Munich Airport's operations from the perspective of the airport's ownership or operator responsibility, or that are already being implemented, or for which there is a legal obligation, or for strategic future projects.</p> <p>The gross risk here is below the risk tolerance limit set by FMG and is therefore not represented in the risk matrix.</p>

Munich Airport is confronted with various legal disputes during the normal course of business. These can lead, in particular, to the payment of compensation claims or, in the case of construction projects, to changes in the remuneration of services. Moreover, other legal disputes can be initiated or existing legal disputes can be expanded. Apart from matters for which provisions have already been made in the balance sheet, Munich Airport is not currently anticipating any material negative impacts for the assets, financial position, and results of operations from other known cases at the present time.

In the case of foreign subsidiaries, risks may arise in particular from the assumption of operational responsibility abroad in the context of consulting services for other airports and the operation of terminals. Airport operating projects, like the Munich location itself, are subject to general economic and company-specific risks. To minimize risk, Munich Airport therefore works with local partners who have experience with respect to the specific country regulations and conditions. Risks can arise, in particular, with what are typically long-term airport operator projects, when it comes to assessing future aviation development and consumer behavior on the part of air travelers. This became increasingly evident, particularly as a result of the coronavirus pandemic. A possible lack of growth and/or a possible decline in air traffic, including delayed expansion projects, could have a material adverse effect on the earnings performance of the foreign companies, which would consequently result in risks for the invested capital. Munich Airport is currently seeking to agree on a compensation mechanism with appropriate contractual provisions toward the client. To counter liability risks for Munich Airport in particular, local limited liability companies have been established outside Germany to act as independent entities

and as local contractors. Risks may also arise from unforeseen regulatory intervention in the tariff, tax and levy structure of airports or from contractual breaches to the detriment of airport operators.

Tax [operational] audits by the tax authorities are also considered a general risk.

In addition to the risks presented in the matrix, there was the risk in connection with surface de-icing agents in the previous year. As a result of successful countermeasures, this risk fell below the risk tolerance limit as of December 31, 2021.

Financial risks

The expected financial liability for the gross financial risks listed below were under the reporting limit as at December 31, 2021. Therefore they were not included in the risk reporting. The monitoring and management of these risks are the responsibility of central finance and cash management.

FINANCIAL RISKS

Risk	Description and analysis	Countermeasure(s)
Currency risks	Currency risks arise insofar as planned sales in foreign currencies are not balanced by any corresponding expenses or outgoings in the same currency.	Munich Airport hedges currency risks using forward exchange transactions.
Credit and reliability risks	Credit and credit rating risks primarily arise from short-term deposits as well as trade receivables.	Deposits are (generally) only made with (German) banks with deposit protection. The management of credit risks includes the constant monitoring of debtors' creditworthiness, overdue invoices, and stringent collections management. Dependent on the credit rating, certain services are only performed against prepayment or provision of collateral in the form of guarantees.
Interest rate risks	Interest rate risks largely arise from floating-rate financial liabilities with respect to loans and financial liabilities to shareholders.	Interest rate risks from floating-rate financial liabilities from loans are countered by Munich Airport by hedging with interest payer swaps.
Liquidity risk	Munich Airport monitors risk as part of its long-term business planning and short and medium-term financial planning. In order to ensure solvency at all times, long-term credit lines and liquid funds are made available based on a rolling liquidity plan. In the wake of the coronavirus pandemic, this risk is becoming increasingly important. Risks to the assets, financial position and operating results may arise from banks' lending practices and changes in the general conditions on the capital market.	Munich Airport has set up a separate liquidity management system to safeguard liquidity during the pandemic. Liquidity planning takes into account ongoing business, capital expenditure and financing aspects for the entire Group. In addition to cost reductions, as described under the risks «Economic cycle» and «Personnel situation», the goal is to postpone or avoid capital expenditure projects. In addition, Munich Airport has taken out loans with a total volume of €425 million to secure liquidity in 2021. In addition, there are revolving credit lines.

After considering countermeasures, the following net risks remain:

OVERVIEW OF NET RISKS

Economic burden ↑	very high From €150 million	<ul style="list-style-type: none"> • Attack on air traffic/terror at the airport 		<ul style="list-style-type: none"> • Third runway 	<ul style="list-style-type: none"> • Market slump from epidemics/illness • Economic cycle
	high From €30 million	<ul style="list-style-type: none"> • Natural disasters • Fulfillment of security tasks • Failure to pass an EU safety inspection 	<ul style="list-style-type: none"> • Change in national and EU-wide security requirements • Loss/impairment hub, discontinuation/reduction airlines 	<ul style="list-style-type: none"> • Reorganization of ground handling 	
	medium From €6 million		<ul style="list-style-type: none"> • Personnel situation 		
	low From €1 million				
		very low [5–10%] Not 1x in 3 years	low [>10–25%] 1x in 3 years	medium [>25–50%] 1x in 2 years	high [>50%] 1x within one year
		Likelihood of occurrence/frequency →			

Opportunities

As an international aviation hub, Munich Airport competes with other major commercial airports. Functional and targeted opportunity management is of central importance for maintaining and expanding the airport's market position. This is an integral part of the strategy and planning processes at Munich Airport. Opportunities are future developments and events that may lead to a positive deviation from planning or strategic targets. Both external [for example, changes in the market environment] and internal opportunities [for example, programs to increase efficiency] are considered.

All divisional heads and managing directors of the subsidiaries and associated companies are responsible for developing and implementing measures to take advantage of opportunities. They are supported by the Group Controlling and Investment Management department. In addition, all Flughafen München GmbH employees in the business units and their subsidiaries are generally required to identify opportunities in the course of their daily work and report them to their supervisors. In order to make the best possible use of the company's own resources, Munich Airport operates a professional and tool-supported innovation management system in addition to a traditional ideas management system [for more information, see the section on «Innovation and idea management»].

As a basic principle, Munich Airport strives to strike a balance between opportunities and risks. Where opportunities are likely to occur, they have already been included in the 2022 forecast or the medium and long-term planning. The opportunities presented therefore focus on future developments or events that could lead to a positive deviation for Munich Airport from the forecast and the medium and long-term planning.

The evaluation of opportunities is based on the risk assessment system. The economic benefit resulting from the opportunities and the probability of occurrence are divided into the following categories analogous to the risks under consideration:

Economic advantage	Amount in €
Low	1-5 million
Medium	5-30 million
High	30-150 million
Very high	>150 million

Probability of occurrence	Percentage intervals
Very low	5-10%
Low	10-25%
Medium	25-50%
High	>50%

In contrast to the risks, the probability of occurrence and financial impact (economic advantage) are not shown separately, but are combined in the «high relevance» and «low relevance» opportunity categories.

Since Munich Airport is confronted in some cases with very long planning periods, the opportunities are also indicated as to when they will occur in the short, medium or long-term.

Maturity	Period
Short-term	<2 years
Medium-term	2-5 years
Long-term	>5 years

Compared to the previous year, there have been minor changes in the identified opportunities as of December 31, 2021. The «off-campus» opportunity has been fundamentally revised and renamed «International Business».

OVERVIEW OF OPPORTUNITIES AT MUNICH AIRPORT

Opportunities	Rating	Time of occurrence	Summary of the measures
Development of the coronavirus pandemic	high relevance	short- and medium-term	<ul style="list-style-type: none"> • Systematic monitoring of pandemic development and identification of measures • Close cooperation with relevant stakeholders (especially airlines)
Economic development	high relevance	short- and medium-term	<ul style="list-style-type: none"> • Continuous monitoring of global economic developments • Identification of measures to exploit opportunities in all relevant business units
Market development	high relevance	short-, medium-, and long-term	<ul style="list-style-type: none"> • Intensive airline acquisition • Quality management • Close cooperation with system partner DLH
Regulation and legislation	low relevance	long-term	<ul style="list-style-type: none"> • Association work • Use of expertise in the area of Corporate Communication & Politics
Rail access	high relevance	long-term	<ul style="list-style-type: none"> • Intensive contact with political decision-makers and the Deutsche Bahn • In-house expertise in the field of rail connectivity
Interest and exchange rate trends	low relevance	short-term	<ul style="list-style-type: none"> • Adjustment of product and service portfolio in the retail sector
Implementation of climate protection measures (CO ₂ strategy)	low relevance	long-term	<ul style="list-style-type: none"> • Focusing on regional, regenerative energy supply and introduction of emission-reducing technologies
Internal process and efficiency improvements	low relevance	short-term	<ul style="list-style-type: none"> • Intensive use of the expertise available in the company • Efficient alignment as well as organizational changes
International business	low relevance	medium- to long-term	<ul style="list-style-type: none"> • Intensive observation of relevant markets • Professional customer acquisition • Ongoing adaptation of the product and service portfolio
Real Estate	low relevance	long-term	<ul style="list-style-type: none"> • Intensive observation of relevant markets • Professional customer acquisition

Development of the coronavirus pandemic

The travel and tourism industry is particularly affected by the coronavirus pandemic due to severely restricted mobility worldwide. Further developments, specifically with regard to mobility restrictions, are therefore extremely important for the recovery of global air traffic and for the economic success of Munich Airport as well. At present, it is generally assumed that the aviation industry will take several years to return to pre-crisis levels. Further medical advances and the spread of highly contagious but less pathogenic viral variants could lead to a more rapid end to the coronavirus pandemic. Remaining international travel restrictions and warnings could then be lifted sooner than expected. This would have a significant positive impact on Munich Airport's EBT. The Group is systematically monitoring further developments and is in close contact with airlines as part of its acquisition activities. The aim is to offer above-average participation in a recovery.

Although the probability of an early recovery is presently rated as low, the resulting opportunity is rated as «high relevance» due to its high earnings effect.

Economic development

There is a close correlation between the growth of national and global economic activity and air traffic (the connection is currently obscured by government restrictions on travel and reluctance to travel on the part of the population). The coronavirus pandemic plunged the global economy into a deep crisis. There was a significant slump in economic output in almost all major economies. A recovery in the global economy was observed in fiscal 2021 and is expected to continue in 2022.

Crisis-related supply difficulties for important intermediates, which are impacting industry in particular, are hampering the fundamentally positive development. Consumption opportunities were also constrained by the persistence of Corona rules, resulting in substantial surplus savings for households. If the supply difficulties resolve quickly and the accumulated savings are spent, there is a chance that the economy will recover more quickly and that air traffic will grow as a result.

Protectionist trade policy tendencies have been observed in various countries in recent years. Prominent examples of this are the trade disputes between the United States and China and the United Kingdom's exit from the European Union [Brexit]. Since air traffic volumes are strongly dependent on the degree of globalization of the world economy, protectionist measures generally have a slowing effect on global air traffic. If these trends reverse in the following years and there is a renewed political focus on the global distribution of labor, it could boost economic and air traffic growth.

Different divisions of Munich Airport intensively monitor all relevant economies worldwide. In this way, potential for the various business units [e.g. Aviation, Commercial, International Business] is identified and appropriate measures are initiated to exploit opportunities on a decentralized basis.

Since economic development is one of the key factors influencing air traffic, the associated opportunities must be rated as «high relevance» in the short and medium term.

Market development

Airline industry trends are of particular importance for traffic volumes at airports. The airline industry is currently facing historically unprecedented challenges. The current situation is associated with significant losses for the airlines due to the still significantly restricted traffic volume. Since a clear trend towards a consolidation of the European airline market could be observed before the outbreak of the pandemic, a continuation or even an intensification of this trend can now be expected due to the effects of the crisis. At present, demand for air travel is expected to remain below pre-crisis levels for an extended period. In the event of a widespread airline consolidation, however, demand would be spread among fewer suppliers. Furthermore, it appears possible that the remaining network carriers will emerge from the crisis downsized and focusing on hub locations to efficiently bundle their traffic.

Munich Airport has been pursuing intensive quality management for some time and is just one of a small number of airports worldwide to hold the status of a 5-Star Airport. It also has an extremely attractive catchment area, both in terms of business and private travel, and has been operating a professional airline acquisition service for years. Deutsche Lufthansa is an important customer for Munich Airport. They operate a hub at the Munich location and intend to maintain it in the future. In addition, cooperation is based on joint investments and long-term cooperation agreements.

If there is a large-scale consolidation of the airline market, Munich Airport could benefit disproportionately from the recovery in the aviation market in the medium term, which could lead to earnings growth well above plan.

Although such a development is uncertain due to the current situation, the resulting opportunity must be rated as «high relevance» due to its impact on the subsequent development of the company in the medium and long-term.

Regulation and legislation

Air transport has historically been a highly regulated market. Accordingly, laws, ordinances and international agreements are still a decisive factor influencing air traffic today. The introduction of new regulations as well as changes to existing ones may involve risks, but also present opportunities for market participants.

In 2011, the German government introduced a ticket tax in the form of the German aviation surcharge, which was increased on April 1, 2020. The surcharge is used to implement climate policy objectives. The goal of the increase is to achieve a volume shift to rail. Due to its national character, the German aviation surcharge has competition-distorting effects in the European air traffic market. As a result, air travelers from areas close to borders are increasingly choosing airports abroad as their departure point. If the German civil aviation tax were to be replaced by more effective international climate policy instruments, this could reduce the competition-distorting effects. And this could lead to an increase in traffic at Munich Airport.

In the wake of the current crisis, the discussion on the creation of a Single European Sky gained momentum. The European Commission launched the Single European Sky program back in 1999. In addition to the introduction of uniformly high safety standards, the goal is to expand airspace capacity and achieve more economical supranational cooperation between the individual national air traffic control organizations. In concrete terms, the goal is, among other things, to enable airlines to operate more economical flight routes (direct air route), since there is still considerable potential for improvement in this area. More efficient flight routes could significantly save kerosene and thus reduce CO₂ emissions (by up to 10%). While the latter could bring a positive image boost for air travel as a whole, the former would have a positive impact on demand for air travel due to lower costs. However, Single European Sky is an extremely complex issue, since it involves questions of national sovereignty of the individual European states. Accordingly, the formulation of solutions must take place in cooperation with all national and European players and in dialog with industry.

In order to properly utilize opportunities arising from regulation and legislation, Munich Airport maintains a Policy & Region department and is involved in various aviation associations, such as the BDL. The central objective here is to help shape important regulations for the aviation sector and counteract competition-distorting effects.

In summary, the opportunities arising from regulation and legislation are currently rated as «low relevance» due to the low probability of occurrence.

Rail access

For some time now, the EU in particular has been calling for the various modes of transport to be interlinked as efficiently as possible, thus conserving resources. To this end, it makes sense to optimally connect the major European hub airports in particular to the rail infrastructure. In connection with the intensively conducted climate protection debate, this topic has gained momentum in recent years.

With regard to the rail link to Munich Airport, several projects, including the Erding ring closure, the Walpertskirchen Interchange, the second main line in Munich, and the Munich-Mühldorf-Freilassing/Salzburg Line 38 extension, are currently being planned or implemented. Should an adequate connection to the long-distance rail network also be established, Munich Airport could be efficiently integrated into a future multimodal transportation system. This would expand the passenger catchment area and consequently result in a higher-than-planned development of earnings.

Munich Airport has the necessary expertise on this subject and is in intensive contact with regional and national authorities as well as with Deutsche Bahn. The goal here is to realize an optimal connection of the airport to the long-distance rail network, which would bring a considerable economic advantage. The resulting opportunity is to be rated as «high relevance» in the long term.

Interest and exchange rate trends

Favorable interest rate and exchange rate trends may have a positive impact on the Group's financial result. Thus, currency effects from the conversion of earnings not denominated in euros into the Group's functional currency (euros) may have a positive impact on the financial results.

In the retail business at Munich Airport, international customers [outside the eurozone] play a special role due to retail spending, some of which is significantly above average. Internal analyses have shown that fluctuations in the exchange rate [euro versus foreign currency] have a significant impact on retail revenues. An appreciation of relevant foreign currencies against the euro therefore offers the potential for an above-target earnings performance. However, due to the low passenger numbers as a result of the crisis and the corresponding drop in retail sales, this effect is significantly weaker than in previous years.

Interest rates remain at a historically low level. An improvement in financing conditions can largely be ruled out. Munich Airport's planning therefore assumes rising interest rates for variable-rate loans. However, if interest rates rise less sharply than assumed in the planning period, this would have a positive effect on the Group's EBT.

Nevertheless, Munich Airport expects to benefit overall from favorable conditions on the financial markets.

Altogether, the opportunity arising from interest rate and exchange rate trends must be rated as «low relevance» in the short-term due to the current crisis situation.

Implementation of climate protection measures

Munich Airport is pursuing the climate target of «CO₂ neutrality by 2030». It will reduce the CO₂ footprint it can control to zero through a combination of reduction and offsetting measures. The implementation of this CO₂ strategy is associated with costs. In the field of energy generation and conservation as well as renewable energies, a progressive increase in efficiency can generally be observed. If this development continues at an accelerated rate, the cost of CO₂ neutrality at Munich Airport could fall below the expected level thanks to a better price-performance ratio for low-emission energy generation. The environment, technology, and strategic sustainability management departments at the airport monitor trends in this direction.

In the long-term, this could lead to higher than expected earnings. Despite changing political incentive or sanction mechanisms, the resulting opportunity is rated as «low relevance» due to the comparatively low earnings outcome effect.

Internal process and efficiency improvements

The impact of the coronavirus pandemic has prompted Munich Airport to launch the «Restart» change program. The program served to make the company viable and efficient for the future. In addition to measures to adjust personnel capacity, organizational changes were also developed as part of the program. The management structures and the interfaces between departments were put to the test, as were the company strategy and the Group structure. Initial estimates of the program's earnings-improving effects are part of the medium-term plan presented to FMG's governing bodies at the end of 2020. The measures of the program were specified

in the course of 2021 and subsequently implemented. Since the economic effects of the «Restart» change program have already been taken into account in Munich Airport's medium-term planning and ambitious targets have been assumed, the likelihood of a significantly greater than planned performance can be classified as low. The resulting opportunity is therefore currently rated as «low relevance».

International business

Munich Airport's international business could develop better than expected.

After the pandemic, the macroeconomic environment will recover and demand for consulting and management services will increase again. In the medium term, the further acquisition of airport-related consulting firms and the establishment of new strategic partnerships could also strengthen the local market position of the international business in important target markets. On the one hand, this can ensure faster market entry, local networks can be adopted, and local personnel cost structures can be established. On the other hand, acquisitions can complement the product portfolio and thus strengthen competitiveness.

Current developments also show that more and more governments want to place their airports in the hands of the private sector by means of public-private partnerships or concessions. This could provide opportunities for entering into airport concessions or concluding long-term management contracts for international business.

To this end, the Group closely monitors all relevant markets and developments, conducts professional customer acquisition, and continuously adapts its product and service portfolio to market requirements. In this way, opportunities that arise can be optimally exploited.

In the medium and long-term, this could lead to higher than expected earnings. However, the resulting opportunity must be rated as «low relevance» due to the comparatively low earnings effect.

Real Estate

The current major ecological and economic challenges are putting companies in the Federal Republic of Germany under high pressure to innovate and collaborate. This could lead to an expanded need for cooperative sites and test sites.

With its «LabCampus» project, Munich Airport is creating a new type of innovation center focused on cross-sector collaboration, joint development, testing, presentation, and realization. Currently, infrastructural measures are planned in the immediate vicinity of the LabCampus, including the so-called multifunctional arena. This could lead to a significant increase in the attractiveness of Munich Airport as a real estate location. Higher revenue streams and an associated faster implementation of the LabCampus would be the result [additional buildings and further clusters can be realized earlier with the corresponding revenue streams]. In the long term, therefore, there is potential for earnings to develop well ahead of plan.

The Group keeps a close eye on all relevant markets and conducts professional customer acquisition activities in order to make the best possible use of opportunities that arise in this respect on the market.

Although there is a certain probability of occurrence for such a development, the resulting opportunity is currently rated as «low relevance» due to the long-term impact horizon.

Overall assessment of the opportunities and risk situation

As the second-largest commercial airport in Germany and one of the largest airports in Europe, it is important for Munich Airport to actively seize opportunities as they arise in order to secure and further improve its position in the market through steady growth. However, it is also a key objective of Munich Airport to recognize risks in good time and to counter them systematically.

Therefore, the actual expected impact of possible events and developments is already taken into account in the business planning every year. The reported opportunities and risks are defined as potential deviations going beyond the forecast corporate result. Munich Airport consolidates and aggregates the risks reported by the corporate divisions and Group companies, and reports quarterly to the Executive Board and shareholders. Opportunities are identified and managed with the participation of the Group Controlling and Investment Management departments.

The spread of the coronavirus and its impact on global air traffic have had a significant negative impact on the risk situation at Munich Airport. Taking this current situation into account, the risks were reviewed or reclassified at the beginning of the pandemic. The Executive Board expects that the economic impact of the coronavirus pandemic will continue to affect earnings. However, the further course of the pandemic is not foreseeable, so that a conclusive risk assessment is not possible at the present time.

No risks were foreseeable from the Group-wide risk management system or in the assessment of the Executive Board during the current forecast period, which individually or in their entirety could jeopardize the continued existence of Munich Airport. As in the previous year, management is confident that access to liquidity to meet financing needs will be available to overcome the challenges posed by the coronavirus pandemic. With its diversified business units, Munich Airport's fundamental earnings power forms a solid basis for exploiting opportunities for future business development and for providing the necessary resources to accomplish this.

Munich Airport would like to point out that various known and unknown risks, uncertainties and other factors could lead to material differences between the actual events, financial situation, development or performance of the company and the estimates given here.

Munich, April 8, 2022

Jost Lammers Nathalie Leroy Jan-Henrik Andersson

ABRIDGED CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

T€	Disclosure	2021	2020
+ Revenue	VI.1	601,276	579,672
+/- Changes in inventories and work in progress		53	-86
+ Own work capitalized	VI.2	17,207	15,611
+ Other income	VI.3	61,946	29,018
Total revenue		680,482	624,215
- Cost of materials	VI.4	-249,702	-232,577
- Personnel expenses	VI.5	-419,095	-408,606
- Other expenses	VI.6	-57,501	-144,870
Earnings before interest, taxes, depreciation, and amortization (EBITDA)		-45,816	-161,838
- Depreciation and amortization	VI.7	-239,851	-242,016
Operating result (EBIT)		-285,667	-403,854
+ Interest result	VI.8	-66,690	-94,059
+/- Other financial result	VI.8	18,676	66,305
Financial result		-48,014	-27,754
+ Result from companies accounted for using the equity method	VII.4	-2,576	-1,812
Earnings before taxes (EBT)		-336,257	-433,420
+/- Income taxes	VI.9	74,961	112,019
Group profit/loss of the year (EAT)		-261,296	-321,401
of which assignable to owners of the company		-261,296	-321,402
of which assignable to non-controlling interests		0	1

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

T€	Disclosure	2021	2020
Group profit/loss of the year		-261,296	-321,401
+/- Cash flow hedging	VII.16	12,719	12,354
+/- Deferred taxes not affecting profit or loss	VII.6	-2,543	-2,470
Items to be reclassified to the statement of profit or loss		10,176	9,884
+/- Actuarial gains and losses	VII.17	491	-1,670
+/- Deferred taxes not affecting profit or loss	VII.6	-133	463
+/- Effects of foreign currency translation		-4	62
Items not to be reclassified to the statement of profit or loss		354	-1,145
Other comprehensive income net of tax		10,530	8,739
Total comprehensive income		-250,766	-312,662
of which assignable to owners of the company		-250,766	-312,663
of which assignable to non-controlling interests		0	1

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Assets			
T€	Disclosure	Dec. 31, 2021	Dec. 31, 2020
Intangible assets	VII.1	15,605	19,384
Property, plant, and equipment	VII.2	5,124,510	5,120,387
Investment property	VII.3	144,974	145,273
Investments in companies accounted for using the equity method	VII.4	1,708	2,304
Receivables	VII.5	5,051	5,109
Contract assets	VII.23	15,176	6,237
Other financial assets		290	245
Deferred tax assets	VII.6	15,794	8,810
Other assets	VII.9	5,554	7,390
Non-current assets		5,328,662	5,315,139
Inventories	VII.7	22,518	28,057
Receivables	VII.8	57,334	60,603
Contract assets	VII.23	10,930	7,516
Other financial assets	VII.8	134	40
Current income tax assets		1,088	4,196
Other assets	VII.9	19,263	32,786
Short-term deposits	VII.10	34,984	67,985
Cash and cash equivalents	VII.10	16,963	9,717
Current assets		163,214	210,900
Assets held for sale	VII.11	1,269	2,551
Assets		5,493,145	5,528,590

Equity and Liabilities			
T€	Disclosure	Dec. 31, 2021	Dec. 31, 2020
Subscribed capital	VII.12	306,776	306,776
Reserves	VII.12	90,083	133,651
Other equity	VII.12	1,418,253	1,624,515
Non-controlling interests		20	20
Equity		1,815,132	2,064,962
Financial liabilities from interests in partnerships	VII.14	348,177	334,619
Liabilities	VII.15	17,192	19,471
Other financial liabilities	VII.15	1,949,988	1,631,789
Employee benefits	VII.17	82,923	119,135
Other provisions	VII.18	91,999	92,038
Deferred tax liabilities	VII.6	250,516	318,474
Other liabilities	VII.20	13,658	14,600
Non-current liabilities		2,406,276	2,195,507
Liabilities	VII.19	145,006	111,597
Contract liabilities	VII.23	2,376	792
Other financial liabilities	VII.19	699,495	744,664
Employee benefits	VII.17	44,351	46,987
Other provisions	VII.18	12,409	13,238
Current income tax liabilities		5,187	4,895
Other liabilities	VII.20	14,736	11,329
Current liabilities		923,560	933,502
Equity and Liabilities		5,493,145	5,528,590

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Disclosure	Subscribed capital	Reserves		Other equity	Non-controlling interests	Equity
			Capital reserve	Revenue reserve			
As of Dec. 31, 2019	VII.12	306,776	102,258	45,232	1,923,854	19	2,378,139
Group profit/loss for the year		0	0	0	-321,402	1	-321,401
Other comprehensive income		0	0	-1,207	9,884	0	8,677
Total comprehensive income		0	0	-1,207	-311,518	1	-312,724
Allocation to reserves		0	0	40,229	-40,229	0	0
Withdrawals from reserves		0	0	-52,861	52,861	0	0
Changes in reserves		0	0	-12,632	12,632	0	0
Effects of foreign currency translation		0	0	0	-453	0	-453
As of Dec. 31, 2020	VII.12	306,776	102,258	31,393	1,624,515	20	2,064,962
Group profit/loss for the year		0	0	0	-261,296	0	-261,296
Other comprehensive income		0	0	358	10,176	0	10,534
Total comprehensive income		0	0	358	-251,120	0	-250,762
Withdrawals from reserves		0	0	-43,926	43,926	0	0
Changes in reserves		0	0	-43,926	43,926	0	0
Effects of foreign currency translation		0	0	0	932	0	932
As of Dec. 31, 2021	VII.12	306,776	102,258	-12,175	1,418,253	20	1,815,132

CONSOLIDATED STATEMENT OF CASH FLOWS

T€	Disclosure	2021	2020
Total comprehensive income		-250,766	-312,662
+ Deferred taxes not affecting profit or loss		2,676	2,007
+ Actuarial gains and losses		-491	1,670
+ Cash flow hedging		-12,719	-12,354
Changes due to foreign currency translation		4	-62
Group profit/loss of the year (EAT)		-261,296	-321,401
Result from companies accounted for using the equity method		2,576	1,812
Income taxes		-74,961	-112,019
Financial result		48,014	27,754
Operating result (EBIT)		-285,667	-403,854
Depreciation and amortization		239,851	242,016
Balance of gains/losses from the disposal of fixed assets and reclassifications from fixed assets		-3,189	3,800
Increase/decrease in inventories		5,539	9,426
Increase/decrease in current receivables		3,269	33,626
Increase/decrease in liabilities		31,176	-34,507
Increase/decrease in employee benefits		-38,759	54,415
Increase/decrease in other provisions		-868	1,848
Increase/decrease from currency effects		-932	453
Increase/decrease in other assets/liabilities not related to investing and financing activities		3,014	-21,653
Gross cash flow from operating activities		-46,566	-114,430
Net income taxes paid/received		747	-1,618
Cash flows from operating activities		-45,819	-116,048
Proceeds from sale of owner-occupied property, plant, and equipment		19,801	2,604
Proceeds from sale of intangible assets		639	681

T€	Disclosure	2021	2020
Payments for investments in owner-occupied property, plant, and equipment		-244,628	-387,809
Payments for investments in intangible assets		-2,115	-2,857
Payments for investments in investment property		-1,441	-379
Interest received		1,104	305
Payments in connection with companies not fully consolidated		-1,960	0
Proceeds from short-term deposits		33,000	100,782
+ Cash flows from investing activities		-195,600	-286,673
Proceeds from borrowings	IX	438,350	515,850
Repayments of borrowings from banks	IX	-158,394	-96,899
Repayments of lease liabilities	IX	-5,340	-6,437
Interest payments from lease liabilities	IX	-269	-297
Repayments of financial liabilities from interests in partnerships	IX	0	-11,713
Cash inflows from Group-wide cash management with associated and affiliated companies	IX	5,121	4,494
Cash outflows from Group-wide cash management with associated and affiliated companies	IX	0	-263
Interest paid [excluding borrowing costs for qualifying assets]	IX	-24,116	-23,330
Payments for borrowing costs for qualifying assets	IX	-6,687	-8,543
+ Cash flows from financing activities	IX	248,665	372,862
Change in cash and cash equivalents		7,246	-29,859
Cash and cash equivalents at the beginning of the year		9,717	39,576
Cash and cash equivalents at the end of the year		16,963	9,717

NOTE ON THE AUDIT OPINION

Disclosures on the result of the audit of the consolidated financial statements and the Group management report for fiscal year 2021

The notes to the consolidated financial statements are not included in the above, abridged consolidated financial statements for the fiscal year 2021, which are designed to be included in the printed Integrated Report. The full consolidated financial statements – including the notes – and the Group management report for the fiscal year from January 1 through December 31, 2021 were audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, who came to the overall conclusion that the audit raised no objections and issued an unqualified independent auditor's report. In addition to the unqualified independent auditor's report, the full consolidated financial statements and the Group management report for the fiscal year from January 1 through December 31, 2021 are generally accessible on the Flughafen München GmbH website.

SUPERVISORY BOARD REPORT

The Supervisory Board was informed regularly and in detail by the Executive Board in written reports and at meetings about the Company's situation, its development, and important business events. In its meetings and the meetings of its committees, the Supervisory Board discussed all major company matters and made such decisions as it was called upon to make in accordance with its statutory responsibilities. The Supervisory Board met for five meetings during the fiscal year. The working committee held four meetings. The HR committee convened five times.

At the end of September 30, 2021, both Ms. Andrea Gebekken as Chief Commercial and Security Officer and Mr. Thomas Weyer as Chief Financial Officer and Chief Infrastructure Officer left Flughafen München GmbH [FMG] after successful years on the Executive Board. The Supervisory Board would like to thank both former Executive Board members for their great service to Munich Airport. On October 1, 2021, Ms. Nathalie Leroy took up her position as the new FMG Chief Financial Officer and Chief Infrastructure Officer, having been appointed by the Supervisory Board - and on November 1, 2021, Mr. Jan-Henrik Andersson took up his position as the new FMG Chief Commercial and Security Officer, also having been appointed by the Supervisory Board. The Supervisory Board wishes both new Executive Board members all the best in the performance of their duties.

The financial statements as at December 31, 2021, and the Management Report of Flughafen München GmbH and of the Group presented by the Executive Board have been audited and issued with an unqualified opinion by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Munich, the appointed auditor.

Having conducted its own review, the Supervisory Board acknowledges the auditor's findings and raises no objections.

In accordance with Section 52[1] of Germany's Limited Liability Companies Act [GmbHG] and Section 171[2] of Germany's Stock Corporations Act [AktG], the Board approves the financial statements of FMG and the consolidated financial statements. It proposes that the shareholders endorse the financial statements of FMG and approve the consolidated financial statements.

The Supervisory Board wishes to express its gratitude and respect for the work carried out and the successes achieved by the company's Executive Board and employees in fiscal year 2021.

Munich, July 4, 2022

For the Supervisory Board



Minister of State Albert Füracker
Chairman of the Supervisory Board
of Flughafen München GmbH

IMPRINT

Published by

Flughafen München GmbH
P.O. Box 23 17 55
85326 Munich
Germany

Contact

Corporate Communication & Politics:
Telephone: +49 89 975 413 50
Corporate Development - Sustainability Management:
Telephone: +49 89 975 435 07

E-mail: bericht@munich-airport.de

Photos

Flughafen München GmbH
page 46 Visualization Airport Academy:
© Auer Weber

Grafiken

Flughafen München GmbH

Consulting and design

Kirchhoff Consult AG, Hamburg

Printing

Pinsker Druck und Medien GmbH, Mainburg

Paper

Content: Enviro Top
(certified according to Blauer Engel)

Production

Munich Airport is working hard to minimize its environmental impact – this also goes for its printed products. This publication is printed in accordance with the airport's eco-efficient printing standard. The individual «recipe» of this printing standard combines environmentally friendly inks, additives, and papers as well as optimal recyclability with simultaneously high quality.

Links for further information

The online report with additional content is available at:

➔ report2021.munich-airport.com

Further information on the company is also available on the website:

➔ munich-airport.com/company

Facebook: facebook.com/flughafenmuenchen

Twitter: twitter.com/muc_airport

The German version of this report is legally binding. The Company cannot be held liable for any misunderstandings or misinterpretations arising from this translation.



New times. New horizons.
report2021.munich-airport.com