



Report 2023

SASB











Sustainability Disclosure Topics & Accounting Metrics

Topic	SASB Code	Accounting Metric	Lufthansa Group Response	Reference
GREENHOUSE GAS EMISSIONS	TR-AL-110a.1	Gross global Scope 1 emissions	Gross global Scope 1 emissions: 26.82 million tonnes, (2022: 23,1 million tonnes), thereof 26.79 million tonnes caused by flights of Lufthansa Group aircraft. Specific CO₂ emissions per tonne-kilometre were reduced by 0,3% to 834 grammes (2022: 837 grammes).	Sheet 2023
			Specific CO₂ emissions per passenger-kilometre were 1,8% lower than in the previous year at 88.4 grammes (2022: 90.0 grammes). The calculation of Lufthansa Group's total Scope 1 emissions is based on the Greenhouse Gas Protocol. The emissions factors used for the calculation of Scope 1 emissions (e.g., kerosene, gasoline, diesel, natural gas) are based on the DIN EN 16258. The emissions from flight operations are calculated on the basis of actual transport performance and hence on actual load factors and the actual absolute quantity of kerosene consumed in the reporting year. Transport performance is measured in tonne-kilometres. For passengers and their luggage, an	Annual Report 2023 (Sustainable Development Goals (SDG) Index) p.311

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.1		average of 100 kilograms is the standard estimate; for freight, it is its scale weight.	
			Carbon dioxide (CO_2) emissions do not require special calculation methods, as they are generated in a fixed ratio to the quantity of kerosene burned. The combustion of one tonne of kerosene generates 3.15 tonnes of CO_2 . This is the conversion factor which is also used by the EU Emissions Trading Scheme (EU-ETS, Regulation (EU) 2018/2066) in 2023.	
			distances. The reduction in specific emissions in the Group fleet	
			compared with the previous year was mainly due to an increase in the passenger load factor, changes in the route network, that resulted in a structural increase in average flight length. Longer routes typically create lower specific emissions because the emissions from take-offs and landings, which are higher than in-flight emissions, become less significant in overall terms as the flight distance	
			increases. By using Sustainable Aviation Fuel (SAF), Lufthansa	
			Group was able to reduce climate-impacting emissions by a total of 43,628 tonnes in 2023. Of this amount, 39,195 metric tonnes were saved directly in the combustion of SAF (Scope 1), and	

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.1		4,433 metric tonnes were saved in the upstream supply chain (production and transport, Scope 3) - both values refer to the comparison with the use of fossil kerosene. Consequently, the total emission reduction from the use of SAF remains almost identical in comparison to previous year. Scope 1 data according to GHG Protocol audited with reasonable assurance by Müller-BBM, Cert GmbH and to the requirements of ISO 14064-3.	
	TR-AL-110a.2	Discussion of long- term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	The Lufthansa Group supports IATA's emission reduction targets aimed at reducing net carbon emissions to zero by 2050 (net zero target). All the airlines of the Lufthansa Group are members of the Aviation Alliance Fit for 55, an alliance of European airlines and airports founded in 2022. The partners in the alliance have committed to the goal of carbonneutral aviation by 2050 and have proposed competition-neutral solutions at the European level to achieve this.	Annual Report 2023 (Combined non- financial declaration) p.81
			In addition, the Lufthansa Group has joined the First Movers Coalition of the World Economic Forum. This initiative aims to use at least 5% SAF in 2030, with an emissions advantage of at least 85% compared to fossil fuel. These two aspects already represent a level of ambition which transcends the statutory obligations, since this 5% refers to the total fuel	

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.2		requirements of the Lufthansa Group (not just fuel taken on board in Europe) and the emissions advantage of SAF required in the EU is just 65%.	
			To enable the continuous procurement of SAF on the spot market, up to USD 250 million has been released for the period up to 2026 by the Executive Board of Deutsche Lufthansa AG.	
			Lufthansa Group also defines its own expanded emission reduction targets	
			As befits its pioneering role in climate protection, the Lufthansa Group has defined its own carbon reduction targets which demonstrate an extra level of ambition. The Lufthansa Group's carbon emissions reduction target was successfully validated by the SBTi in the summer of 2022. The SBTi develops sector-specific criteria for climate protection, applies these criteria in participating companies and validates the corresponding corporate targets. With its SBTi validation, the Lufthansa Group became the first airline group in Europe and is among the first three airlines worldwide with a scientifically profound CO_2 reduction target in line with the goals of the Paris Agreement of 2015.	
			Specifically and in accordance with the SBTi guidance, the Lufthansa Group has committed to reducing its carbon intensity, i.e. its carbon emissions	

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.2		per transported tonne-kilometre (passenger and cargo), by 30.6% in the period from 2019 to 2030. This target may only be achieved by reducing fuel consumption or by substituting fossil fuel with SAF. Lufthansa Group is also reporting on the status of its $\rm CO_2$ intensity reduction target, which came to 2.7% below base year 2019.	
			Over and above the reduction required by the SBTi targets, the Group aims to achieve its self-imposed target of cutting net carbon emissions in half by 2030 compared to 2019 by means of voluntary offsets. The Lufthansa Group aims to be carbonneutral in 2050	
			From the Lufthansa Group's perspective, this science-based reduction target is intended to provide a clearly defined path to future-proof growth. Lufthansa Group's reduction path explains the plan to achieve this and how the business will develop accordingly.	

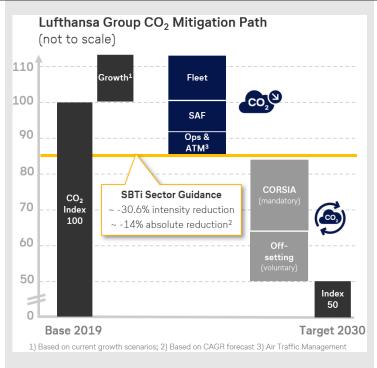


SASB Code

Accounting Metric Lufthansa Group Response

Reference

GREENHOUSE GAS EMISSIONS TR-AL-110a.2



Of the seven greenhouse gases listed in the Kyoto Protocol, Lufthansa Group aircraft emits only CO₂.

Emission reduction targets are an element of longterm variable remuneration for the Executive Board of Deutsche Lufthansa AG. Within the scope of the long-term variable remuneration of the Executive Board, the Supervisory Board regularly defines an environmental target as focus of the strategic and sustainability targets. The reduction of specific

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(Remuneration Report) p.278ff.

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(Combined nonfinancial declaration) p.79, 80, 81, 82

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.2		carbon emissions was defined for the long-term variable remuneration for the 2023 financial year ("long-term incentive"/ LTI 2023). This was derived from the current corporate strategy, according to which the reduction targets are based on the indicator CO ₂ per tonne-kilometre transported, in line with the target system for the validated SBTi targets. This environmental target has a weighting of 20% in the assessment of the level of target achievement for the LTI 2023.	Annual Report 2023 (Sustainable Development Goals (SDG) Index) p.311
			In addition, processes on the ground, such as real estate management and handling processes on the airport apron, also produce carbon emissions. In its efforts to reduce these emissions, the Lufthansa Group focuses on three areas of action: procuring and using renewable energy, increasing energy efficiency in building operations, and achieving carbon-neutral ground mobility. The Group aims to reach the milestone of switching to carbon-neutral mobility on the ground in its home markets by 2030. In the reporting year, organisational structures were established to lay the foundations for developing an overall concept to reduce the carbon emissions associated with ground processes and for implementing control mechanisms. Furthermore, since 2019, the Lufthansa Group has been offsetting the carbon emissions from all of its	Annual Report 2023 (Combined non-financial declaration) p.85-87

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GREENHOUSE GAS EMISSIONS	TR-AL-110a.2		employees' duty flights globally. In 2023, 74,545 tonnes of CO ₂ were compensated. For more details on emissions KPI's, measures and achievements for 2023 see Annual Report p.82ff and/or the Sustainability Factsheet 2023 p. 3-21	
	TR-AL-110a.3	(1) Total fuel consumed	8.451 million tonnes or 373 million gigajoules	Sustainability Fact Sheet 2023 p.3
		(2) percentage alternative	0,15% (By using Sustainable Aviation Fuel (SAF) 43,628 tonnes CO_2 were reduced in the year 2023. Of this amount, 39,195 tonnes were accounted for by direct savings in the combustion of SAF (Scope 1) and 4,433 tonnes by savings in the upstream supply chain (production and transport, Scope 3))	Sustainability Fact Sheet 2023 p.9, 15
		(3) percentage sustainable	0,15% (By using Sustainable Aviation Fuel (SAF) 43,628 tonnes CO_2 were reduced in the year 2023. Of this amount, 39,195 tonnes were accounted for by direct savings in the combustion of SAF (Scope 1) and 4,433 tonnes by savings in the upstream supply chain (production and transport, Scope 3))	Sustainability Fact Sheet 2023 p.9, 15

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LABOR PRACTICES	TR-AL-310a.1	Percentage of active workforce covered under collective bargaining agreements	Of 63,176 Lufthansa Group employees in Germany (as of 31 December 2023), some 76% benefit directly from collective bargaining arrangements. The remaining 24% are largely manager and non- payscale employees in senior positions. 98% employees of Austrian Airlines in Europe and 87% employees of SWISS benefit from collective bargaining agreements.	financial declaration) p.101
	TR-AL-310a.2	(1) Number of work stoppages (2) Total days idle	The Pilots Union "Vereinigung Cockpit" called for a 5h strike at the end of December in Germany. O days	
COMPETITIVE BEHAVIOR	TR-AL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	In 2023, no fines were imposed on Lufthansa Group due to legal proceedings associated with anticompetitive behavior.	

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ACCIDENT & SAFETY MANAGEMENT	TR-AL-540a.1	Description of implementation and outcomes of a Safety Management System	Ensuring in-flight safety and passenger well-being is a top priority for the Lufthansa Group. In order to meet this requirement, all airlines in the Lufthansa Group have a comprehensive safety management system (SMS).	(Combined non- financial declaration)
			The Group airlines' experts track performance ratios, carry out audits and inspections, evaluate risks, analyze flight data, and investigate incidents. All these measures serve the purpose of identifying and steering safety-relevant trends at an early stage and guarding against possible undesirable developments. Beyond the legally required reporting systems, Lufthansa Group operates a low-threshold confidential reporting system that is open to all employees. Regarding their safety management systems, the Lufthansa Group's airlines take their bearings from legal requirements such as EU guidelines, as well as regulations issued by the European Aviation Safety Agency (EASA) and the U.S. Federal Aviation Administration (FAA). In addition, they fulfill all standards and recommendations of the International Civil Aviation Organization (ICAO).	

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ACCIDENT & SAFETY MANAGEMENT	TR-AL-540a.1		Every two years, independent auditors review the safety standards applied Group-wide as part of the IATA Operational Safety Audit (IOSA).	Annual Report 2023 (Combined non- financial declaration) p.93, 106
			All Group airlines fully apply the internationally accepted IATA standards for air safety. These external benchmarks are supplemented by Lufthansa Group with internal guidelines, in particular the Executive Board's Safety Commitment. These guidelines are compiled in the aviation group's Safety Management Manual (SMM) and are additionally included in handbooks concerning flight operations, training, maintenance, and ground handling services. The Executive Board and all managers and employees affected by operator regulations fulfill their tasks in accordance with the SMM. Within the Lufthansa Group, independent departments monitor compliance with regulations and processes related to flight operations. Occupational health and safety have been central areas of action at the Lufthansa Group for several decades and are managed on a Group-wide basis for all of the Group's companies. As an operating company, the health of its employees is particularly important for the commercial success of the Lufthansa Group.	

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ACCIDENT & SAFETY MANAGEMENT	TR-AL-540a.1		Occupational Safety and Medical Services (including Psychosocial Counselling and Health Management) are closely linked with all of the other business units in the Lufthansa Group. This is designed to ensure a rapid response and enable the effective development and implementation of preventive approaches for long-term employee health.	
			The Occupational Safety function consistently implements preventive measures to avoid accidents, health risks and occupational diseases. In the Group companies in Germany, the Lufthansa Group's occupational health and safety experts review all professional activities by means of risk assessments and regular safety inspections. For many years, psychological stress at work has been assessed using a procedure developed by the University of Heidelberg and adapted for the Lufthansa Group.	
			Specific guidelines make managers aware of their responsibility for occupational health and safety. They are required to deal with this directly when they are appointed to their position.	
			The entire Medical Services department, including Psychosocial Counselling and Passenger Medical Care, is certified according to the DIN ISO 9001:2015 quality management system. This certificate was renewed on the basis of an external	

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ACCIDENT & SAFETY MANAGEMENT	TR-AL-540a.1		audit in the summer of 2023. In addition, this department is authorised to provide further training enabling medical professionals to qualify as occupational medicine specialists.	
			Accident figures enable effectiveness audits In 2023, the accident figures included all of the companies that are insured in Germany by the employers' liability insurance association for the transport sector and that employ a total of 88% of the Lufthansa Group's employees worldwide and 94% of its employees in Germany. The reporting was expanded by comparison with 2022, and further companies are being gradually added. For every million hours worked, the initial incidence of work-related injuries in the reporting year was 7.8. However, the figure calculated for 2023 is provisional, since the data will be compared with the employers' liability insurance association after the publication of this report. All events that resulted in downtime of at least one calendar day are included in	Annual Report 2023 (Combined non-financial declaration) p.108
			the calculation of this indicator. By way of comparison, the volume of accidents for all of the companies insured with the employers' liability insurance association for the transport sector amounted to 25.4 accidents per one million hours	
			worked in 2022. This figure only takes into account accidents resulting in three or more days off work.	

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ACCIDENT & SAFETY MANAGEMENT	TR-AL-540a.2	Number of aviation accidents	1	
	TR-AL-540a.3	Number of governmental enforcement actions of aviation safety regulations	0	

Activity Metrics

SASB CODE	ACTIVITY METRIC	LUFTHANSA GROUP RESPONSE	REFERENCE
TR-AL-000.A	Available seat kilometres (ASK)	300,582 million	Annual Report 2023 p.3
TR-AL-000.B	Passenger load factor	82,9%	Annual Report 2023 p.3
TR-AL-000.C	Revenue passenger kilometres (RPK)	249,269 million	Annual Report 2023 p.3
TR-AL-000.D	Revenue ton kilometres (RTK) ¹	31,925 million	Factsheet Sustainability 2023 p. 3
TR-AL-000.E	Number of departures ²	946,132	Annual Report 2023 p.3
TR-AL-000.F	Average age of fleet	13.4 years	Annual Report 2023 p.27

¹ Lufthansa discloses data as "Tonne kilometres (TKT)".

² Lufthansa discloses number of flights, which is nearly identical with number of departures.

Editorial information

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You will find further information on sustainability within the Lufthansa Group at:

www.lufthansagroup.com/en/responsibility

View the Annual Report 2023 including the non-financial declaration at:

→ https://investor-relations.lufthansagroup.com/en