

**EMAS**  
Environmental  
statement



# Content

## Foreword

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## Foreword

Messe Frankfurt GmbH's binding ecological target is to be *climate-neutral* at its Frankfurt base by 2040 at the latest. We see this as attaining greenhouse gas neutrality and establishing a sustainable water management system.

We work closely together with the sectors to increase awareness of the need for greater sustainability within our events. The transformation process at our Frankfurt base includes all parts of the company. The aim is to develop long-term measures for the ecological, social and economic dimensions. To this end, we have created a sustainability target architecture that not only maps out long-term targets but also short- and medium-term milestones.

We were one of the first trade fair companies to decide of their own accord to introduce the environmental management system EMAS. Thanks to EMAS, we now have valuable base data for our many sustainability activities and improve our target architecture at the same time.

### **Our clear mission:**

We work to get closer and closer to our environmental targets and usher in the transformation to a sustainable trade fair sector.



Wolfgang Marzin  
President and Chief Executive Officer  
of Messe Frankfurt GmbH

# 1. Environmental policy

As one of the world's leading organisers of trade fairs, congresses and other events with their own exhibition grounds, we at Messe Frankfurt GmbH – together with our Frankfurt-based subsidiaries Messe Frankfurt Venue GmbH and Messe Frankfurt Exhibition GmbH, Messe Frankfurt Medien und Service GmbH and Accente Gastronomie Service GmbH – feel it is our responsibility to protect our environment and to use natural resources carefully. This is why we strive to act as a role model for the event sector when it comes to protecting the environment and, in turn, to be a strong marketing partner for our customers both now and in the future.

We therefore commit ourselves to protecting the environment, including preventing environmental pollution, and to continually improving our environmental performance. This commitment also includes sustainable resource use, measures for adapting to and mitigating climate change, protecting biodiversity and ecosystems and other environmentally relevant aspects relating to Messe Frankfurt GmbH.

To this end, we operate an environmental management system in accordance with the requirements of Regulation (EC) No. 1221/2009 (EMAS Regulation) and environmental management norm ISO 14001:2015 and commit to improving this on an ongoing basis. Through ongoing monitoring – including planning, controlling and checking – we ensure that the current legal and regulatory requirements are known and adhered to during the entire working day. We commit ourselves to fulfilling these and other requirements.

To fulfil this environmental policy, we have formulated specific environmental targets for Messe Frankfurt GmbH and agree to provide the information and resources needed to achieve them.

The Executive Board guarantees that this policy will be communicated to all employees using all internal corporate communications instruments available within Messe Frankfurt GmbH. It also ensures that this policy will be published as part of the environmental statement.

## 2. Company description

Messe Frankfurt GmbH is one of the largest organisers of trade fairs, congresses and other events with its own exhibition grounds, in which it organises its own leading international trade fairs. These trade fairs bundle the international supply and corresponding worldwide demand for consumer goods, technologies and textiles and therefore provide the ideal framework for showcasing innovations.

In addition to Messe Frankfurt GmbH's own events, the Frankfurt exhibition grounds play host to many congresses and other guest events. Guest organisers value the architecturally appealing yet functional exhibition grounds, the outstanding infrastructure and the central location with excellent national and international connections.

Carrying out events and operating the trade fair centre both have an impact on the environment. Messe Frankfurt GmbH has been aware of its responsibility for years and endeavours to keep the strain on the environment as low as possible.

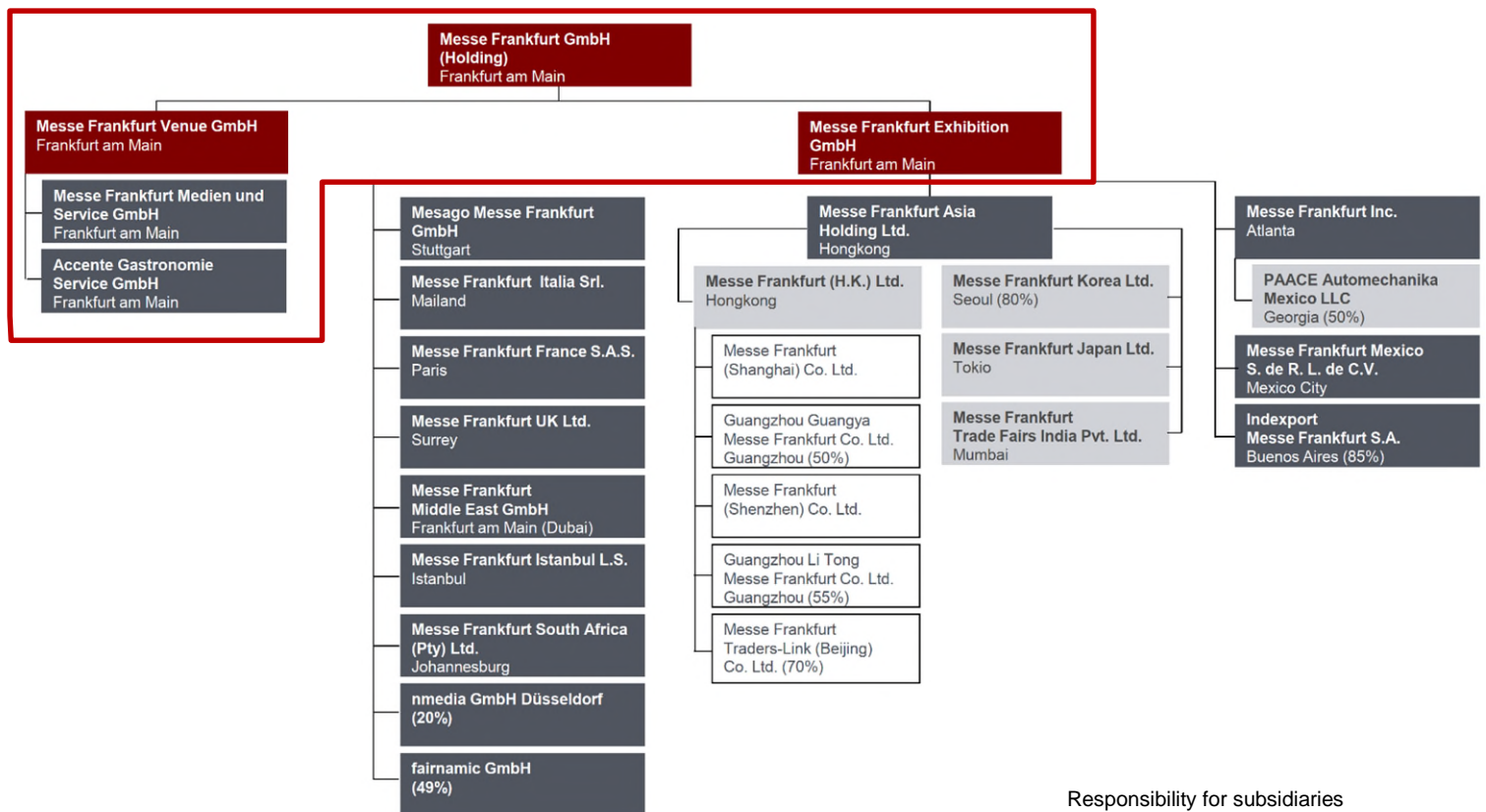
Since as far back as 2007, Messe Frankfurt GmbH has been monitoring water, energy and other important resources through annual reports with a view to using these effectively and minimising consumption. In addition, an interdisciplinary Energy Team was set up in 2014 to develop energy efficiency measures and implement them in order to meet the relevant targets. Courses of action and operational targets for energy and water were also defined through this steering group. Since then, these targets have been examined in regular Energy Team meetings and suitable measures introduced to help reach them.

To expand on previous efforts and, in turn, further reduce the company's impact on the environment, Messe Frankfurt GmbH decided in 2022 to introduce an environmental management system based on the Eco-Management and Audit Scheme (EMAS) standard, which also meets the requirements of environmental management norm ISO 14001. Messe Frankfurt GmbH's environmental management system focuses on the company's Frankfurt base and aims to help systematically reduce the strain on the environment caused by the company and its events.

## 2.1 Area of application

The environmental management system (including the relevant documentation) covers the activities of Messe Frankfurt GmbH and its subsidiaries at the company’s Frankfurt base. The main focus of business activities is on planning, organising and running international flagship events and holding congresses and other events in Frankfurt.

The following organisational chart shows the structure of Messe Frankfurt GmbH and where the environmental management system takes effect. The area of application does not include subsidiaries that are not based in Frankfurt.



### Messe Frankfurt GmbH

As a holding company, Messe Frankfurt GmbH is responsible for strategic control and overall coordination of the Messe Frankfurt Group. The holding company also provides financial resources and acts internally as an investor whose decisions are based on strategic criteria and long-term profit expectations. The shares of the holding company are held by the two public shareholders: the City of Frankfurt (60 percent) and the federal state of Hesse (40 percent).

Messe Frankfurt GmbH controls the activities of the two independent wholly-owned subsidiaries: Messe Frankfurt Exhibition GmbH and Messe Frankfurt Venue GmbH.

**Messe Frankfurt Exhibition GmbH**

Messe Frankfurt Exhibition GmbH is responsible for the entire event business and acts like a private trade fair organiser without its own exhibition grounds. It is the main tenant of Messe Frankfurt Venue GmbH. The company contains all Group events and all subsidiaries in Germany and abroad that hold events. The Messe Frankfurt Exhibition GmbH subsidiaries that are not based in Frankfurt are not included within the scope of the environmental management system. The company is responsible for managing and developing Messe Frankfurt's trade fair brands around the world and for developing new trade fair themes. Activities that are aimed at events held around the world are not taken into account either.

**Messe Frankfurt Venue GmbH**

The function of Messe Frankfurt Venue GmbH is to manage technical and other services for events, to market the exhibition grounds, the Messe Frankfurt Congress Center, Kap Europa and the Festhalle to guest organisers, and to maintain and develop the exhibition grounds. The two service companies – Messe Frankfurt Medien und Service GmbH and Accente Gastronomie Service GmbH – are part of Messe Frankfurt Venue GmbH.

**Messe Frankfurt Medien und Service GmbH (MFS)**

- Fairconstruction is the partner of choice for trade fair construction concepts – in Frankfurt and internationally. Messe Frankfurt GmbH's stand builders are at hand to provide customers with specialist expertise and local know-how, helping them to bring out the best in their trade fair presentation. As part of Messe Frankfurt Medien und Service GmbH, Fairconstruction offers complete packages or individual solutions for stand construction, equipment, system stands and designer solutions, rental furniture and technology.
- Media Services includes advertising on the exhibition grounds, online banners and multimedia solutions as well as individual promotional measures. It also produces trade fair catalogues, themed publications and trade fair newspapers relating to the events on the Frankfurt exhibition grounds.

**Accente Gastronomie Service GmbH**

Accente Gastronomie Service GmbH is Germany's largest trade fair catering and food services company. Accente operates all food service establishments and shops in the trade fair halls and in the outdoor exhibition area. Its food is prepared on the exhibition grounds directly so that the range of dishes can be produced fresh and as required.

**The range of services includes the following**

- Banquet and eventcatering
- Running events
- Hospitality for conferences, meetings or stand parties
- Stand catering and delivery
- Supplying exhibitors
- Personnel services
- Providing personnel for exhibitors and event organisers
- Renting out equipment

## 2.2 Definition of the product

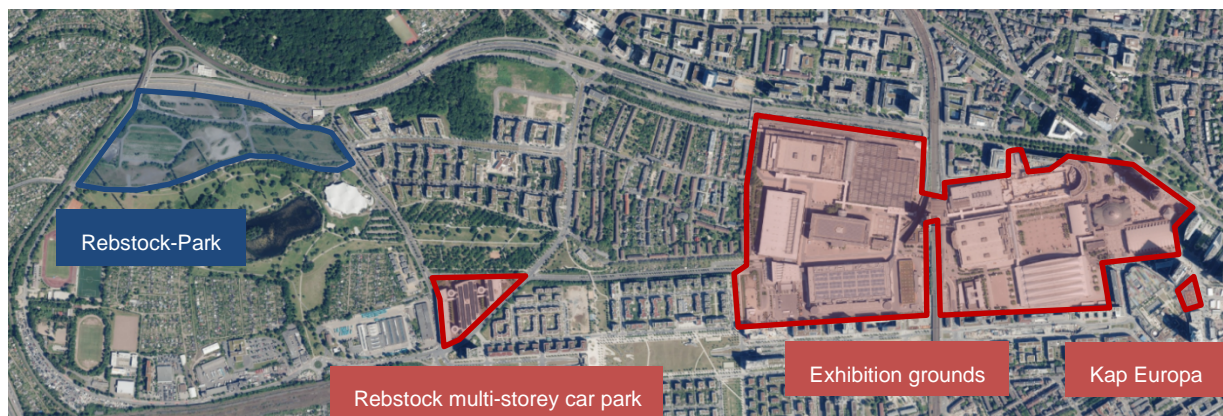
Messe Frankfurt's main business consists of organising trade fairs, congresses and other events, which will be referred to here by the all-purpose term 'events'. Messe Frankfurt events can be categorised as Group events or guest events. Group events are organised by Messe Frankfurt Exhibition GmbH and held at Messe Frankfurt's Frankfurt base. Guest events, by contrast, are events that are held on Messe Frankfurt's exhibition grounds but that are run by other companies or organisations. Here, the organisers rent buildings or halls for their event from Messe Frankfurt Venue GmbH.

## 2.3 Exhibition grounds

Messe Frankfurt GmbH's exhibition grounds covers an area of 585,000 m<sup>2</sup> in the heart of Frankfurt. Here, the company's buildings currently provide 393,838 m<sup>2</sup> of trade fair halls and other exhibition space. As well as this, there are administration and service units.

While the history of Frankfurt as a trade fair city can be traced back as far as the Middle Ages, the chronology for Messe Frankfurt's current location begins with the founding of the Ausstellungs- und Festhallen-Gesellschaft mbH in 1907 and the completion of the Festhalle in 1909. The Festhalle, which continues to be used to this day, now has listed building status. Since the construction of the Festhalle, the location has been constantly adapted to the needs and wishes of exhibitors and visitors with new buildings and modifications. Today, 11 different halls are available for events of all kinds. The individual architecture of each building gives the trade fair location its varied appearance.

The following image provides an overview of the spaces currently used by Messe Frankfurt.

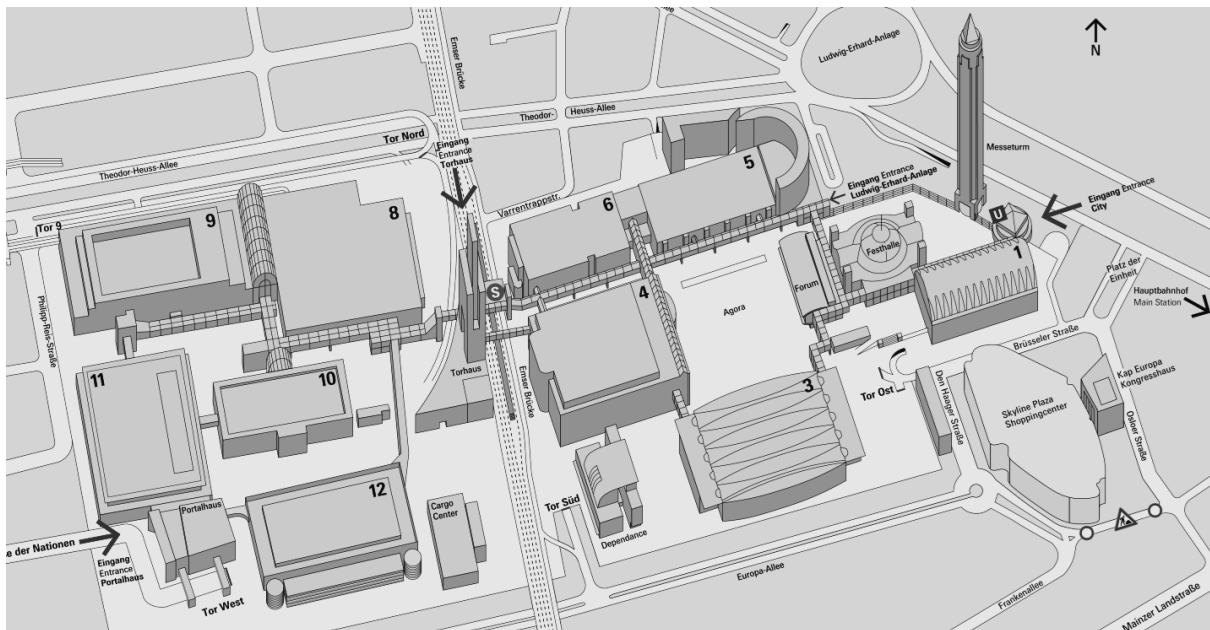


The space belonging to Messe Frankfurt (marked in red) is divided into three areas.

- Exhibition grounds with trade fair halls, administrative and service buildings
- Rebstock multi-storey car park
- Kap Europa event building outside of the exhibition grounds

Messe Frankfurt also uses space rented from the City of Frankfurt (marked in blue) in Rebstock Park as temporary parking spaces for large events. The rented spaces are maintained by Messe Frankfurt. Messe Frankfurt's buildings are shown in the following graphic and the main usage areas listed in the table beneath it.





#### Trade fair halls and other exhibition space:

Hall 1 Space for trade fairs and other events

Hall 2 (Festhalle) Space for trade fairs and other events

Hall 3 Space for trade fairs and other events

Hall 4 (with P4) Space for trade fairs and other events and for parking

Hall 5 Space for trade fairs and other events

Hall 6 Space for trade fairs and other events

Halls 8, 9 and Galleria (with P9) Space for trade fairs and other events and for parking

Hall 10 Space for trade fairs and other events

Hall 11 and Portalhaus Space for trade fairs and other events

Hall 12 Space for trade fairs and other events

Forum Space for trade fairs and other events

Congress Center (CMF) Space for trade fairs and other events

Kap Europa Space for trade fairs and other events

Outdoor area (Agora, P3/10/13) Outdoor areas for trade fairs and other events

#### Administration and service units::

Torhaus Office and administration building

Dependance Offices, large kitchen, canteen

Technicum Office and administration building

Cargo Center Functional buildings for handling cargo/materials

Domizil Residential building

Rebstock multi-storey car park Parking area

Other (e.g. Via Mobile) Other (e.g. parking areas (P1, P2, P8), guard house, outdoor facilities)

#### Power station operated by Mainova AG

Mainova AG operates a power station on the Messe Frankfurt GmbH exhibition grounds. This power station is not part of Messe Frankfurt GmbH and it also supplies power to the entire city area. For this reason, the power station is not covered by the environmental management system.

### Protected areas

Messe Frankfurt's areas (exhibition grounds, Rebstock multi-storey car park and Kap Europa) are not located in any kind of protected area (water protection area, nature reserve, floor area, etc.) – see areal photograph on page 8. By contrast, the parking area rented by Messe Frankfurt in Rebstock Park (marked in blue) is located in a landscape conservation area ("Green belts and green corridors in the city of Frankfurt am Main"). This area is indicated as Zone I in the relevant ordinance. The rented area in Rebstock Park and the multi-storey car park are administered by a service provider solely for event-related purposes and in accordance with the terms of the landscape conservation area ordinance. Messe Frankfurt has emergency plans to be implemented in the event of accidents such as fuel spills.

### Residential areas

The Kuhwaldsiedlung neighbourhood, a residential area in Frankfurt's Bockenheim district measuring approximately 25 hectares, borders the exhibition grounds to the west. To the south, the residential area is separated from the exhibition grounds by Europa-Allee and office buildings. We take steps to keep the environmental impact on the neighbouring (residential) area as low as possible. For example, this has ensured that no complaints about noise emissions have been received in the last few years.

### Contaminated sites

The Messe Frankfurt grounds do not contain any known contaminated sites, either from the company's own activities or those of previous owners. In addition, Messe Frankfurt works together with the bomb disposal team of Darmstadt Regional Council (RP Darmstadt) to monitor suspected sites of unexploded bombs from the Second World War. When new buildings are being planned, aerial photograph interpretations and analyses by the Regional Council are used and the land examined for bombs using a variety of methods.

### Environmentally relevant machinery and equipment

Various kinds of environmentally relevant machinery and equipment are used on the exhibition grounds:

Type	Quantity	of which requiring permit in accordance with the German Emission Control Act (BImSchG)
Boilers	15	0
Refrigeration units	98	0
Wet cooling towers	39	0
Emergency power generators	18	0
Fat separators	26	0
Hydraulic lifts	40	0
Tank systems	3	0
Warehouse of cleaning agents	2	0
Waste collection point	2	0

The wet cooling towers and the refrigeration unit are operated and samples analysed in accordance with the requirements of the 42nd Ordinance for the Implementation of the Federal Immission Control Act (42. BImSchV).

The fat separators, the tank system (with a volume of 5,000 litres) and a waste collection point are operated by service providers.

### 3. Environmental management system

In 2022, with the introduction of the environmental management system in accordance with the requirements of the EMAS Regulation (EC) No. 1221/2009 and environmental management norm ISO 14001, Messe Frankfurt GmbH decided to define its environmental performance in the first year and continually improve it in the years that followed.

#### Environmental performance

Messe Frankfurt GmbH's environmental performance is determined in an initial environmental assessment based on its key environmental aspects, including energy, waste, materials used and water consumption. These key areas are analysed using existing data.

Core indicators are defined for all key environmental aspects of Messe Frankfurt GmbH. These are used to assess the environmental performance and allow an annual comparison. The core indicators are calculated on the basis of an input/output value and a reference value:

$$\text{Core indicator}_n = \frac{\text{Input/Output}_n}{\text{Reference value}}$$

Organising trade fairs and other events is defined as a product of Messe Frankfurt GmbH. Because of this, event-related parameters are taken as reference values. The following reference values are used depending on the input/output value in question:

- Exhibition space rented (m<sup>2</sup>)
- Product of rented space and rental duration in days (m<sup>2</sup>/day)
- Number of visitors (n)

The rented space and the rental duration are recorded in Messe Frankfurt GmbH's booking system. As this is also used as a basis for billing customers, the data is guaranteed to be accurate.

The visitor count is determined based on the number of tickets sold and admission vouchers redeemed. This means that the data is very accurate.

#### Organisational structure of the environmental management system

The Executive Board of Messe Frankfurt GmbH is responsible for the company's environmental management. To fulfil its responsibility, the Executive Board put together an EMAS team consisting of EMAS officers entrusted with the necessary powers. Here, the EMAS team builds on the existing structures of Messe Frankfurt GmbH's Sustainability Board. This Sustainability Board includes management from different disciplines, ensuring that there is a broad base for dealing with sustainability issues throughout the Group.

The Messe Frankfurt GmbH Executive Board informs employees about the company's environmental management system and environmental targets by means of intranet, training and Executive Board information events (townhall meetings). Employees can send their suggestions for improvement directly to the EMAS team, e.g. by emailing them to [sustainability@messefrankfurt.com](mailto:sustainability@messefrankfurt.com).

## 4. Environmental aspects

In its first environmental assessment, Messe Frankfurt GmbH recorded and assessed all environmental aspects to determine the main ones. Here, it evaluated and prioritised these based on the following two criteria:

### Potential impact on people, nature and the environment

These aspects are summarised below:

- Potential harm/benefit for the environment
- Condition/vulnerability of environment
- Scope, quantity, frequency and reversibility

Value	Assessment
A	High impact
B	Medium impact
C	Low impact

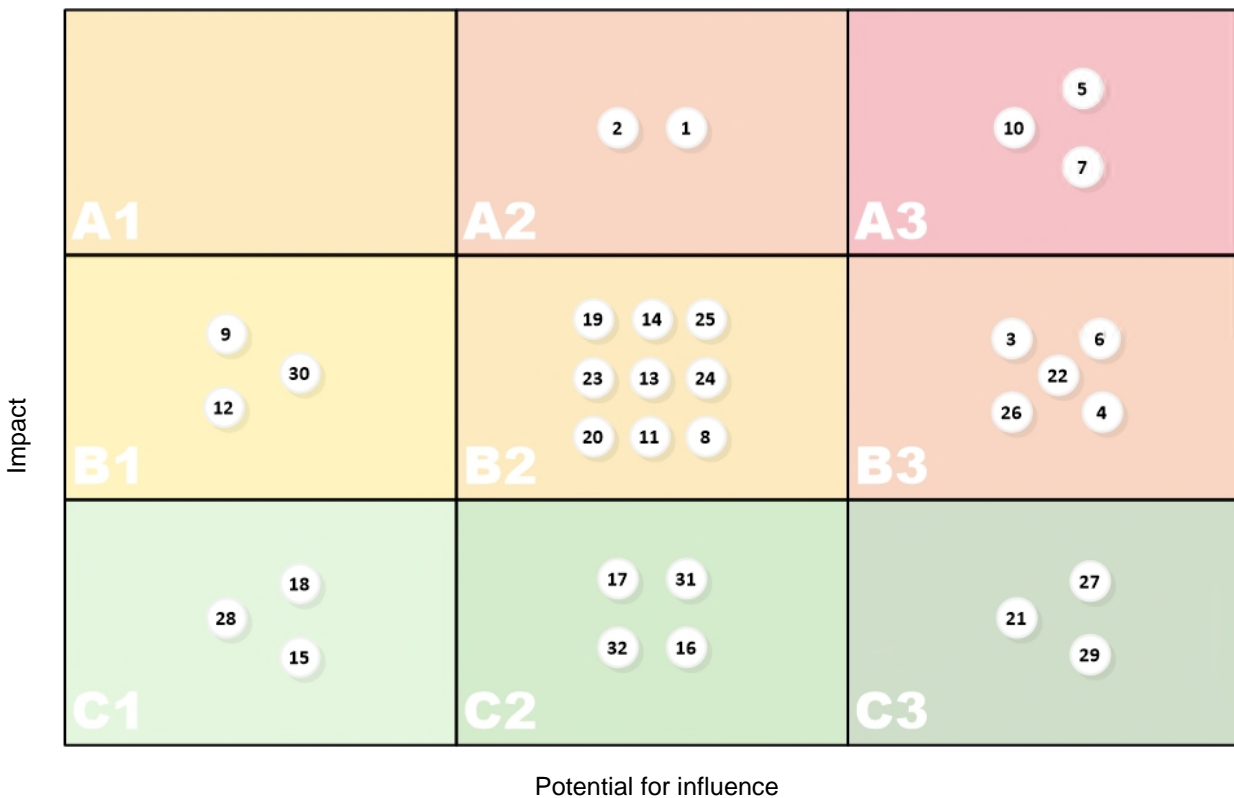
### Potential for influence by Messe Frankfurt GmbH

These aspects are included below:

- Available database
- Legal provisions
- Opinions/expectations of interested parties

Value	Assessment
3	High potential for influence
2	Medium potential for influence
1	Low potential for influence

Key environmental aspects are those in categories A and B and are of particular relevance for our environmental management system. The analysis determines the main environmental aspects of Messe Frankfurt GmbH and prioritises them at the same time. **The result of the materiality analysis** is shown in the following graphic.



The following table is the legend of this graphic as well as showing the main environmental aspects:

No.	Environmental aspect		Environmental impact
1	Waste	Group events	– Resources used
2	Waste	Guest events	– Emissions caused by disposal
3	Waste	Administration	– Space needed (landfill)
4	Waste	Special waste	
5	Energy	Electricity required	– Use of fossil fuels
6	Energy	Natural gas required	– Greenhouse gas emissions
7	Energy	Steam required	– Space needed
8	Energy	Fuel consumption – fleet	
9	Energy	Fuel consumption – service providers	
10	Emissions	Main source of energy	– Air pollution
11	Emissions	Fleet	– Global warming
12	Emissions	Service providers	
13	Emissions	Business travel	
14	Emissions	Coolant loss	
15	Emissions	Travel by exhibitors/visitors	
16	Emissions	Travel by employees	
17	Local phenomena	Noise	– Reduction of biodiversity
18	Local phenomena	Fine particulates	– Air pollution
19	Soil	Biodiversity	– Impaired soil function
20	Soil	Land use	– Interfering with natural biotopes
21	Materials	Office material/IT	– Resources used and emissions generated during production
22	Material	Paper	
23	Material	Trade fair stand construction	– Disposal of waste after use
24	Materials	Food	
25	Materials	Advertising products	
26	Water	Water consumption	– Resources used
27	Accidents/emergencies	Fire	– Pollution
28	Accidents/emergencies	Flooding	– Release of greenhouse gases
29	Accidents/emergencies	Leakage of environmentally hazardous substances	– Loss of biodiversity
30	Other	Service providers/suppliers	– Resources used and emissions in the supply chain
31	Other	Product range	
32	Other	Capital investments	

## 5. Environmental performance in figures

The recent event with the most dramatic impact was the COVID-19 pandemic. Due to the pandemic, hardly any events were held in 2020 and 2021. No major events were held in the first quarter of 2022 either, meaning that a number of trade fairs – and in particular Group events – had to be cancelled. Events have been held on the Messe Frankfurt exhibition grounds again since May 2022, but not yet on the same scale as before the pandemic. The statistics for 2020 and 2021 are not representative because of the cancelled events and the short-time work. By the same token, 2022 is not yet entirely comparable with the pre-pandemic years. Because of this, Messe Frankfurt has decided to use key figures from the current reporting year (2022) and the most recent regular financial year (2019) for this environmental statement.

<b>Location overview</b>		2019	2022
Rented exhibition space	m <sup>2</sup> /day	44,892,505	34,866,476
Rented exhibition space	m <sup>2</sup>	1,451,849	1,016,495
Visitor count	n	2,631,000	1,267,000
<hr/>			
Total energy consumption	MWh	104,459	79,379
Steam	MWh	42,792	38,235
Electricity purchased	MWh	56,163	36,151
Own electricity generated	MWh	1,366	1,346
Natural gas	MWh	1,751	1,335
Fuel*	MWh	2,387	2,311
<hr/>			
Total emissions	t CO <sub>2</sub> eq/a	26,298	8,449
Steam	t CO <sub>2</sub> eq/a	7,489	6,691
Natural gas	t CO <sub>2</sub> eq/a	319	243
Service providers	t CO <sub>2</sub> eq/a	359	293
Business travel	t CO <sub>2</sub> eq/a	1,251	235
Fleet	t CO <sub>2</sub> eq/a	257	181
Coolant	t CO <sub>2</sub> eq/a	N/A	679
Electricity	t CO <sub>2</sub> eq/a	16,624	0
<hr/>			
Total material	t	1,287	986
Total paper	t	355	122
Food and beverages	t	1,328	1,013
<hr/>			
Total quantity of waste	t	14,051	6,406
Event waste	t	12,880	5,663
Administration waste	t	897	576
Special waste and food waste	t	274	167
<hr/>			
Total water consumption	m <sup>3</sup>	198,242	149,994
Total wastewater	m <sup>3</sup>	178,984	131,255
<hr/>			
Total land usage	m <sup>2</sup>	762,500	762,500
of which sealed area	m <sup>2</sup>	591,655	591,655
of which near-natural area	m <sup>2</sup>	14,200	14,200

\* The figure for consumption includes the total fuel used by service providers, the fleet and, for 2022, emergency power generators.

## 5.1 Energy

The bulk of energy used by Messe Frankfurt GmbH at its Frankfurt base is for operating its trade fair halls and administration buildings. The main sources of energy are electricity, steam and natural gas. For historical reasons, the primary heat supply and the bulk of cooling requirements (absorption cooling machines) come from district heating in the form of steam. The steam is generated in heat and power plants operated by Mainova AG after which it is collected and fed into Messe Frankfurt's own steam network through a reducing station. Because it is located outside the exhibition grounds, Kap Europa has its own connection to the steam network. The natural gas supply serves as a backup system in case there is a problem with the steam supply and to supply smaller energy users.

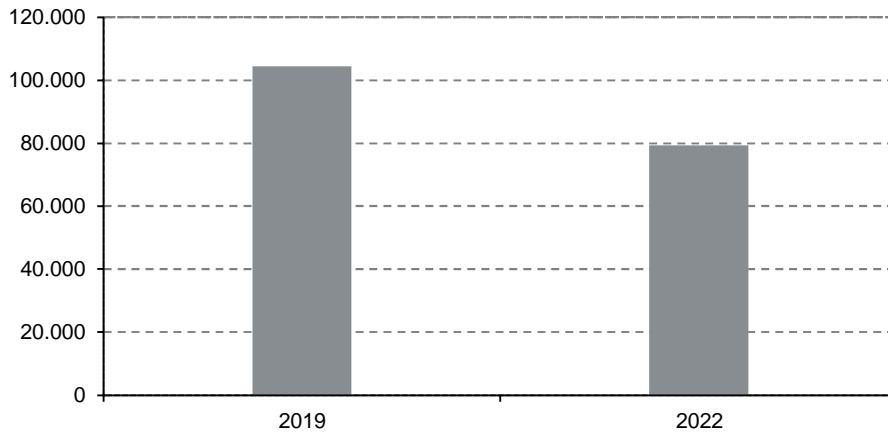
Fuel is also needed for the company's fleet and emergency power systems. The emergency power systems are essential for emergency lighting and for ensuring that important systems that are relevant for fire protection continue to work. They are tested on a monthly basis. The fuel needed by logistics service providers for operating forklifts and operating shuttle buses is also recorded. Messe Frankfurt's energy consumption is primarily determined via utility bills. For a detailed breakdown, an extensive monitoring network with over 3,000 individual measuring points is operated with a view to monitoring and regulating energy consumption. Depending on the specific area in question, meters are used for gauging consumption of electricity, steam, condensation, natural gas, heating and cooling. An IT system that has been specially developed for this monitoring network and its data infrastructure allows designated employees to have permanent access to the relevant meter data. As the data is registered on an ongoing basis, they also have access to historical figures and hydrographs.

At the end of 2009, a photovoltaic system was installed on the roof of Hall 10 with a total output of 490 kWp. In 2010, a further system went into operation on the Rebstock multi-storey car park with a total output of 612 kWp. Both solar power stations were set up as an employee and citizens' project. The systems are maintained and operated by Sonneninitiative e.V., an environmental association based in Marburg. In 2018, another photovoltaic system was set up on Hall 12 and went into operation with a total output of 1,512 kWp. This system meets Messe Frankfurt's own electricity needs.

Underconsumption was recorded for all energy sources in 2022 following the cancellation of events in the first quarter owing to COVID. Because the events were cancelled, the air-conditioning was not used and the halls were not operated. With the resumption of regular trade fair business in 2023, it is to be expected that energy requirements will increase compared with 2022 and that it will be on a level similar to 2019.

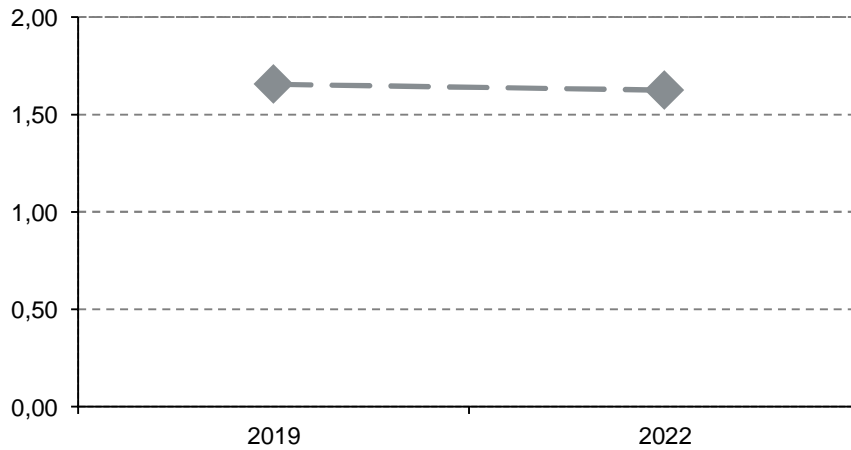
Sources of energy		2019	2022
Steam	MWh/a	42,792	38,235
Electricity	MWh/a	57,529	37,497
of which own electricity generated	MWh/a	1,366	1,346
Natural gas	MWh/a	1,751	1,335
Total fuel for fleet	MWh/a	969	687
Fleet MF	MWh/a	623	446
Fleet AC	MWh/a	346	240
Emergency power generators	MWh/a	N/A	478
Fuel for service providers	MWh/a	1,418	1,147
Logistics	MWh/a	1,418	933
Bus shuttle	MWh/a	N/A	214
<b>Total</b>	<b>MWh/a</b>	<b>104,459</b>	<b>79,379</b>

Energy consumption for location as a whole  
[in MWh/a]



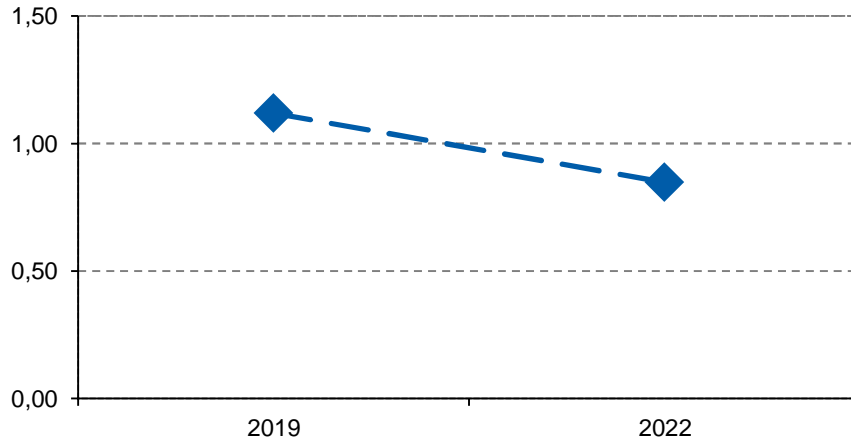
Specific core indicators		2019	2022
Total energy requirement – trade fair halls	kWh/(m <sup>2</sup> /day)	1.66	1.63
Steam requirement – trade fair halls	kWh/(m <sup>2</sup> /day)	0.63	0.74
Electricity requirement – trade fair halls	kWh/(m <sup>2</sup> /day)	1.12	0.85
Natural gas requirement – trade fair halls	kWh/(m <sup>2</sup> /day)	0.04	0.03

Spec. total energy requirement – trade fair halls  
[in kWh/m<sup>2</sup> per day]

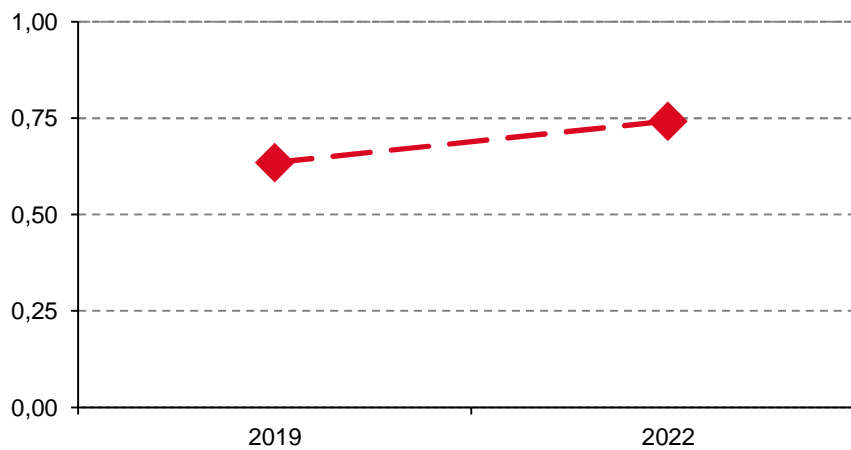




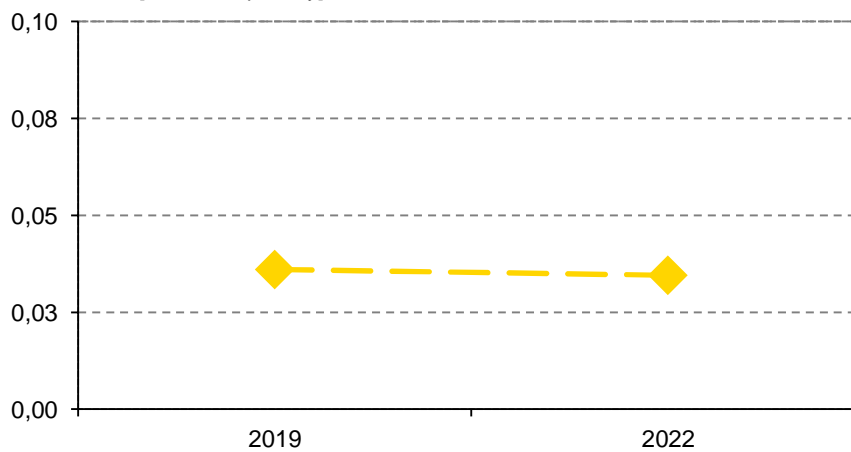
Spec. electricity requirement – trade fair halls  
[in kWh/m<sup>2</sup> per day]



Spec. steam requirement – trade fair halls  
[in kWh/m<sup>2</sup> per day]



Spec. natural gas requirement – trade fair halls  
[in kWh/m<sup>2</sup> per day]



## 5.2 Emissions

The air pollution emitted by Messe Frankfurt results from the location-specific energy consumption (electricity, natural gas, steam and fuels). The emissions caused by Messe Frankfurt GmbH's service providers (forklift operation and shuttle buses) are also included in the analysis. In addition, the greenhouse gas emissions caused by business travel (apart from with the company's own fleet) are recorded, as are greenhouse gas emissions caused by coolant loss. The greenhouse gas emissions are listed as CO<sub>2</sub> equivalents, meaning that CH<sub>4</sub>, N<sub>2</sub>O, HFKW, FKW, NF<sub>3</sub> and SF<sub>6</sub> are taken into account in addition to CO<sub>2</sub>.

Messe Frankfurt GmbH's greenhouse gas emissions have fallen substantially in 2022 compared with 2019. This can be attributed above all to the company's switch to green electricity. Messe Frankfurt's reduced energy consumption has also led to a corresponding fall in greenhouse gas emissions.

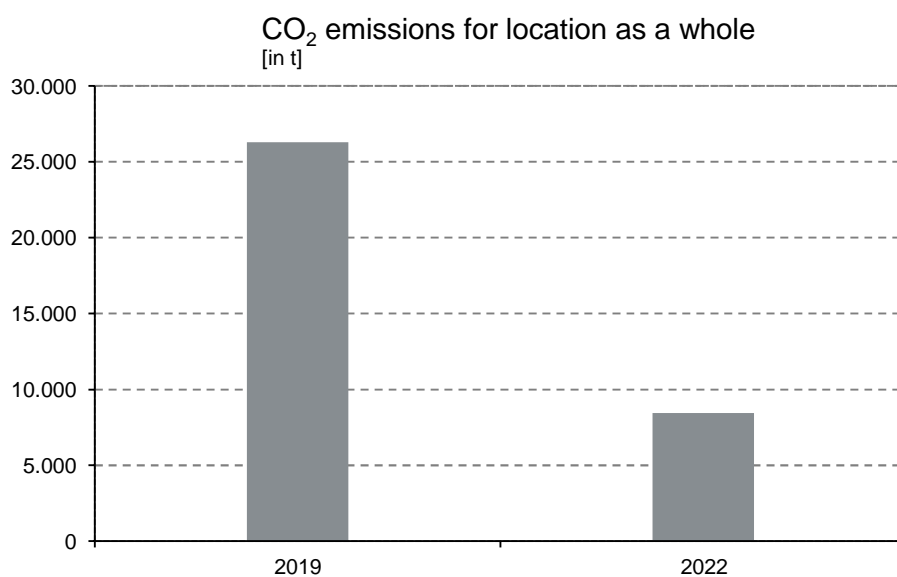
However, with the resumption of regular trade fair operations in 2023, it is expected that greenhouse gas emissions resulting from steam and natural gas will increase again compared with 2022. In spite of this foreseeable increase, the marked reduction in emissions in previous years shows how successful Messe Frankfurt GmbH has been in its use of renewable energies and efficient operating practices.

In future, the key figures for greenhouse gas emissions for the fleets operated by Messe Frankfurt GmbH and Accente GmbH are to be correlated to the number of kilometres travelled. However, it is not yet possible to record kilometre readings in the current reporting year.

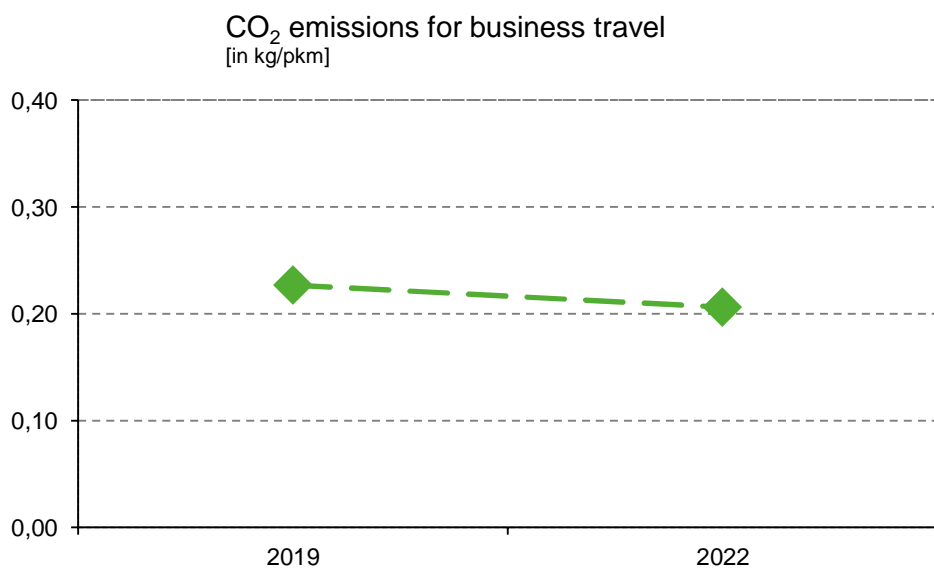
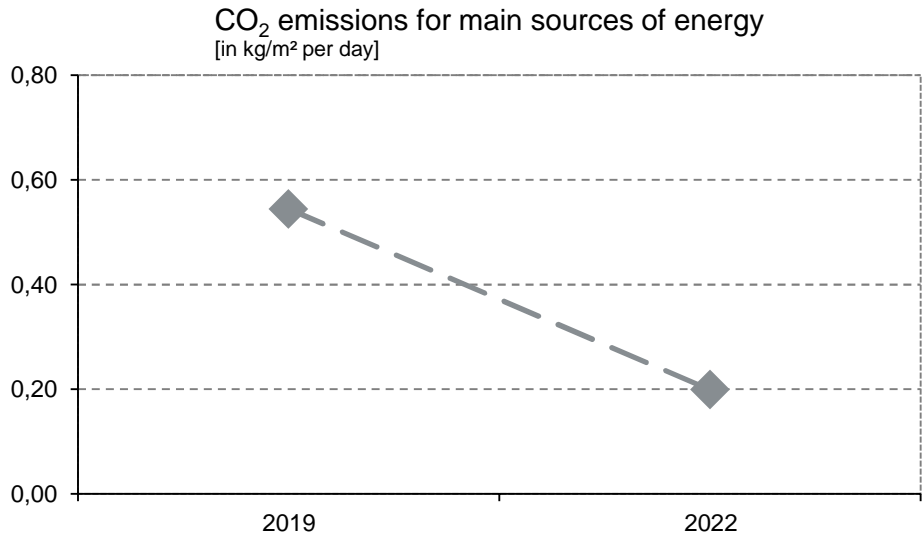
<b>Emissions factors</b>		NOx	SO <sub>2</sub>	Fine particulates	Greenhouse gas emissions
Electricity	kg/MWh	-	-	-	0
Steam	kg/MWh	-	-	-	175
Natural gas	kg/MWh	3.726	0.148	0	182
Petrol	kg/MWh	0.202	0.009	0.000001	263
Diesel (cars)	kg/MWh	0.818	0.001	0.0019	266
Diesel (trucks/buses/emergency power generators)	kg/MWh	1.692	0.001	0.0016	266
Coolant	kg CO <sub>2</sub> eq/kg	-	-	-	according to GWP

<b>Total emissions</b>		2019	2022
Greenhouse gas emissions	t CO <sub>2</sub> eq/a	26,298	8,449
NOx	kg/a	10,077	8,468
SO <sub>2</sub>	kg/a	354	264
Fine particulates	kg/a	3	3

<b>Greenhouse gas emissions</b>		2019	2022
Steam	t CO <sub>2</sub> eq/a	7,489	6,691
Natural gas	t CO <sub>2</sub> eq/a	319	243
Service providers	t CO <sub>2</sub> eq/a	359	293
Logistics	t CO <sub>2</sub> eq/a	359	236
Bus shuttle	t CO <sub>2</sub> eq/a	N/A	57
Business travel	t CO <sub>2</sub> eq/a	1,251	235
Total fleet	t CO <sub>2</sub> eq/a	257	181
Fleet MF	t CO <sub>2</sub> eq/a	165	118
Fleet AC	t CO <sub>2</sub> eq/a	92	64
Emergency power	t CO <sub>2</sub> eq/a	N/A	127
Coolant	t CO <sub>2</sub> eq/a	N/A	679
Emissions – electricity	t CO <sub>2</sub> eq/a	16,624	0
<b>Total</b>	<b>t CO<sub>2</sub>eq/a</b>	<b>26,298</b>	<b>8,449</b>



<b>Specific core indicators</b>		2019	2022
Greenhouse gas emissions – main sources of energy	kg CO <sub>2</sub> eq/m <sup>2</sup> day	0.544	0.199
Business travel	kg CO <sub>2</sub> eq/pkm	0.23	0.21



### 5.3 Materials

The materials used by Messe Frankfurt GmbH relate primarily to administration and printing, trade fair stand construction, catering and onsite advertising. The core materials are paper, materials for trade fair stand construction, advertising materials for events, and food. Materials are purchased centrally by Messe Frankfurt GmbH – apart from Accente GmbH, which sources its materials separately. The purchased materials are documented by the relevant departments.

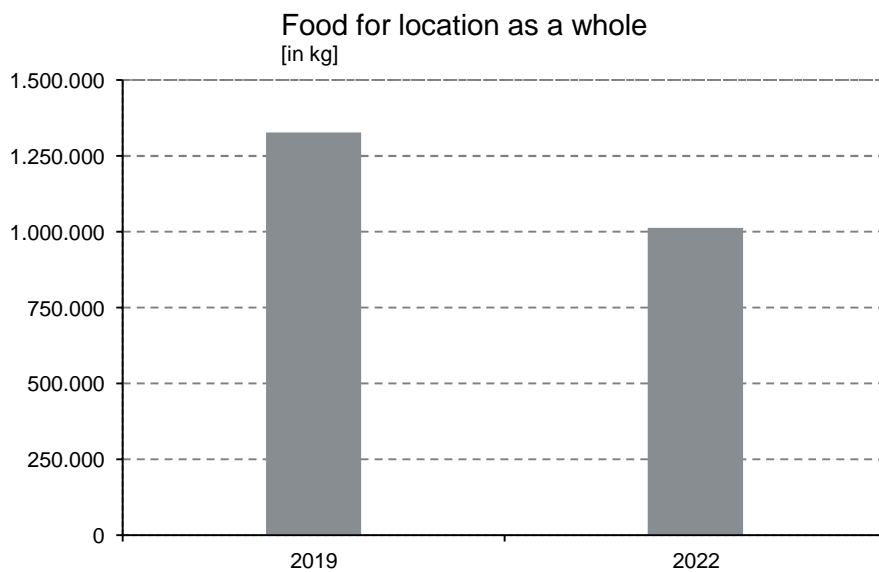
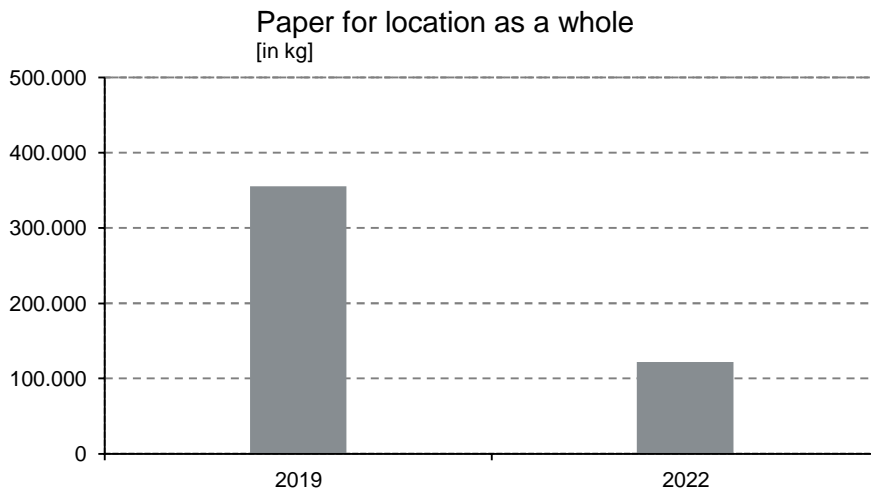
When the material flow is recorded for the first time in the area of trade fair stand construction, the granularity of the data means that it cannot yet be analysed using the International System of Units (SI). As well as this, it is not yet possible for Messe Frankfurt Medien und Service GmbH to determine the exact proportion of trade fair stands at events. However, given that this data is essential for setting measurable targets – and, in turn, for reducing the materials used in trade fair stand construction – Messe Frankfurt Medien und Service GmbH is aiming to provide adequate base data in future. At present, advertising materials are not measured in SI units either. In future, we will aim to provide a more comprehensive analysis, particularly with regard to advertising banners. The core materials used in trade fair stand construction are wood, plastic, metal and ribbed material and velours sold as a roll.

Most of Messe Frankfurt's paper consumption results from the production of trade fair catalogues by external service providers. Messe Frankfurt also has a small printing facility that produces small amounts of print media. The volume of paper required for trade fair catalogues fell substantially in 2022 compared with 2019. This can be attributed firstly to a deliberate reduction in the number of print catalogues and secondly to the cancellation of events in the first quarter of 2022. It is not possible to gauge the amount of paper used by Messe Frankfurt GmbH's administration in 2019. At present, the amount of paper used by Accente GmbH can only be analysed in euros rather than weight.

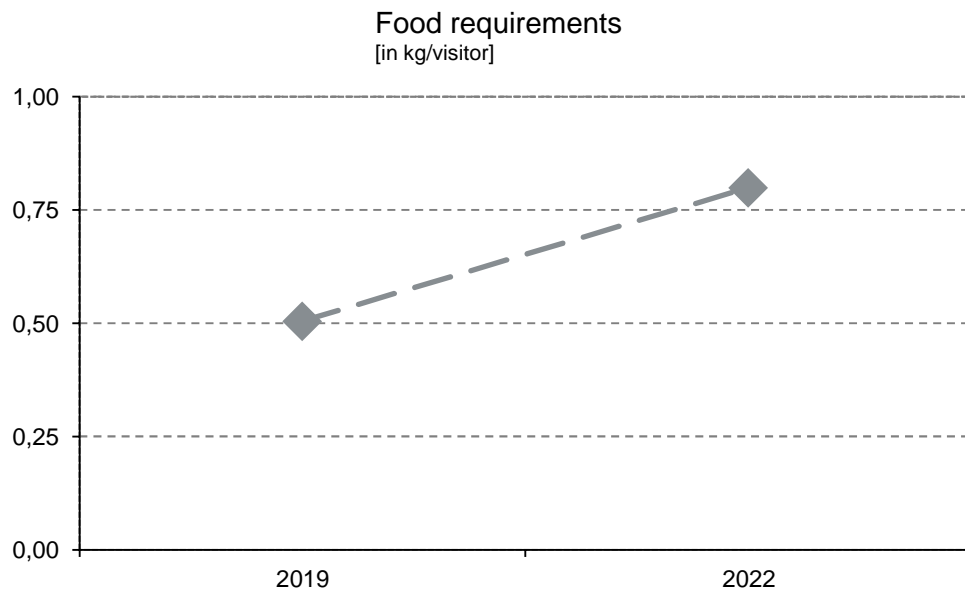
<b>Paper</b>		2019	2022
Paper – service providers	t	355	110
Paper – holding company	t	N/A	12
Paper – Accente	t	N/A	N/A
<b>Total</b>		<b>355</b>	<b>122</b>

<b>Food</b>		2019	2022
Meat and fish together	t	91	52
Meat	t	84	50
Fish	t	6	2
Carbohydrates	t	89	58
Fruit and vegetables	t	153	82
Dairy products	t	177	82
Total beverages	t	778	711
Alcoholic beverages	t	223	245
Non-alcoholic beverages	t	555	466
<b>Total</b>	<b>t</b>	<b>1,287</b>	<b>986</b>

<b>Indoor banner material</b>		2019	2022
Banners	quantity	N/A	391
Corpus	quantity	N/A	55
Luminous displays	quantity	N/A	415
Triangle Tower	quantity	N/A	151
Other	quantity	N/A	839
<b>Total</b>	quantity		<b>1,851</b>



Specific core indicator		2019	2022
Food requirements	kg/visitor	0.505	0.799



## 5.4 Waste disposal

At Messe Frankfurt GmbH, waste is divided into three categories:

- Event waste (Group and guest events)
- Administration waste
- Special waste

Messe Frankfurt GmbH has a direct influence on the amount of administrative and special waste produced. In the case of waste produced at Group and external events, Messe Frankfurt not only disposes of waste from its own trade fair stand construction but all waste from the other trade fair stands as well.

All waste is disposed of correctly by service providers, who are also responsible for separating the waste. At present, the average sorting rate is at least 85 percent in terms of weight. The collected leftover food is processed by bioLog and later converted into energy through fermentation. Woodchips produced from waste wood after sorting are used for thermal energy in biomass power plants or reused in the chipboard industry.

To ensure that waste is avoided and disposed of correctly, waste consultants are on-site during set-up and dismantling for Group events. Their job is to advise stand constructors and exhibitors on separating waste. They are also responsible for allocating waste or stands that have not been dismantled. Guest organisers can also book these waste consultants for their events in order to reduce the amount of waste produced.

The limited event activity in the first quarter of 2022 had a clear influence on the amount of waste produced at Group events, which for the most part are held at the beginning of the year. This means that the volume of waste in 2023 is expected to be greater than it was in 2022.

The waste from the demolition of Hall 5 is not included in the waste statistics because it was disposed of by the building contractor.

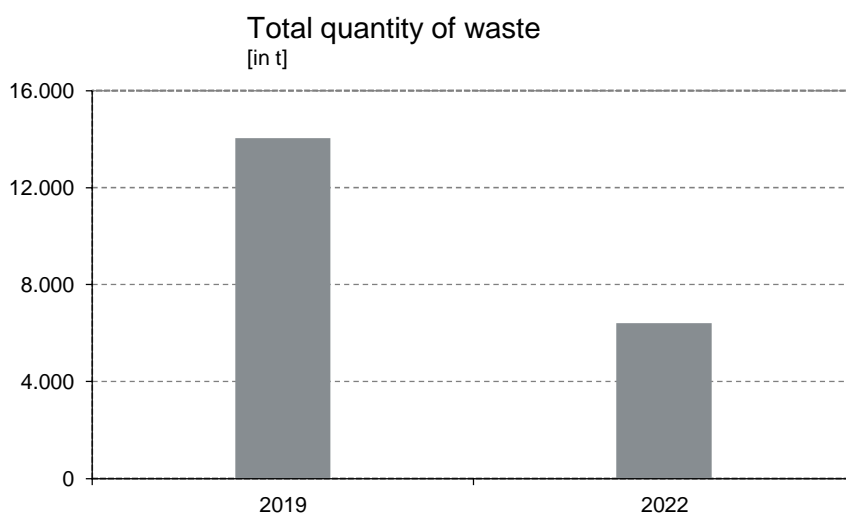
Based on the current data in the area of trade fair stand construction, no direct correlation can be made as yet between the waste produced at Group events and guest events. However, this connection is important in order to be able to influence these waste levels and to gauge the effectiveness of waste reduction measures.

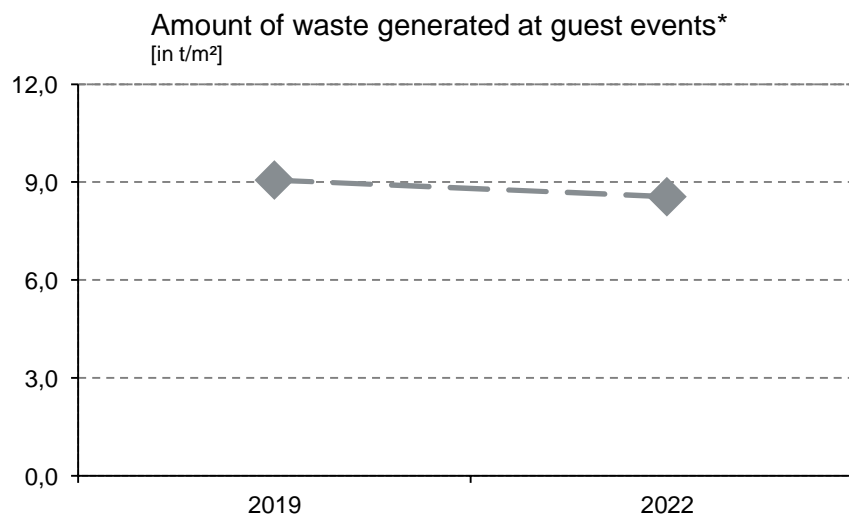
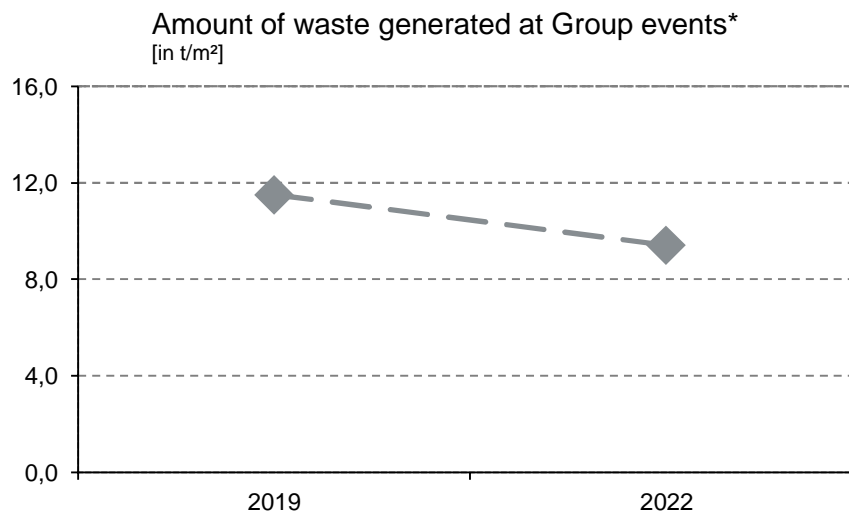
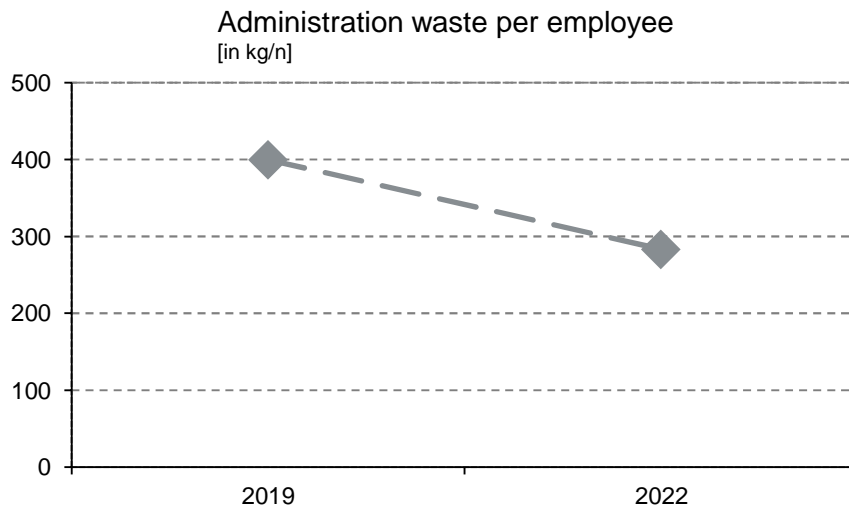
<b>Volume of waste</b>		<b>2019</b>	<b>2022</b>
Total event waste	t	12,880	5,663
Group events	t	10,336	3,428
Guest events	t	2,545	2,235
Total administration waste	t	897	576
Messe Frankfurt	t	535	337
Accente	t	362	239
Food waste	t	263	144
Special waste	t	11	23
<b>Total</b>	<b>t</b>	<b>14,051</b>	<b>6,406</b>



<b>Disposal of waste according to type</b>		<b>2019</b>	<b>2022</b>
Wood	t	8,087	3,417
Residual waste	t	1,850	1,073
Boxes	t	1,904	757
Paper	t	1,420	720
Carpeting	t	229	104
Folie	t	166	94
Plastics	t	83	53
Waste glass	t	32	20
Scrap metal	t	7	0
Food waste	t	263	144
Special waste	t	11	23
Electric scrap*	t	7	17
Paint and lacquer residue*	t	2	3
Halogen-free machining emulsions*	t	2	2
Other (batteries, insulation material, etc.)*	t	0	1
<b>Total</b>	<b>t</b>	<b>14,051</b>	<b>6,406</b>

\* Hazardous waste





\* These figures were calculated using only events that took place in both years (2019 and 2022).

## 5.5 Water/wastewater

Most of Messe Frankfurt GmbH's water requirement comes from operating the trade fair halls and the outdoor exhibition area. In the trade fair halls and buildings, this consists of basic consumption (hygiene flushing as required by the German Drinking Water Ordinance (TrinkwV)) and event consumption (sanitary facilities, recooling plants, utility supplies to stands). Compared with this, providing water for the outdoor areas of the exhibition grounds has a rather secondary role.

The weather, especially the outside temperature, has a major influence on the amount of water required by Messe Frankfurt GmbH. When outside temperatures are high, there is a greater need for cooling via climate control, which in turn increases the amount of water needed by the recooling plants.

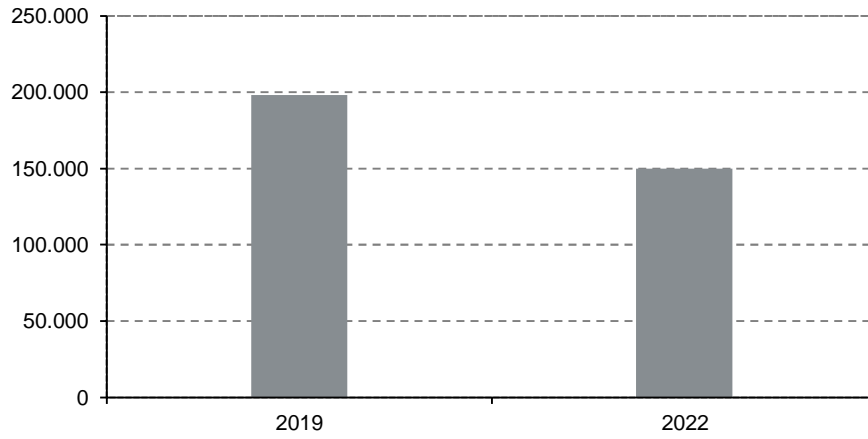
The amount of wastewater produced by Messe Frankfurt GmbH is lower than its water requirement – this is because the water is used to irrigate the outdoor areas and the water from the recooling plants that has evaporated is not fed to the drainage system. This data is recorded by Messe Frankfurt GmbH's calibrated meters (stand pipes for the outdoor areas and meters for the recooling plants) and communicated to the supplier.

In 2022, water consumption went back to normal after events started up again after the pandemic. Nonetheless, water consumption has declined compared with pre-pandemic years. This can be attributed to the large events not taking place at the beginning of the year. By comparison, the specific water consumption per trade fair visitor is increasing because the basic consumption also needs to be covered outside of events.

Due to the current base data, it is not yet possible to break down water consumption (recooling plants, hygiene flushing and sanitary facilities) comprehensively in the individual halls.

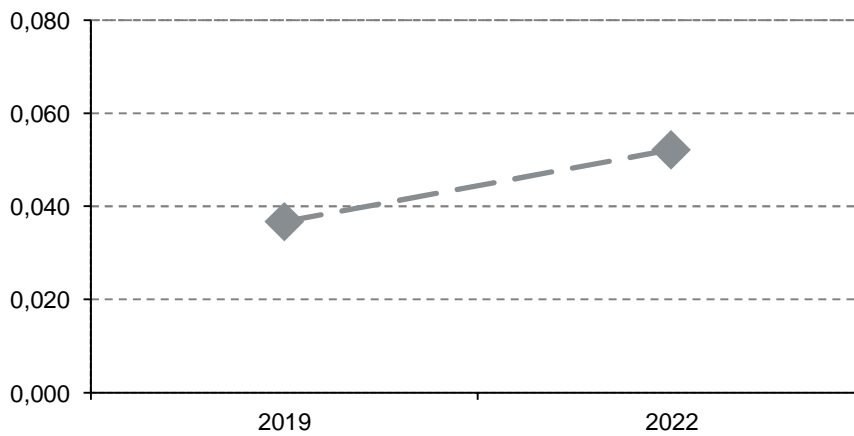
<b>Water/wastewater</b>		<b>2019</b>	<b>2022</b>
Water consumption	m <sup>3</sup>	198,242	149,994
Wastewater	m <sup>3</sup>	178,984	131,255

Water consumption for location as a whole  
[in m<sup>3</sup>]



Specific core indicator		2019	2022
Water consumption – events	m <sup>3</sup> /n	0.037	0.052

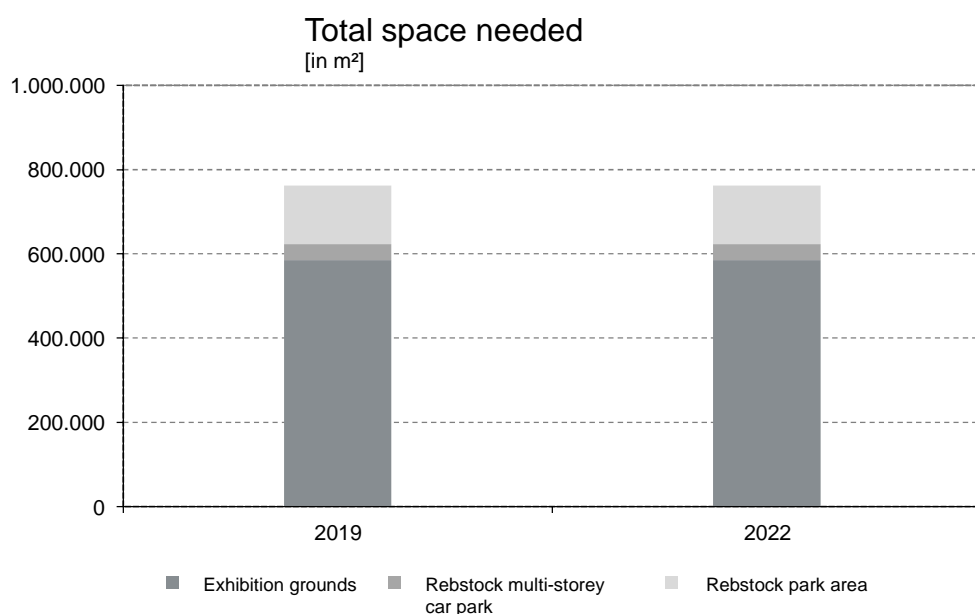
Event-related water consumption  
[in m<sup>3</sup>/n]



## 5.6 Space needed

Messe Frankfurt GmbH operates its own exhibition grounds with a total of 11 trade fair halls and other administration buildings and the Kap Europa congress centre. Messe Frankfurt GmbH's exhibition grounds cover a total area of 585,000 square metres. This extensive infrastructure can accommodate a great many events and administrative activities. Messe Frankfurt GmbH has various green areas with bushes, trees and plants on its exhibition grounds. In addition, parts of Rebstock Park are rented and a multi-storey car park is operated by a service provider exclusively for event purposes.

Areas		2019	2022
Total land usage	m <sup>2</sup>	762,500	762,500
Exhibition grounds	m <sup>2</sup>	585,000	585,000
Rebstock multi-storey car park	m <sup>2</sup>	37,500	37,500
Rebstock Park area	m <sup>2</sup>	140,000	140,000
Sealed areas	m <sup>2</sup>	591,655	591,655
Exhibition grounds	m <sup>2</sup>	554,000	554,000
Rebstock multi-storey car park	m <sup>2</sup>	28,000	28,000
Rebstock Park area	m <sup>2</sup>	9,655	9,655
Near-natural areas	m <sup>2</sup>	14,200	14,200
Exhibition grounds	m <sup>2</sup>	14,200	14,200
Rebstock multi-storey car park	m <sup>2</sup>	-	-
Rebstock Park area	m <sup>2</sup>	-	-



## 5.7 Environmental accidents

Messe Frankfurt's emergency management system is operated centrally by the OSC (Operation & Security Centre). The OSC houses Messe Frankfurt's central control room, corporate and event security, fire protection and building control technology. It additionally provides space for representatives of the police and fire brigade, and also for the German Red Cross and security service.

Messe Frankfurt's emergency plans for various emergency situations are also regulated in the OSC and tested for functionality at regular intervals and after every serious incident. This means that dangerous situations can be dealt with quickly and professionally, working closely together with the authorities and aid organisations.

Messe Frankfurt implements the high fire protection standards in accordance with the Venue Regulations (VStättVO). These include for example regular fire inspections and emergency exercises.

<b>Environmentally relevant accidents</b>	2019	2020	2021	<b>2022</b>
quantity	0	1*	0	0

\* A truck lost hydraulic oil. The affected area was immediately treated with binder and the released hydraulic oil was collected in a small container. No hydraulic oil entered the sewer system.

## 6. Further environmental activities

Messe Frankfurt GmbH not only adheres to the environmental targets shown here for continually improving its environmental performance but is also active in many other environmental measures and projects.

Messe Frankfurt GmbH provides its employees with a free job ticket that entitles them to use public transport throughout the entire RMV area. The same goes for exhibitors and visitors. For over twenty years, visitors to Messe Frankfurt's own events have been able to use their admission ticket to travel free of charge on public transport within the entire fare zone. With regard to e-mobility, there are several charging stations available on the exhibition grounds, including one high-speed charging station (300 kW).

There is bicycle parking throughout the exhibition grounds and Messe Frankfurt employees are given the tax-friendly option of leasing a bicycle of their choice from their gross pay. In 2017, Messe Frankfurt was the first trade fair company in Germany to be certified as a *Bicycle-Friendly Employer* owing to its outstanding commitment in this area. It also received the *bike+business-Award* in the same year. In addition, it has carried the *Bicycle-Friendly Company* seal since 2022.

Climate protection and minimising environmental impact also have top priority with regard to the exhibition grounds and buildings in Frankfurt. Kap Europa is the first congress centre in the world to have been awarded a platinum certificate from the German Sustainable Building Council (DGNB) for meeting the high ecological standards throughout the building's entire life cycle. Green roofs on Kap Europa, Hall 5 and the Cargo Center contribute to a favourable microclimate while offering a suitable habitat for the resident bee colonies.

This commitment can also be seen in Messe Frankfurt's subsidiaries on its Frankfurt base. Here, the *Fairconstruction* brand, with its modular, long-lasting and reusable system stands, is an important basis for sustainable trade fair construction and for Accente Gastronomie Service GmbH's *Green Catering* sustainability initiative.

Messe Frankfurt GmbH is also a member of numerous initiatives and networks, allowing it to join forces with other companies to tackle the environmental impacts of its sector. In Germany, these include the *fairpflichtet* sustainability code, the Association of the German Trade Fair Industry (AUMA) and, at local level, business energy efficiency network *EnergieGemeinschaft RheinMain*. In keeping with AUMA's joint sector positioning, Messe Frankfurt is aiming to achieve climate neutrality, including greenhouse gas emissions and sustainable water management, by 2040.

At a global level, Messe Frankfurt GmbH is committed to the *Net Zero Carbon Events Pledge*. This is supported by various organisations and associations in the trade fair and event sector, including UFI and AUMA. In addition, Messe Frankfurt GmbH – with its *Texpertise Network* – works together with the *United Nations Conscious Fashion and Lifestyle Network* to help bring about an ecological, social and economic shift in the textile sector. It is also a member of the *UN Global Compact*.

## 7. Environmental targets

<b>Target 1</b>	<b>To develop a concept for a climate-resilient green area management</b>	<b>until 2024</b>
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1.1 Appoint an external expert to create a new land register for green areas

1.2 Create a replanting concept with climate-resilient plant types

<b>Target 2</b>	<b>To reduce the greenhouse gas emissions of shuttle buses</b>	<b>until 2024</b>
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2.1 Examine possible ways of using climate-neutral drives and fuels together with the shuttle bus service providers

2.2 Enter into new contracts taking into account climate-neutral drives and fuels

<b>Target 3</b>	<b>To establish an environmental rating for service providers</b>	<b>until 2026</b>
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3.1 Ask relevant suppliers about the status of existing and/or planned Environment & Sustainability certifications

3.2 Validate the feedback on these queries and transfer them into a database/matrix; derive initial measures for optimising contractors' carbon footprints in the annual review

3.3 Follow up on measures as part of the annual supplier review and carry out a new validation

<b>Target 4</b>	<b>To prepare key figures for trade fair stand construction</b>	<b>until 2025</b>
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4.1 Determine the weights of "core materials" (e.g. wall elements) in SI units

4.2 Indicate whether materials have been used once or multiple times

4.3 Conduct space-based analysis of stand structures (m<sup>2</sup>) for providing specific key figures

4.4 Evaluate the use of materials for trade fair stands based on reliable figures

<b>Target 5</b>	<b>To develop the concept for reducing water consumption or using it for hygiene flushing</b>	<b>until 2025</b>
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5.1 Prepare a flushing concept



<b>Target 6</b>	<b>To develop a concept for reducing the amount of waste produced at Group events</b>	<b>until 2026</b>
6.1	Hold one-hour workshops with the relevant brand managers on the waste levels at events and have Sustainability Management and V23 submit a waste report	
6.2	Develop a template including a structure for a waste avoidance concept by Sustainability Management	
6.3	Prepare a waste avoidance strategy for the relevant Group events – among other things, this analyses how waste levels can be reduced through various measures: these include incentives, longer dismantling times, using more sustainable product packaging, favouring ecological stand materials, sustainable stand packages and better separation of waste materials for recycling	
<b>Target 7</b>	<b>To reduce basic electricity consumption by 10% compared with 2019</b>	<b>until 2025</b>
7.1	Always switch off consumers outside of events	
7.2	Identify constant lighting (stairwells, car parks, escape routes) and switch them to LED technology	
7.3	Optimise lighting in Hall 4 car park	
7.4	Optimise lighting in Rebstock multi-storey car park	
7.5	Presence control in Torhaus toilets and kitchenettes	
7.6	Switch to LED technology for exterior lighting	
7.7	Test possible ways of using efficient servers	
7.8	Test and optimise pump control for Hall 3	
<b>Target 8</b>	<b>To reduce specific steam consumption by 20% compared with 2019</b>	<b>until 2025</b>
8.1	Energy-optimise room temperature settings in the Torhaus (21°C heating and 25°C cooling)	
8.2	Reduce the fresh air proportion in ventilation and air-conditioning systems	
8.3	Energy-optimise hall temperature settings in the Torhaus (21°C heating and 25°C cooling)	
8.4	Optimise space and event planning – give preference to using energy-efficient halls	
<b>Target 9</b>	<b>To reduce energy-related greenhouse gas emissions to reach a specific value of 0.1 kg CO<sub>2</sub>/m<sup>2</sup>*d</b>	<b>until 2026</b>
9.1	Supply green gas for the entire exhibition grounds	
9.2	Supply green steam for the entire exhibition grounds	

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**Target 10 To reduce greenhouse gas emissions caused by Accente GmbH's fleet by 10% until 2026 compared with 2022**

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10.1 Record the kilometres travelled as a reference value for establishing a specific key figure

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10.2 Adapt the company car guidelines to create an incentive for choosing vehicles with reduced CO<sub>2</sub> emissions when ordering new cars

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10.3 When replacing old vehicles used for event services and furniture/carpeting rental, take steps to use electric vehicles whenever possible (wherever operationally possible and advisable)

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**Target 11 To reduce the adjusted water consumption in the Torhaus by 10% until 2026 measured against the average consumption between 2015 and 2019**

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11.1 Check and reduce permanent consumers (base load)

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11.2 Reduce water consumption through toilets and urinals by optimising the settings for flushing cisterns and valves

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11.3 Use water-saving aerators in the washbasins of the sanitary facilities

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**Target 12 To switch 60% of indoor banner materials from the main supplier to sustainable products until 2024**

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12.1 Request the main supplier to switch previously used banner materials to sustainable alternatives. This concerns all products with which indoor banners are used – i.e. banners, column banners, advertising wall, fabric banners, corpora, Slim Boxes and Triangle Towers.

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## 8. Binding obligations

Messe Frankfurt keeps an index of legal provisions relevant to the environment. It goes without saying that Messe Frankfurt GmbH and all of its employees adhere to these legal requirements. In recent years, there have not been any indications of failure to comply with the relevant environmental regulations.

The relevant binding obligations include:

- Federal Immission Control Act (BImSchG)
- 42nd Regulation for implementing the Federal Immission Control Act (BImSchG)
- Ordinance on Installations for the Handling of Substances Hazardous to Water (VAwS)
- Technical Instructions on Air Quality Control (TA Luft)
- Technical Instructions on Noise Protection (TA Lärm)
- Venue Regulations (VStättVO)
- Commercial Waste Ordinance (GewAbfV)
- German Waste Management and Product Recycling Act (KrWG)
- Statute concerning the drainage of the city of Frankfurt am Main
- Energy efficiency laws

## Declaration by the environmental verifier

The undersigned – Dipl.-Biol. Lennart Schleicher, EMAS environmental verifier with the registration number DE-V-0404, authorised for sections 82.3 and 56.2 (NACE Code) – confirms having audited whether the locations comply with all requirements of the Regulation (EC) No. 1221/2009 of the European Parliament and Council of 25 November 2009 on the voluntary participation of organisations in a community system for environmental management and audit measures (EMAS), updated by Regulation (EU) 2017/1505 and Regulation (EU) 2018/2026, as indicated in the environmental statement by the organisation

Messe Frankfurt GmbH  
Ludwig-Erhard-Anlage 1  
60327 Frankfurt am Main, Germany.

Signing this declaration confirms that:

- The audit and validation has been carried out in full compliance with the requirements of Regulation (EC) No. 1221/2009, updated by Regulation (EU) 2017/1505 and Regulation (EU) 2018/2026
- The findings of the audit and validation confirm that there is no evidence of failure to comply with the valid environmental regulations
- The data and information in the organisation's environmental statement give a reliable, credible and true picture of all of the organisation's activities within the area indicated in its environmental statement

This declaration does not constitute an EMAS registration, which can only be issued by a competent authority in accordance with Regulation (EC) No. 1221/2009. This declaration may not be used on its own for the purposes of providing information to the public.

Frankfurt, 23 November 2023

Dipl.-Biol. Lennart Schleicher  
Environmental verifier