

Tomorrow  
On-Board

 TURKISH AIRLINES

 **TURKISH AIRLINES**

A STAR ALLIANCE MEMBER 



**2022 Sustainability Report**



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About the Report

This report is the ninth sustainability report published by Turkish Airlines Inc. (“Turkish Airlines”, “THY A.O.” or “the Incorporation”). Turkish Airlines Sustainability Report is the main source of information where we present to our stakeholders the policies and strategies followed by Turkish Airlines to create a sustainable future, the social, environmental and economic impacts resulting from the activities carried out in this context, and the future vision.

Turkish Airlines Inc. has reported in accordance with the GRI Standards for the period from January 1, 2022, to December 31, 2022. The content of the report is rooted in the operational data of the Incorporation for the specified timeline. Unless otherwise stated, information pertaining to the Company's subsidiaries is excluded from this report, except for the consolidated financial data. Given that the Incorporation's R&D activities are conducted within its subsidiaries, Turkish Airlines Technology Inc. and

Turkish Technic Inc., the disclosed R&D data incorporates information from these subsidiaries.

The main content of the report has been developed through materiality studies aligned with international standards. This includes identified aspects stemming from these efforts, alongside subjects required by corporate commitments and legal framework, as well as stakeholder expectations.

For the year 2022, the greenhouse gas declarations, as stated in the report, have been independently verified in accordance with the TS EN ISO 14064-3: 2019 Standard. [The GHG Verification Statement can be found on page 93](#) of the report.

The Turkish Airlines 2022 Sustainability Report, as well as previously published reports, are accessible through the [investor.turkishairlines.com](#).

Rapor Navigasyonu

- Links to the Website.
- Links to the Annual Report.
- Links to the Video Content.
- It refers to the data that has been audited.

# Message from the Chairman of the Board of Directors



Prof. Ahmet BOLAT  
Chairman of the Board of Directors  
and the Executive Committee

In 2022

57,581 tons and prevented  
181,379  
tons of CO<sub>2</sub> greenhouse gas  
emissions.

## Dear Esteemed Shareholders,

In 2022, we lived through a period in which the global economy was healing the wounds of the pandemic process. Our Incorporation exceeded the 2019 level by achieving 71.8 million passengers and 202 billion ASK. This success lies under the innovations we implemented to remind the pleasure of flying again after a difficult period and our service understanding that has become a star in our sector. The focus of these innovations is to create an aviation service that is safe and satisfactory for our passengers.

As Turkish Airlines, we have carried many new initiatives into effect with the aim of providing our guests with a more sustainable travel experience. One of these initiatives is the "Green Class" flight, which combines the use of biofuel throughout the year with environmentally friendly products. This flight is a kind of preview of our future plans. In the coming period, we aim to further develop the products offered on this flight and expand them to all our flights.

Sustainable Aviation Fuels (SAF) are key to reducing emissions in the sector. We do not confine our efforts on SAF to biofuel use. In 2022, we joined the Global SAF Declaration, representing a collaborative initiative established by stakeholders in the aviation, aerospace, and fuels sectors to decarbonize the sector. We will continue to develop broader partnerships to promote the use of these fuels.

Thanks to our comprehensive fuel efficiency policy, which includes the use of Sustainable Aviation Fuels, we prevent tons of emissions each year. By adding new-generation aircraft to our fleet, we increased our aircraft number to 394 while maintaining an average fleet age of 8.7 years. With highly fuel-efficient, new-generation aircraft and operational

improvements, we achieved a fuel saving of 57,581 tons and prevented 181,379 tons of CO<sub>2</sub> greenhouse gas emissions in 2022.

We aim to develop broader collaborations not only with organizations within the aviation sector but also with all our stakeholders, including our employees and passengers. The CO<sub>2</sub>mission platform, which we launched in 2022, is one of the finest examples of collaboration with our guests who desire to be a part of the process of improving the world. Through the voluntary carbon offset platform CO<sub>2</sub>mission, travel enthusiasts can offset the unavoidable emissions from their flights by supporting various development projects. Thanks to our passengers' contributions, made entirely on a voluntary basis, approximately 1.5 million kilograms of carbon dioxide were offset in one year. At Turkish Airlines, we also offset the emissions resulting from our employees' business travels through CO<sub>2</sub>mission. However, our efforts in carbon offsetting practices for unavoidable emissions management go beyond this. Throughout the year, we offset a total of 8,968 tons of greenhouse gas emissions within emission trading systems such as EU ETS, UK ETS, and CH ETS. We voluntarily implement CORSIA, the International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for International Aviation, from the pilot phase onwards, in line with the scheme's timeline and requirements, and we will offset our emissions within this scope.

In our sustainability efforts, which are based on a multi-stakeholder, collaborative, and interdisciplinary approach, we have unified under the motto 'Tomorrow On-Board' during the reporting period. This enables us to carry out these activities in a more comprehensive perspective in the light of the UN Sustainable Development Goals. In 2022, our inclusion among the supporters of the UN Global Compact, the world's largest corporate sustainability

initiative, also demonstrates our commitment to adopting the UN Sustainable Development Goals as a guiding principle.

Like the bridges we build between our stakeholders and various fields that serve sustainability, we are also building bridges between countries, continents, and cultures in a manner befitting our mission. In 2022, our Incorporation conducted flights to 25 out of the 46 least developed countries recognized by the United Nations, carrying 1.4 million passengers. As the only airline flying to 152 international destinations, we provide unique support for sustainable development. Through the global connectivity we offer, we create opportunities for these regions to enhance their economic and social relationships with the world. With the momentum we gained in the reporting period, we significantly expanded our flight network. We increased the number of destinations we fly from 333 to 342, and the number of revenue passenger from 44.8 million to 71.8 million. This achievement makes our Incorporation the airline that flies to the most countries globally, and the flag carrier-network airline with the highest number of flights in Europe.

In 2023, we will commemorate two significant milestones, both for the Republic of Türkiye and for our Incorporation. We will have the honor of celebrating the 100th anniversary of our Republic and the 90th anniversary of our Incorporation together. In this outstanding year, while continuing our double-digit growth, we will add our 400th aircraft to our fleet and welcome our one billionth passenger with a warm "Welcome..." As the global face of Türkiye, we will continue to progress towards becoming a world-class airline, setting an example with our sustainability performance.

On this occasion, I would like to extend our gratitude to all our stakeholders, including our employees, business partners, shareholders, and passengers, for their trust in our Incorporation on this journey.

# Turkish Airlines At a Glance

Turkish Airlines, the flag carrier airline of the Republic of Türkiye, has taken its place among the largest airline companies in the world with its rapid growth trend since its foundation in 1933, with the objective of carrying out domestic and international passenger and cargo air transportation activities.



Today, Turkish Airlines continues to grow with the objective of having the youngest and most modern fleet in Europe with its 18 subsidiaries and affiliates, a paid-in capital of 1.38 billion TL, and more than 65,000 employees, including its subsidiaries.

With 394 passenger and cargo aircraft in its fleet, Turkish Airlines is the airline company that flies to the most countries in the world, with 342 domestic and international destinations in 2022. This year, Turkish Airlines transported 71.8 million passengers, 1.7 million tons of cargo and mail with 472,707 landings.



## Our Vision

- A continued growth trend over industry average,
- Zero major accidents/crashes,
- Most envied service levels worldwide,
- Unit costs equating with low cost carriers,
- Sales and distribution costs below industry averages,
- A personnel constantly developing their qualifications with the awareness of the close relationship between the benefits for the company and the added value that they contribute,
- An entrepreneurship that creates business opportunities for fellow members in the Star Alliance and takes advantage of the business potential provided by them
- A staff well adapted to modern governance principles by observing the best interests of not only shareholders but also stakeholders.

## Our Mission

- To become the preferred leading European air carrier with a global network of coverage thanks to its strict compliance with flight safety, reliability, product line, service quality and competitiveness, whilst maintaining its identity as the flag carrier of the Republic of Türkiye in the civil air transportation industry.

## Core Values

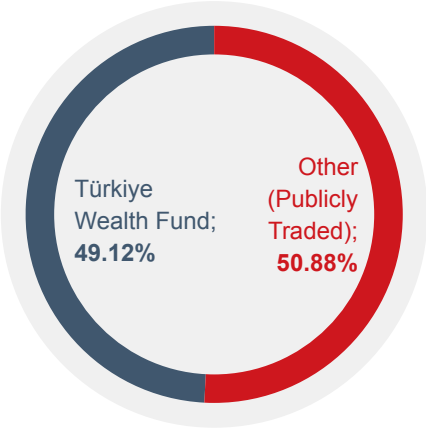
- Honesty and Fair Dealing
- Customer Satisfaction
- Demonstrating Respect to Individuals
- Innovation
- Teamwork
- Leadership
- Productivity
- Confidentiality
- "Open Door" Policy



## Ownership Structure

As of 2022, Turkish Airlines' paid-in capital is 1.38 billion TL. The paid-in capital is divided into 138,000,000,000 shares with a nominal value of 1 (One) Kurus each. 67,788,484,857 Group A registered shares are transferred to the Türkiye Wealth Fund, 1 Group C registered share belongs to the Privatization Administration of the Turkish Ministry of Treasury and Finance. The remaining 70,211,515,142 Group A shares were offered to the public and traded on the Borsa Istanbul. The Incorporation does not have a cross-shareholding structure with different companies. The shares held by foreign shareholders cannot exceed 40% of the total issued capital of the Incorporation. You can find information on Turkish Airlines' shareholding structure and the use of shareholder voting rights in the [Investor Relations](#) section of the corporate website.

### Turkish Airlines Ownership Structure



## Subsidiaries And Affiliates

As of 2022, Turkish Airlines has 18 subsidiaries operating in various fields. Thanks to these subsidiaries, our Incorporation diversifies its activities and provides cost advantage, operational flexibility, quality and efficiency.

Cabin Interior Manufacturing Group	Support Services Group	Passenger and Cargo Transport Group	Maintenance Repair (MRO) Group	Other
Turkish Cabin Interior Systems Inc.  TSI Aviation Seats Inc.  Cornea Aviation Systems Industry and Commerce Inc.	Turkish Opet Aviation Fuels Inc.  Turkish Fuel Services Inc.  Turkish Do&Co Catering Services Inc.  Turkish Ground Services Inc.  Turkish Flight Training and Airport Operations Inc.  Turkish Airlines Technology Inc.	Sun Express Aviation Inc.  Air Albania SHPK  We World Express Limited  THY Air Cargo Transport Inc.  Turkish Airlines International Investment and Transport Inc.	Turkish Technic Inc.  Pratt & Whitney Turkish Engine Center Co. Ltd.  Goodrich Turkish Technic Service Center Co. Ltd.	Tax Refund and Intermediation Inc.



Brands





# Turkish Airlines 2022 Awards



Europe's Best Airline  
(Skytrax Passenger Choice Awards)

Southern Europe's Best Airline  
(Skytrax Passenger Choice Awards)

World's Best  
Business Class Catering  
(Skytrax Passenger Choice Awards)

Europe's  
Best Economy Class Airline  
(Skytrax Passenger Choice Awards)



5 Star Global Airline  
(APEX The Airline Passenger  
Experience Association)

APEX World Class 2022  
(APEX The Airline Passenger  
Experience Association)

Europe's Best Food and Beverage  
Service  
(APEX – Passenger Choice Awards)

Europe's Best Seat Design  
(APEX – Passenger Choice Awards)



Airline of the Year for  
Sustainability Innovation  
(CAPA)



Most Sustainable Flag  
Carrier Airline  
(World Finance 2022  
Sustainability Awards)



Most Valuable Brand of Türkiye  
(Brand Finance)



Service Export  
Special Award  
(Turkish Exporters Assembly)



2022 Readers' Choice Awards  
Condé Nast Traveller Magazine



PAX International Readership Awards  
(PAX International & PAX Tech)



Most Technological  
Airline Brand of Türkiye  
(Tech Brands Türkiye)



"The Happiest Workplaces in Türkiye"  
(Happy Place to Work)



Sustainability Performance  
Evaluation Silver Medal  
(Ecovadis)



Best Transatlantic Airline Award  
(Business Traveler- 2022)



LACP 2022 Spotlight Awards  
Global Communications  
Competition – Gold Award  
(LACP)

# Financial and Operational Performance

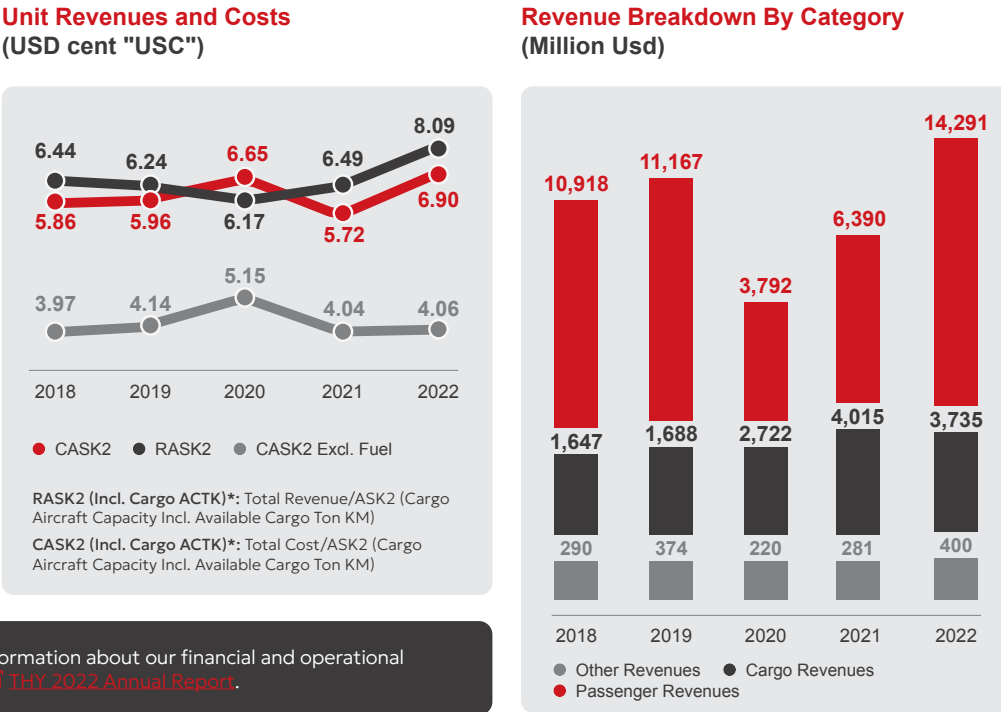
After the profound effects caused by the Covid-19 restrictions on the aviation industry in 2020-2021, Turkish Airlines left behind a successful year financially and operationally, despite all the challenging conditions that continued to affect the industry in 2022.

Due to the increasing demand for tourism activities, our Incorporation achieved a faster financial and operational recovery compared to other airlines. Compared to the previous year, our number of passengers increased by 26.5% on domestic flights, by 88.0% on international flights and by 60.3% in total, reaching 71.8 million passengers. In parallel, passenger transportation revenues increased by 124% to 14.3 billion USD, while cargo revenues decreased by 7% to 3.7 billion USD. Total revenue, on the other hand, increased by 72% compared to the previous year and reached 18.4 billion USD.

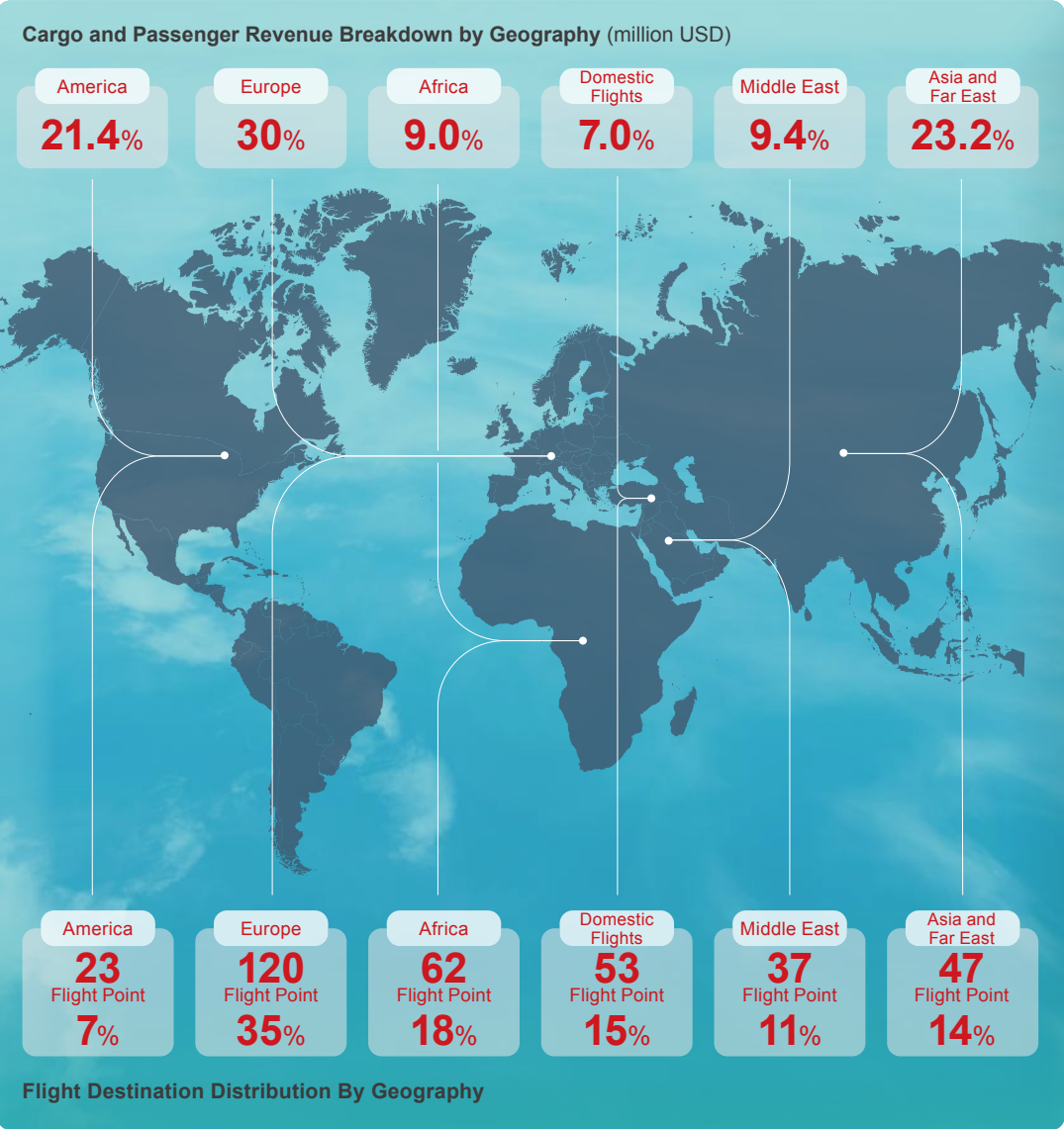


You can find more information about our financial and operational performance in the [THY 2022 Annual Report](#).

Financial Indicators (million USD)	2018	2019	2020	2021	2022
Operating profit	1,191	876	-255	1,414	2,779
EBITDA	2,463	2,589	1,481	3,416	4,947
Net debt	7,687	10,107	14,120	11,596	8,714
Return on Equity (ROE) (%)	13%	11%	-16%	14%	32.87%
Total assets	20,732	24,724	25,530	26,537	30,944
Total investments	2,940	4,315	4,903	4,193	5,499

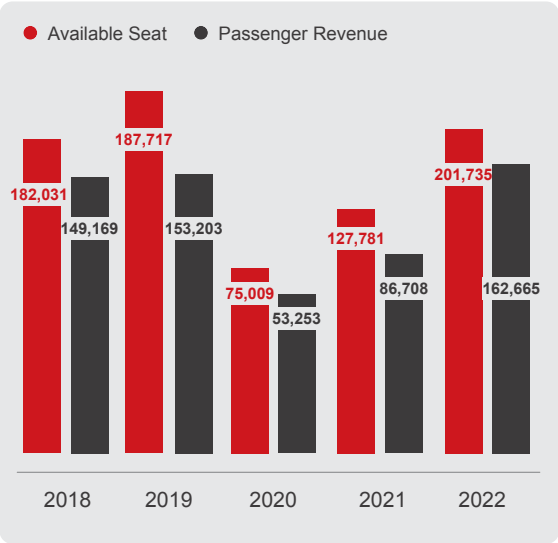




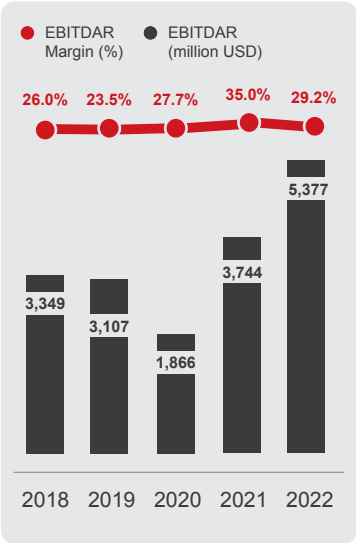


Total Traffic Figures	2018	2019	2020	2021	2022
Revenue passenger (thousand)	75,168	74,282	27,951	44,792	71,818
Available seat (million Km)	182,031	187,717	75,009	127,781	201,735
Revenue passenger (million Km)	149,169	153,203	53,253	86,708	162,665
Passenger load factor (%)	81.9	81.6	71.0	67.9	80.6
Flight Destination	310	322	324	333	342
Number of Landings	511,064	507,352	240,353	357,206	472,707
Distance Flown Km (thousand)	866,630	926,224	472,246	703,643	954,708
Cargo + mail (tons)	1,412,423	1,544,341	1,494,276	1,880,949	1,678,953
Excess luggage (tons)	7,717	11,848	7,513	22,181	31,519

ASK and RPK Growth (Million KM)



EBITDAR



# Our Contribution to the Economy

The aviation industry, which connects different cultures and markets in the world effortlessly, quickly, and economically, has a strategic importance for the development of the world economy.

Today, an effective aviation activity is among the basic elements that render commercial activities possible, tourism sector among others, and facilitate local economic development. In this context, Turkish Airlines, which is the flag carrier of Türkiye as the airline flying to the most countries and international destinations in the world, has been making direct and indirect economic contributions to Türkiye's economic development in numerous areas since its foundation.

## Direct Economic Impact

Turkish Airlines carries out its activities in coordination with a wide range of stakeholders. As a result of these activities, direct economic value is created for various stakeholder groups.

## Contribution to GDP Of Türkiye

In 2022, when the global economy started to recover after the effects of the pandemic in 2020 and 2021, a period of recovery in tourism and foreign trade activities took place in Türkiye. Turkish Airlines, which grew by an average of 10% annually in terms of revenue in the 10-year period before the pandemic, increased its total revenue by 72% compared to the previous year and increased its total revenue by 39% compared to 2019, thanks to the decrease in the impact of the pandemic, the relaxation of travel restrictions and the increase in cargo operations. Cargo operations also continued to grow and cargo unit revenues to double on average compared to 2019. Turkish Airlines generated a total revenue of 18.4 billion USD in 2022, thanks to the recovery in passenger operations and the growth in cargo operations.

The value of the investments made by our Incorporation in 2022 is 5.5 billion USD, and 31 new ordered aircraft with a total value of 2,111 million USD were added to our fleet during the year.

Direct Economic Impact Distribution (million USD)	2018	2019	2020	2021	2022
Direct economic value generated - Net Sales Revenue	12,855	13,229	6,734	10,686	18,426
Direct economic value distributed	11,686	12,644	7,264	9,411	15,710
Activity costs	9,827	10,477	6,103	8,051	13,473
Wages and benefits paid to employees	1,772	2,067	1,097	1,298	2,140
Dividends paid	0	0	0	0	0
State taxes and similar payments	41	52	41	37	57
Donations, sponsorships, and corporate responsibility expenditures	46	48	23	25	40
Cargo and Mail (tons)	1,412,423	1,544,341	1,494,276	1,880,949	1,678,953
Excess Luggage (tons)	7,717	11,848	7,513	22,181	31,519

The value of the investments made by our Incorporation in 2022 is

5.5 billion USD.



Turkish Airlines generated a total revenue of

18.4 billion USD.



	2018	2019	2020	2021	2022
Investments (million USD)	2,940	4,315	4,903	4,193	5,499
Fleet investments	1,291	2,402	2,926	2,061	2,879
Financial Lease Refunds	906	974	1,541	1,786	1,655
Other	743	939	436	346	965



Contribution to Public Finance

Aviation industry provides a substantial contribution to public finance directly through tax payments or indirectly through fringe benefits, airport fees, etc. The total amount of the indirect taxes and charges, generated in 2022 by Turkish Airlines with an important contribution to public finance, amounts to 1,532 million USD.

Taxes paid (TL)	2018	2019	2020	2021	2022
Türkiye	773,139,271	1,441,302,581	898,893,051	1,472,755,988	4,139,375,929
Other States	59,865,126	66,849,176	59,912,800	54,248,048	241,316,083
Airports	1,108,276,906	1,120,050,112	425,535,737	740,139,335	1,310,017,369

Contribution to Employment Generation

Aviation industry in Türkiye is considered as one of the important employment resources. An employee working in air transport services is 175% more productive while generating higher gross added value compared to a non-sector employee in Türkiye.<sup>1</sup>

Turkish Airlines, which provided direct employment opportunities to 40,245<sup>2</sup> people in 2022, represented a significant portion of the direct employment opportunities provided by the aviation industry in Türkiye in 2022, with the direct employment opportunities of 65 thousand people, together with its subsidiaries.



<sup>1</sup> Economic Contribution of Aviation in Türkiye, Oxford Economics, 2011

<sup>2</sup> The figure includes data of Turkish Technic Inc., Turkish Flight Training and Airport operations Inc. and Turkish Airlines Technology Inc.

Tax Policies

With its “full tax resident” status, Turkish Airlines is subject to corporate tax, value-added tax, stamp duty, income tax, Recovery Contribution Share, Tourism Share, and various other taxes due to the income it has earned both in Türkiye and abroad, and its activities.

In this context, our Incorporation fulfills all its tax responsibilities in line with the legislation and acts ethically in tax payments. An expert unit was established in order to carry out the tax processes correctly and efficiently, to compare the tax-related information needs of other units, to follow the relevant legislation, to determine tax risks and opportunities, and to make tax calculations and planning within the company. The tax unit carries out its work in accordance with the principles specified in the Tax Procedure document for the company.

Tax-based accounting records are examined and reported by the independent audit firm. Current legislation on tax calculations is meticulously followed, and within this scope, tax consultants who are experts in their fields are called in, and written opinions are requested from the authorities when deemed necessary.

Turkish Airlines is subject to corporate and similar taxes in many countries abroad and works in collaboration with expert consulting firms with sector experience in order to ensure maximum compliance with local legislation. THY International Office Tax Checklist document was created in order to check the compliance of foreign operations with tax legislation. Tax Management monitors the Prevention of Double Taxation Agreements and Bilateral Aviation Agreements, and closely follows the opportunities and risks regarding the tax transactions of foreign offices and directs ongoing practices.



Contribution to Türkiye’s Export

Turkish Airlines not only directly contributes to the country’s exports as Türkiye’s largest exporter with a service export figure of 14.7 billion USD in 2022, but it also contributes indirectly by increasing the connectivity of the country thanks to its identity as the airline that flies to the most countries in the world. Sales outside of Türkiye in 2022 constitute 93% of total sales. This contribution provides a strategic foreign currency inflow for both Turkish Airlines and Türkiye, especially during the pandemic crisis.

Contribution to Destination Economies

Turkish Airlines is the market leader in Türkiye, covering 50% of air passenger transportation. The Incorporation added 9 new destinations to its flight network in 2022. Thus, our Incorporation has maintained its position as the airline that flies to the most international destinations in the world, by flying to 337 cities and 342 destinations in 129 countries. In 2022, Turkish Airlines operated flights to 25 of the 46 countries included in the United Nations’ least developed countries category. During the year, approximately 1 million 390 thousand of the passengers carried in these 25 countries traveled with Turkish Airlines. By providing global connectivity, Turkish Airlines contributes to the development of these countries’ economic and social relations with the world.





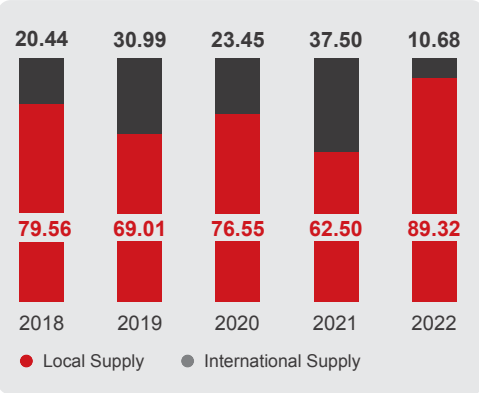
Contribution of Supply Operations

Turkish Airlines, which carries out a wide range of operations broadcasted to various countries of the world, purchases products and services from more than 300 suppliers and business partners in order to carry out its activities. It is essential that these activities are evaluated in terms of both their economic impact and their social and environmental impact, and that they are carried out from local sources as much as possible. In this context, in 2022, Turkish Airlines meets 89.32% of its purchasing operations on an expenditure basis and 74.16% on a supplier basis from local suppliers.

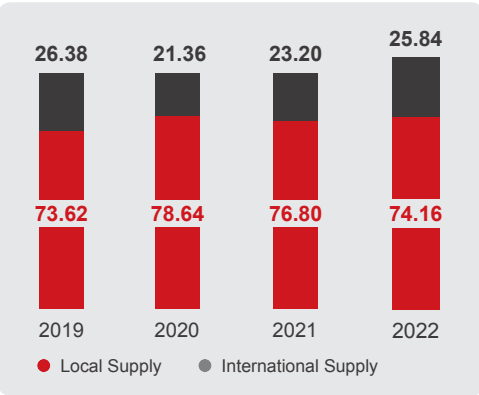
Turkish Airlines contributes to the development of its suppliers in social, environmental and economic areas in order to ensure sustainability across the value chain. In this framework, the suppliers in the Incorporation are evaluated with the Supplier Evaluation System established by the Directorate of General Purchasing, and the points obtained impact the supplier selection. In the contracts signed with the suppliers, articles regarding the social rights of the employees and the protection of the environment are included. Suppliers are expected to comply with quality standards such as ISO 14001 Environmental Management System, corporate policies such as Code of Business Conduct and Ethics and Supplier Code of Conduct Policy, which are also published on the Incorporation website.

Within the scope of Qualiteam audits, the new audit model of Turkish Airlines, compliance with environmental management principles is also monitored in audits carried out for ground service companies, fuel providers, terminal operators within the scope of management systems standards, legal provisions, and contracts. In addition, companies from which call centers, catering, cleaning and transportation services are provided are audited periodically and their compliance levels are evaluated. In 2022, supplier audit rate has reached to 55.81%.

Local Procurement Rate By Expenditure (%)



Local Procurement Rate By Number Of Suppliers (%)



in 2022, Turkish Airlines meets

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# Management Fundamentals

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# Corporate Governance

Turkish Airlines was established in 1933 as a state-owned enterprise to carry out passenger and cargo transportation activities.

Turkish Airlines was included in the scope of the privatization program in 1990 and has become an Incorporation with 50.88% of its shares are publicly traded as of today. The 49.12% shares of the Incorporation held by The Privatization Administration of Türkiye in the Ministry of Treasury and Finance were transferred to the Türkiye Wealth Fund in 2017. The Privatization Administration Directorate of the Türkiye Ministry of Treasury and Finance currently holds 1 Class C share. The Incorporation, whose shares are publicly traded on Borsa İstanbul (BIST), is subject to the provisions of the Turkish Commercial Code and the regulations of the Capital Markets Board of Türkiye (CMB).

As Türkiye's flag carrier airline, Turkish Airlines aims to promote and represent the Turkish aviation industry in the international arena in the best way possible with its management culture, principles, and an internationally acclaimed corporate governance approach. Having adopted the principles of transparency, accountability, justice, and responsibility as the basic principles in its working culture, the Incorporation complies with all the mandatory principles of the Corporate Governance Principles determined by the Capital Markets Board, while also paying utmost attention to comply with non-mandatory principles.

## Structure and Working Principles of the Board Of Directors

Turkish Airlines Board of Directors, which is the main representative and administrative body of the Incorporation, consists of 9 members, three of whom are independent meet the independence criteria specified in the corporate governance regulations of the Capital Markets Board, and three of them have executive responsibility and are elected by the General Assembly. The Chairman of the Board of Directors also acts as the Chairman of the Executive Committee. As of the reporting period, a female member is serving in the Board of Directors.

Members of the Board of Directors are elected by the General Assembly for a two-year term of office from among professionals who meet the conditions set forth in the Turkish Code of Commerce and Capital Markets Regulations and stand out with their professional competence and experience in areas such as aviation, finance and management. The Board of Directors consist of 9 members appointed by the Shareholders Assembly. It is obligatory to appoint 8 members of the Board of Directors, by electing amongst the candidates nominated by the Group A shareholders having highest votes, and to appoint one member by electing amongst the candidates nominated by the Group C shareholder. Therefore, there is no classified or staggered Board of Directors membership structure. Members of the Board of Directors whose terms of office expire can be re-elected.

Ordinary General Assembly meetings are held at least once a year and in accordance with the regulations, while Extraordinary General Assembly meetings can be held when deemed necessary. According to the Turkish Code of Commerce, the shareholders constituting one twentieth of the publicly traded companies may request the Board of Directors to call the General Assembly for a meeting or to put on the agenda the issues that they want to be resolved in the General Assembly by stating the necessary reasons and the agenda in writing. The request to put an item on the agenda must have reached the Board of Directors before the payment of the announcement fee for the publication of the call notice in the Turkish Trade Registry Gazette (21 days before the meeting date). If the Board of Directors accepts the call, the General Assembly is called for a meeting to be held within 45 days at the latest; otherwise, the call is made by the claimants.

Shareholders or their proxies present at the General Assembly meetings have one vote for each share. There is no upper or lower limit of shares limiting voting rights. Although the voting process is carried out by open voting, secret voting can also be carried out upon the request of shareholders with a share value above 10%.

The Board of Directors convenes with the participation of at least 6 members and takes decisions with the affirmative votes of at least 5 members. The decision to make proposals to the General Assembly on fundamental issues such as making changes in the Articles of Association, mergers and acquisitions, and issuance of shares depends on the attendance and affirmative vote of the Board member representing the Group C shareholder in the meeting where these decisions are taken. Group C shares may be transferred to another Turkish public institution without the need for a Board of Directors decision, in line with the authorities granted by the relevant laws to the Privatization Administration.

Although there is no restriction on the members of the Board of Directors taking on other duties outside the company, the duties of the members of the Board of Directors outside the company are disclosed to the shareholders at the General Assembly meeting and on the Public Disclosure Platform (KAP).

The members of the Board of Directors are responsible for all duties and authorities other than those assigned to the General Assembly by the relevant legal regulations and the Articles of Association of the Incorporation, without any further limitation, and they have all the authorities required by these duties. In order to fulfill these duties and to increase efficiency in the representation and administrative processes of the Company, the Board of Directors may delegate some or all of its management and representation powers to one or more of the members, to senior and mid-level managers who are not members of the Board of Directors and who are in charge of execution, to executive committees to be formed with the participation of members from within or outside the Board of Directors, or to Committees established in accordance with the provisions of the Capital Markets Law and relevant regulations.<sup>1</sup>



<sup>1</sup> The Board of Directors may not delegate authority regarding the privileges granted to Group C shares by the provisions of the Articles of Association of the Incorporation.



Communication with Shareholders

In line with the Turkish Commercial Code and CMB regulations, Audit Committee, Corporate Governance Committee and Early Detection of Risk Committee have been established in order to increase the operational efficiency and governance quality of the Board of Directors. All members of the Audit Committee and the chairmen of other committees are elected from among the independent members of the Board of Directors. The Corporate Governance Committee also performs the duties of the Nomination Committee and the Remuneration Committee.

As stated in the Corporate Governance Communiqué, the Committees of the Board of Directors may benefit from the opinions of independent experts on matters they deem necessary in relation to their activities. The cost of consultancy services required by these committees is covered by the Incorporation. However, in this case, information about the person/ organization from which service is provided and information about whether this person/ organization has any relationship with the Incorporation is included in the annual report.

Turkish Airlines Board of Directors convened 69 times in 2022, in which all members have attended.

According to Turkish Airlines Remuneration Policy, which is also available on the corporate website, a fixed fee is determined for the members of the Board of Directors at the Ordinary General Assembly meeting each year. In addition to the fixed remuneration determined at the General Assembly, the members of the Board of Directors and the Executive Committee can be paid additionally or provided with fringe benefits in the amount determined by the Board of Directors within the framework of the opinion of the Corporate Governance Committee, in accordance with the criteria specified in the Remuneration Policy. While determining the remuneration of the independent members of the Board of Directors, care is taken to ensure that they maintain their independence.

Turkish Airlines maintains close communication with its stakeholders such as shareholders, investors, and investment analysts in line with the principles of transparency, accountability, and equality. The Investor Relations Department, reporting to the CFO (Chief Financial Officer), is responsible for ensuring that this communication is carried out efficiently, that accurate, consistent, and timely information about the Incorporation is provided and that these activities are carried out systematically.

In line with the Public Disclosure Policy, the Investor Relations Department is responsible for ensuring and monitoring communication and information exchange between the Board of Directors and capital market regulators and participants. In this context, presentations are made at investor conferences, teleconference calls and corporate and individual investor meetings are held to share financial, operational, and strategic developments regarding the Incorporation with investors and analysts.

All announcements made on the Public Disclosure Platform are published on the Investor Relations website of the Incorporation, at the latest, one business day after the announcement. Press releases, bulletins and announcements made by the Incorporation through written and visual media and data distribution channels are published under a separate title on the investor relations website in order to facilitate access by investors.

General Assembly meetings are the most fundamental channel where shareholders can ask questions about the company and directly convey their opinions, suggestions, and complaints to the Board of Directors. At the General Assembly meeting of 2022, 8 of our shareholders conveyed their demands, complaints, and suggestions to the Board of Directors.

General Assembly Meetings	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022
General Assembly Dates	26.03.2021	29.03.2022	25.07.2023
Number of shareholders present, represented, granting power of attorney to chairman or voting by email	367 shareholders representing 879,352,441 shares	301 shareholders representing 842,423,123 shares	660 shareholders representing 877,232,093 shares
Attendance rate	63.72%	61.05%	63.57%





# Risk Management



## Risk Management Strategy

The aviation industry is impacted by multiple dynamics and involves intense competition. In this challenging environment, Turkish Airlines pursues a comprehensive and multidimensional risk management strategy to maintain its operational and financial success, differentiate positively from its competitors and strengthen its position in the international aviation industry.

Early Identification of Risks Committee, established at the level of the Board of Directors, is the highest-level management body responsible for controlling the efficiency and reliability of the risk management systems and processes followed. The financial risk management strategy of the Incorporation and the management of the risks it is exposed to are managed by the Treasury and Risk Management Commission. At the periodic meetings held by the Commission, current financial conditions, macroeconomic outlook, sector dynamics and geopolitical developments are evaluated, and necessary decisions are taken for the management of potential financial risks.

Preventive measures for the identified risk factors are evaluated according to accepted risk limits and determined by using reliable methods and tools that are internationally accepted. Risk protection strategies are developed and implemented for each identified risk factor. Natural hedging methods are given priority to keep financial risks at a controllable level, and in cases where this is not possible, financial transactions are issued. In this context, hedging transactions can be implemented by using derivative instruments against possible fluctuations in commodity prices, especially in fuel oil, exchange rates and interest rates. With these transactions, it is aimed to increase predictability and reduce the financial impact that will occur as a result of fluctuations to a reasonable and manageable level.

More detailed information on risk management can be found on pages 152-153 of Turkish Airlines [2022 Annual Report](#).

## Internal Audit and Control

It is primarily the responsibility of Audit Committee, which operates within the Board of Directors, to ensure the efficient functioning of the internal control and audit systems throughout the Incorporation and to evaluate their effectiveness. The Committee convenes before the announcement of the quarterly financial results and assures that the consolidated financial results to be announced to the public are transparent and accessible. The Committee ensures that all necessary measures have been taken for the independent external audit work to be carried out in a transparent and efficient manner. In this context, Audit Committee submitted six written reports to the Board of Directors in 2022.

Board of Inspection, which operates under the Executive Committee, is responsible for supervising the activities of the Incorporation, the effectiveness of corporate governance, risk and control processes, providing consultancy and assurance services, and making opinions and suggestions on the efficient and effective operation of these processes.

In addition to the planned inspections carried out throughout the year, the Inspection Board also conducts case-based inspections against unplanned inspections or suspicious situations or abuses upon the request of the Executive Committee. Through the activity, unit and process audits it carries out, the Board makes suggestions about errors, frauds and abuses that may cause loss of income and assets of the Incorporation and oversees measures to be taken and risk reduction measures in the periodic reports it submits to the senior management. Afterwards, it monitors whether the measures determined in the light of the findings and recommendations are fulfilled.

In 2022, a total of 57 audit activities were carried out, including 34 inspections and 23 inspection-investigations. All these audits are aimed at eliminating, reducing or keeping corruption risks under control.

## Information Security

Due to the structure that the aviation industry has reached today, most of the Company's activities consist of highly digitized systems and data-based business processes. Increasing the intensity of innovative digital systems in operations is an important pillar of Turkish Airlines' future strategy. It is of great importance to ensure information security and continuously improve security processes in terms of performing digital systems and business processes in a healthy manner and in compliance with relevant regulations.

Necessary studies in the field of both information security and cyber security are implemented considering the Presidency Information and Communication Security Guide, KVKK / GDPR (Personal Data Protection Law / EU General Data Protection Regulation), DGCA (General Directorate of Civil Aviation) Cyber Aviation Instruction, ISO 27001 Information Security Management system and PCI DSS credit card security standards, ensuring that Turkish Airlines' information assets remain secure.

The Information Security Management System (ISMS) and Information Security Policy, created in accordance with the ISO 27001 Information Security System Standard, aims to ensure that all critical company data, especially customer information, is managed and protected in a safe and efficient manner. Information security risks are managed by considering the requirements of internationally accepted cyber risk

management approaches such as NIST CSF, ISO 22301 Business Continuity Management System Standard and ISACA.

Various periodic monitoring and improvement mechanisms and performance criteria have been established to maintain compliance with legal regulations on information security. These criteria are evaluated at least once a year. The Information Security Management System is also subject to the internal audit process at least once a year and corrective actions are planned. The results of these studies are reported to the senior management and performance is monitored.

Efforts such as establishing security policies, creating cyber security architecture, and managing compliance processes throughout the Incorporation are carried out by the IT Compliance Management under the Directorate of Cyber Security. Cyber Security Risk and Internal Control Management is responsible for all cyber security operations of the Incorporation.

During the reporting period, many studies were carried out on data security, application security, network security, end-user security, system security, border security, cloud security, and physical security to protect and improve our information security systems and applications against risks.





# Business Ethics and Code of Conduct

Turkish Airlines follows internationally recognized principles of business ethics and conduct in all its operations and decisions.

## Our Approach to Business Ethics

In order to provide guidance in a systematic manner to its executives, employees and stakeholders, the Board of Directors has established “Code of Business Conduct and Ethics”. The principles outlined in the Turkish Airlines Code of Business Conduct and Ethics Manual are binding for all executives and employees of the Company. This Handbook can be accessed through the [Sustainability](#) section of our corporate website.

The principles defined in the [Code of Business Conduct and Ethics Manual](#) cover a range of topics including our corporate values, compliance with regulations, anti-bribery and anti-corruption efforts, and prevention of anti-competitive behaviors. Every employee joining the Incorporation is acquainted with the Code of Business Conduct and Ethics as well as Ethics Board Procedure.

The works initiated during the previous reporting period to improve the existing “Code of Ethics Handbook” content and to create a new document named the “Code of Business Conduct and Ethics ” continued into the year 2022, which resulted in the completion and implementation of the document. In addition to fundamental business ethics topics, this current comprehensive Code of Business Conduct and Ethics Manual aligns with international compliance standards, particularly in areas such as human rights, sanctions and trade restrictions compliance, anti-money laundering measures, anti-bribery and anti-corruption efforts, as well as regulations related to gifts, hospitality, and other corporate offerings. To ensure the successful execution of this Manual which follows international best practices, professional support was given from all units of the Incorporation and international firms.

In 2022, with the intention of systematizing the Incorporation’s commitment to human rights, [Human Rights and Employee Rights Policy](#) was established. Additionally, to monitor the compliance of suppliers to ethical standards, the [Supplier Code of Conduct Policy](#) was created.

## Code of Ethics Trainings

To increase the awareness of the Incorporation’s managers and employees on the corporate ethical culture, a Code of Ethics Training program was created. This program aims to train them with the expected attitudes aligned with Turkish Airlines’ Ethical Values and with the desired approach in potential suspicious situations. The training covers topics such as “Code of Ethics, Violations of Code of Ethic , Ethical Line, Ethics Committee” and extends beyond general business ethics principles to include legal compliance, anti-corruption, anti-bribery efforts and fair competition. Delivered through an online training platform in both Turkish and English, this program ensures the participation of all employees and managers. Each employee is required to re-attends this training every three years. In the year 2022, a total of 9,463 employees and managers have participated in 4,416 person\*hours of training.

In addition to training initiatives, various measures are taken to continuously increase the knowledge and awareness of both managers and employees in matters of business ethics. For the same purpose, subject-specific presentations are crafted, and internal communication tools such as email notifications, corporate publications and posters are utilized, and online workshop sessions are conducted, ensuring a comprehensive approach to nurture ethical awareness within the organization.

Code of Ethics Trainings	2018	2019	2020	2021	2022
Total number of training participants (person)	5,910	4,320	2,420	6,207	9,463
Total training hours (person*hour)	2,955	2,160	1,210	3,103	4,416

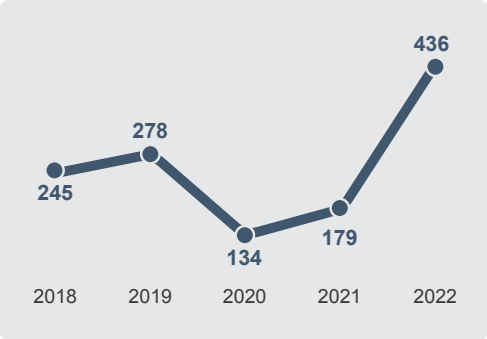
## Reporting Abuses

An essential aspect of the ethics management process implemented throughout the Incorporation revolves around identifying and preventing behaviors that contradict ethical principles or raise suspicions, with a primary focus on human rights, discrimination, bribery and corruption, conflicts of interest, and anti-competitive practices. To this end, a dedicated Ethics Line is in place, enabling stakeholders to submit complaints and inquiries anonymously and openly. Managed by an independent third-party organization, all reports received through this communication channel are assessed by the Ethics Committee. Based on its evaluation, the Ethics Committee determines the necessary actions to address the reported situations. Additionally, internal audit activities are conducted in response to ethics-related reports. These internal audits are overseen by the Inspection Board, which reports at the Executive Committee level.

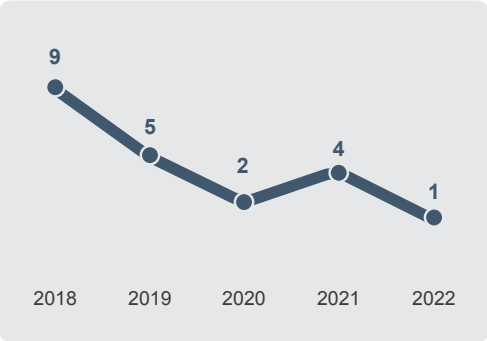
Determined by the CEO, the Ethics Committee consists of five representatives, one being the Chairman and the remaining four being members. This committee is responsible for fostering the embrace of ethical values across the Incorporation and their integration into the working culture. It encourages employees to habitually question whether their discourse and conduct align with ethical values in the workplace. The committee also aims to promote an ethical approach parallel to the corporate culture, guide employees when encountering situations that raise suspicions, and assume responsibility for resolving emerging conflicts. The Ethics Committee aspires to create a positive, diverse, open, and inclusive working environment where employees and others can ask questions, express concerns about work-related ethical issues, request investigations, or report violations without fear of reprisal.

In 2022, aiming to accelerate the dissemination and development of an ethical culture across the Incorporation, a comparative analysis of various organizational practices related to "Ethics Committee Processes" was conducted. After these evaluations, both the support services for ethics reporting and the application procedures were improved. As part

Number of Ethics Line Applications



Number of Reported Discrimination Cases



of these improvements, within the framework of national and international regulations as well as the Incorporation's rules and regulations, the processes related to ethical transactions for employees were streamlined. Ethic Processes Supervisor, responsible for ensuring the execution of these processes and coordinating their outcomes with relevant personnel/ units, was reorganized under the CEO through the Private Office Management. This restructuring further accentuated the top management's role in ethical matters. Following the significant increase in remote working after the pandemic, comprehensive employee awareness campaigns and system enhancements led to a notable rise in Ethics Line submissions, thereby enhancing the detection of potential violations. In this context, during the year 2022, a total of 436 submissions were made to the Ethics Line, of which 391 were reviewed and resolved by the Ethics Committee or its subcommittees during the reporting period. The majority of these submissions were related to suspicions of behavior contrary to work discipline, workplace harmony, or organizational culture rather than direct violations of ethical rules.

With the increase in the number of submissions, the need to evaluate a greater number of cases and develop attitudes towards different situations has emerged. This has provided the Incorporation with the opportunity to identify areas for improvement, develop corrective and preventive actions, observe various aspects, and generate solutions across multiple domains.

An essential principle of the Incorporation's ethical culture is not tolerating discriminatory attitudes and behaviors in its operations and decisions. Therefore, when employees suspect they have been subjected to discriminatory behavior, they are encouraged to report it through the Ethics Line or other channels. In 2022, there was one submission to the Ethics Line regarding suspicion of experiencing discriminatory behavior. The submission was reviewed, and it was determined that the incident involved behavior against work discipline and harmony, resulted in appropriate sanctions. However, supporting evidence for the suspicion of discrimination could not be established.

During the year 2022, a total of 436 submissions were made to the Ethics Line, of which

391

were reviewed and resolved by the Ethics Committee or its subcommittees during the reporting period.



Anti-Corruption

One of the cornerstones of the Incorporation’s compliance efforts with business ethics principles revolves around combating bribery and corruption. Within our operations, we adhere to the Turkish Airlines Code of Business Conduct and Ethics , which encompasses our established principles for anti-bribery and anti-corruption measures. In addition to these principles, we also ensure compliance with the legal regulations of the countries in which we operate and work in alignment with the guiding principles of the aviation sector.

Within the framework of our anti-corruption principles, a well-established approach is adopted for the detection and prevention of corruption and non-compliant behavior, along with the monitoring and enhancement of anti-corruption systems. This approach assigns distinct roles to various units, including senior management, Directorate of Inspection Board, Directorate of Security, Audit Committee, Ethics Committee, Disciplinary Committee, and Human Resources, aimed at fostering a comprehensive commitment to the prevention of corruption. In the Incorporation, monitoring anti-bribery and anti-corruption matters, ensuring compliance with regulations, and mitigating or reducing associated risks are facilitated through the development of internal control measures. As part of the internal audit programs, bribery and corruption audits are conducted to identify, investigate, and take necessary measures in case of potential irregularities. These audits are designed to detect, examine, and address possible wrongdoings while adhering to the Incorporation’s established internal audit procedures. The annual audit plan, which follows a risk-based approach, was formulated to address specific areas of concern, and led to the scrutiny of 30% of business units for corruption risks in the year 2022. Despite the pandemic-related flight restrictions, with the gradual return to normalcy in flight operations, emphasis was placed on conducting audits in international units. In total, 57 audit activities were carried out during the reporting period. Throughout 2022, no evidence of a violation of the anti-bribery and anti-corruption policy was found against the Incorporation. As a result, no administrative, financial, or legal sanctions were imposed against the Incorporation or its employees in relation to bribery and corruption violations.

Legal Compliance and Fair Competition

The aviation industry is subject to numerous legal regulations both locally and internationally, with a closely monitored legal compliance landscape in various areas. It is an organized sector where adherence to local and international authorities’ legal standards is rigorously observed. For civil aviation companies, legal compliance is a prerequisite for conducting operations. Given the diversity and rapidly evolving nature of the laws and regulations involved, a proactive approach is of utmost importance in compliance processes. To fulfill this purpose, during the reporting period, the Directorate of Legal was restructured in 2022 as the “Directorate of Legal and Compliance”, and the position of Compliance Department was established, as a continuation of efforts initiated in previous periods. The responsibilities of the Compliance Department encompass ensuring compliance with international regulations imposed by international organizations and/or states. This includes taking necessary steps to prevent money laundering, combat bribery and corruption, promote fair competition, manage conflicts of interest, and ensure alignment with said legal regulations.

Turkish Airlines conducts its operations with numerous licenses and certification documents. The continuity of these documents is ensured by continuously monitoring the required compliance standards, and the compliance index is calculated and reported based on the findings obtained. Within this framework, throughout the year 2022, there were no administrative or judicial sanctions imposed on the Incorporation and its management due to practices in violation of legislative provisions.

As a company highly ranking internationally in terms of operational scale and maintaining continuous growth, upholding compliance with the Competition Act and relevant regulations holds significant importance for Turkish Airlines. To instill this awareness throughout the organization, equitable competition training is provided to executives and employees at all levels. These training sessions offer participants insights into situations that may breach fair competition conditions, introduce tools and methods that can be employed to detect and prevent non-compliance instances. In the year 2022, no evidence of a violation of competition rules was found against Turkish Airlines. Furthermore, no administrative or legal sanctions related to the Competition Act were imposed on the Incorporation.





## Sustainability Management

In 2022, Turkish Airlines named its sustainability vision as **"Tomorrow On-Board"** in order to ensure that sustainability management processes are managed with a common corporate understanding. It is aimed to develop a holistic communication approach with the **"Tomorrow On-Board"** motto, which will also guide the future sustainability practices of the Incorporation.



If you are a brand that forges the strongest connections between worlds and have a passion for rediscovering them as you forge these connections, you bear a tremendous responsibility.

## WE ARE MAKING GREAT STRIDES IN THIS DIRECTION!

We are working hard to create a world where we create value for every person we touch and every destination we travel to, where we develop as we create value, where we consider both humans and the environment in the process, where no one is left behind on the journey and the balance of nature is preserved.

**As the airline that flies to more countries than any other,** we see the world with all its different elements as an integrated whole. We know that humans cannot exist without nature, society cannot exist without humans and progress is impossible without society. This is why our dream is to ensure every part of our world receives the value it deserves. Our promise is to preserve the world for tomorrow.

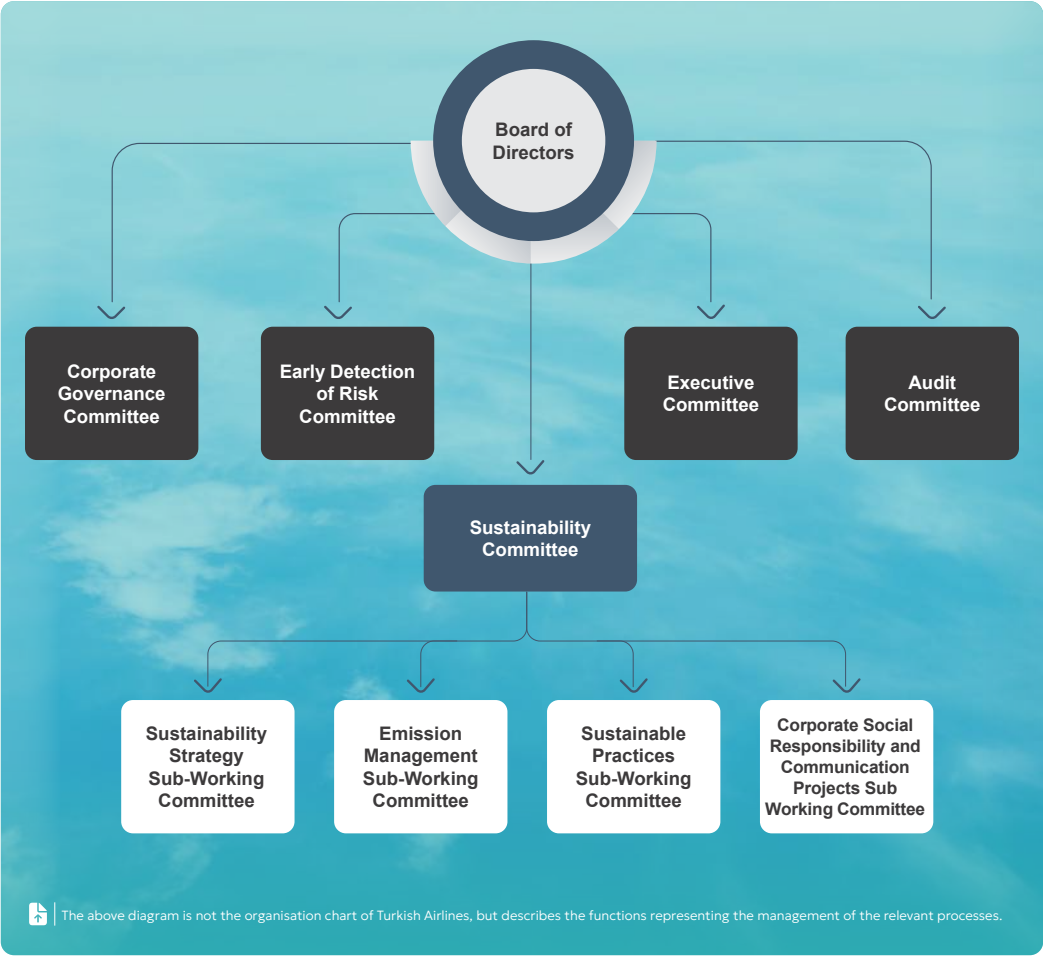
Sustainability Management Structure

The most senior governance bodies responsible for sustainability management at Turkish Airlines are the Board of Directors and the Executive Committee. The main responsibility of the Board of Directors and the Executive Committee is to manage the social, economic and environmental impacts arising from the operations of Turkish Airlines and to assess the sustainability risks and opportunities that may affect the operations of the Incorporation. The Sustainability Committee is responsible for the effective implementation of these processes at all levels of the Incorporation.

The Sustainability Committee, chaired by the CEO with the participation of the Chief Officers and SVP (Senior Vice President) of Subsidiaries, convenes at least once a quarter. Apart from regular meetings, the Committee may convene again if necessary, without waiting for the meeting period.

The Sustainability Committee carries out its activities in order to determine, review and continuously improve the sustainability management strategy, sustainability policy and short, medium and long term sustainability targets and to decide on improvement projects that will increase the sustainability performance of Turkish Airlines. The Sustainability Committee reports to the Board of Directors the risks and opportunities regarding material sustainability issues, assessments of the performance results obtained as a result of the activities of the organisation, feedback from internal and external stakeholders and the practices decided to improve the sustainability performance of the Incorporation in the light of this information.

The Corporate Sustainability Management Department is responsible for the follow-up of the



The above diagram is not the organisation chart of Turkish Airlines, but describes the functions representing the management of the relevant processes.

decisions taken by the Sustainability Committee, and the relevant units of the Incorporation are responsible for the planning and realisation of the necessary activities. The Corporate Sustainability Management Department reports to the Sustainability Committee the projects and practices implemented by the units of the Incorporation.

Taking into account the material sustainability issues of the Incorporation, legal regulations, sector trends, best practices, stakeholders' expectations and developments in the global agenda, four different Sustainability Sub-Working Committees have been established to work on corporate social responsibility and communication projects, sustainability practices, sustainability strategy and emission management. Sustainability Sub-Working Committees first determine the projects that can be implemented within the Incorporation and submit their decision proposals to the Sustainability Committee for approval. In line with the decisions taken by the Sustainability Committee, they provides coordination for implementation the required activities, monitor the developments and report the results achieved to the Sustainability Committee. Sub-Working Committees convene at least 4 times a year, at least 1 month before the Sustainability Committee meetings held quarterly. In cases where an issue related to sustainability needs to be discussed urgently, they convene without waiting for the meeting date. The Sustainability Committee Secretariat carries out the meeting organisation, coordination among members and decision follow-up processes of the Sustainability Sub-Working Committees.

# Duties and Responsibilities of the Sustainability Committee

Sustainability Committee, regarding Turkish Airlines activities, is responsible;

- To ensure that the necessary steps are taken to determine the sustainability strategy, policy, short, medium, and long-term goals of the Incorporation,
- To monitor, review and, if necessary, rearrange the status of short, medium, and long-term objectives and improvement projects regarding our Sustainability Policy,
- To secure that sustainability risks and opportunities in environmental, social and governance issues are managed and integrated into the sustainability strategy of the Incorporation,
- To ensure that necessary studies are carried out within the Incorporation in order to comply with national and international legislation, standards, rules, contracts, procedures and requirements in the field of sustainability,
- Evaluating the expectations of the parties concerned with the current national and international developments in sustainability, ensuring that the best practices are projected within the Incorporation and monitoring the progress of the projects,
- Analyzing the results by monitoring the status of sustainability performance indicators and ensuring that improvement actions are taken, when necessary,
- Ensuring that employees are informed in line with the sustainability strategy and studies are carried out to adopt this strategy as a company culture,
- To assure that the sustainability strategy, policy, and practices are adopted by all stakeholders of the Incorporation,
- Evaluating the requests regarding the Sustainability Performance Evaluations that the Incorporation will participate in and deciding whether to participate or not,
- To evaluate the issues that will affect the activities of the Incorporation, which are addressed in the national and international committees, technical teams and working groups of which the Incorporation is a member,
- Evaluation of the project and decision proposals submitted by the Sustainability Sub-Working Committees,
- Authorizing Sustainability Sub-Working Committees to be formed within the Incorporation, if necessary.

# Sustainability Indices

Incorporation participates voluntarily in the performance evaluations of national and international indices and sustainability rating agencies, which support meeting the expectations of the stakeholders by providing a transparent communication network with all the relevant parties. This participation both enables the analysis of current situation in the industry and the monitoring of global trends. It is aimed to increase performance by ensuring the continuity of participation in the performance evaluations of national and international indices and sustainability rating agencies, such as DJSI, FTSE4Good, MSCI, EcoVadis, Sustainalytics, TPI and Borsa İstanbul Sustainability Index, which were also voluntarily participated in the previous years. As a result of these evaluations made by the world's leading rating agencies, both company-based and sector-specific scores were raised to higher levels compared to the previous year. With the 2022

Sustainalytics ESG Risk Rating Score, Turkish Airlines ranked 1st in the "lowest risk" ranking among 69 participants in the airline subsector, and succeeded in being in the "lowest 1% risk segment" in its sector. Global airline, which was deemed worthy of an award in the "Bronze" category by Ecovadis in 2021, was awarded in the "Silver" category with its performance in 2022.

Turkish Airlines has continued its presence in 2022 in the BIST Sustainability Index, which includes companies traded on Borsa İstanbul with high corporate sustainability performances and aims to increase knowledge and practices on sustainability. Beyond its presence in the Sustainability Index and the BIST Participation Sustainability Index; as the first and only airline to be included in the BIST Sustainability 25 Index, it ranked first among 47 airlines evaluated by Refinitiv in 2022 with its performance in sustainability.





## Sustainability Priorities

Aviation industry activities are closely related to a wide range of social, economic and environmental issues. However, not all of these issues may have the same priority in the sustainability strategy for each company. Turkish Airlines' sustainability strategy has been formulated within the framework of social, economic and environmental issues that may arise as a result of the Incorporation's activities, products and services or that may affect these activities, products and services. These issues are prioritised and classified through a systematic process designed in line with international standards and involving the opinions and suggestions of external stakeholders, and constitute the sustainability strategy of the Incorporation.

Turkish Airlines' sustainability priorities were revisited in the previous reporting period. In this process, global megarisk trends, international initiatives and reporting standards and prominent practices in the aviation industry were taken into consideration. As a result, social, economic and environmental issues specific to Turkish Airlines Sustainability Programme were identified. In the process of identifying material issues, 17 Sustainable Development Goals were also assessed in terms of the impacts, risks and opportunities they may pose on Turkish Airlines' operations, products and services. A total of 1,434 Turkish Airlines employees, including 98 managers, 857 office employees and 479 flight crew, participated in the materiality study. On the other hand, 281 external stakeholders, including investors and shareholders, customers, financial institutions, subsidiaries, suppliers, insurance and brokerage companies, provided feedback during the prioritisation process. The results obtained from these studies were re-evaluated in a workshop with a wide participation of company executives, and then submitted to senior management for approval, and sustainability priorities were determined.

- Support for the Social Development
- Fair Competition
- Water Management
- Single Use Plastic
- Sustainable Catering
- Noise Management
- Responsible Supply Chain Management
- Innovation



"Business Ethics and Ethical Behaviour", "Regulatory Compliance and Risk Management", "Customer Satisfaction" and "Financial Performance" are not subject to prioritisation as they are among the unchangeable principles of the Incorporation's management approach.



- Flight Safety and Security
- Climate Change
- Employee Health and Safety
- Changes in Customer Expectations and Behaviour
- Fleet Modernization and Development
- Digitalization
- Business Continuity
- Talent Management
- Waste Management



- Human Related Environmental Disasters
- International Crises
- Global Economic Crises
- Animal Welfare
- Biodiversity Loss



Sustainability Strategy



The sustainability strategy of the Incorporation is defined as "creating value in the future by going beyond today's gains with our understanding of business excellence and innovation in the light of global trends and the expectations of employees, customers, suppliers, subsidiaries, affiliates, all business partners and shareholders through holistic consideration of all environmental, social and economic impacts and effective risk management".

In line with the mission, vision and core values of the Incorporation, a road map for the sustainability strategy of the Incorporation is created by evaluating the long-term goals and the risks and opportunities in achieving these goals within the framework of sustainability priorities determined by taking into account the sector and competitor practices, the contents of reporting frameworks such as WEF Global Risk Reports, GRI, SASB, TCFD, etc., as well as the 17 Sustainable Development Goals of the United Nations and stakeholder expectations. The sustainability priorities approved by the Senior Management will continue to be updated in the coming years in line with global developments and feedback from our stakeholders.







Turkish Airlines Sustainability Policy, which is based on the sustainability strategy, is available for all our stakeholders on the corporate website.
































Support of Turkish Airlines to the Sustainable Development Goals

Turkish Airlines has also included the United Nations Sustainable Development Goals in the materiality study carried out within the scope of its sustainability program; SDG5, SDG7, SDG8, SDG9, SDG12, SDG13, SDG16, SDG17 have been identified as the areas of work to be targeted in the coming periods. On the other hand, Turkish Airlines also contributes to many other SDGs other than those prioritized through its operations.

Supported SDGs	Sub-Goals	Description	References
	1.1 Eradicate extreme poverty 1.4 Equal rights to ownership, basic services, technology and economic resources	"Turkish Airlines generates direct and indirect economic value in the geographies where it operates through its value chain and the socioeconomic impact it provides at its destinations, and together with its subsidiaries, creates employment for more than 75,000 people. Compared to other sectors, each job created in the aviation industry is 175% more productive and creates a greater added value.  In 2022, Turkish Airlines flew to 25 of the 46 countries categorized as the least developed countries by the United Nations. Thus, by carrying the production of underdeveloped or developing countries to target markets, Turkish Airlines contributes to their economic development, employment and income growth.	 Support to the Economy (p.10)
	3.3 Fight communicable diseases 3.8 Achieve universal health coverage 3.B Support research, development and universal access to affordable vaccines and medicines	With the end-to-end cold chain corridor established on over 400 different routes, Turkish Cargo plays an active role in the market for the transportation of vaccines and medicines at appropriate temperatures and conditions. Turkish Airlines flies to different destinations in many geographies, especially in Africa, and supplies vaccines and medical supplies to these regions, enabling the population to access vaccines and medicines.	 Turkish Airlines 2022 Annual Report (p.89)
	4.3 Equal access to affordable technical, vocational and higher education 4.4 Increase the number of people with relevant skills for financial success 4.5 Eliminate all discrimination in education	It is prerequisite for operating in the aviation sector to have a human resource with the highest level of training and professional capacity. With its international competencies, experience and technical infrastructure, Turkish Airlines plays an important role in both the training of its own employees and bringing new professionals to the sector. In this context, Turkish Airlines' support for undergraduate and graduate programs of universities and collaborations established with them, enables employee development, improves sectoral knowledge and increases employment opportunities.	 Talent Management (s.82)

Supported SDGs	Sub-Goals	Description	References
<div><div>5</div><div>GENDER EQUALITY</div><div></div></div>	<div>5.1 End discrimination against women and girls</div> <div>5.5 Ensure full participation in leadership and decision-making</div> <div>5.C Adopt and strengthen policies and enforceable legislation for gender equality</div> <div>10.2 Promote universal social, economic and political inclusion</div> <div>10.3 Ensure equal opportunities and end discrimination</div> <div>10.4 Adopt fiscal and social policies that promotes equality</div> <div>10.A Special and differential treatment for developing countries</div>	<p>Diversity and equality are amongst Turkish Airlines’ most fundamental corporate values. Equal treatment of all employees in all areas is of primary importance in terms of both human rights and corporate policies. Studies are carried out to ensure that female employees take a balanced place in technical and managerial roles where there is insufficient representation and to improve their career opportunities, and within this scope, partnerships with national and international initiatives are developed. While the participation of disadvantaged individuals in the workforce is supported by fair wages and working conditions, working conditions are facilitated by responsible HR policies.</p> <p>Turkish Airlines carries out internal and external process improvement, sustainable development management and corporate social responsibility activities to make its products and services more accessible to disabled, disabled-veteran, elderly, pregnant and disadvantaged passengers.</p> <p>With the end-to-end cold chain corridor established on over 400 different routes, Turkish Cargo has maintained its connectivity by continuing its flights to many developing and underdeveloped countries, and supported these countries experiencing inequalities in access to vaccines and medical supplies.</p>	<div><div></div><div>Gender Balance (p.79)</div></div> <div><div></div><div>Turkish Airlines 2022 Annual Report (p.89)</div></div>
<div><div>7</div><div>AFFORDABLE AND CLEAN ENERGY</div><div></div></div> <div><div>12</div><div>RESPONSIBLE CONSUMPTION AND PRODUCTION</div><div></div></div> <div><div>13</div><div>CLIMATE ACTION</div><div></div></div>	<div>7.2 Increase global percentage of renewable energy</div> <div>7.3 Double the improvement in energy efficiency</div> <div>7.A Promote access to research, technology and investments in clean energy</div> <div>12.2 Sustainable management and use of natural resources</div> <div>12.4 Responsible management of chemicals and waste</div> <div>12.5 Substantially reduce waste generation</div> <div>12.6 Encourage companies to adopt sustainable practices and sustainability reporting</div> <div>12.8 Promote universal understanding of sustainable lifestyles</div> <div>13.1 Strengthen resilience and adaptive capacity to climate-related disasters</div> <div>13.2 Integrate climate change measures into policies, and planning</div> <div>13.3 Build knowledge and capacity to meet climate change</div>	<p>Turkish Airlines manages its environmental and climate impacts within the framework of its Sustainability Policy and Environmental Policy. In line with this context, impacts on the climate and the environment are managed with responsible practices and projections such as responsible procurement, waste management, energy and emission management, and clean energy, and the progress achieved by carrying out performance-enhancing studies is reported.</p> <p>Aware of the negative impacts of the global climate crisis and the role of the aviation industry, Turkish Airlines works to reduce its carbon footprint and minimize climate-related risks. To this end, Turkish Airlines increases fuel efficiency by optimizing flight operations, strengthens its fleet with new generation aircraft with high fuel efficiency, collaborates with universities to increase the use of biofuels and supports sustainable biofuel research and development efforts. Aware of the importance of global cooperation, Turkish Airlines takes part in joint efforts to decarbonize sustainable aviation fuel with stakeholders in the aviation, aerospace and fuel sectors, and continues to invest in and support sustainable aviation fuels, while significantly reducing its emissions through investments in the inclusion of new generation aircraft in the fleet, operational improvements and advanced fuel saving practices.</p> <p>On the other hand, Turkish Airlines also works to transition to sustainable product options with its in-flight catering practices. In this context, sustainable products and resource efficiency are supported by preferring recyclable and less waste-generating options in the materials used, and internal communication activities are carried out to raise employee awareness on sustainable living.</p> <p>With the CO<sub>2</sub>mission Programme launched during the reporting period, all travellers can support sustainable development projects by offsetting their flight emissions.</p>	<div><div></div><div>Responsible Company (p.36)</div></div>
<div><div>8</div><div>DECENT WORK AND ECONOMIC GROWTH</div><div></div></div>	<div>8.1 Sustainable Economic Growth</div> <div>8.3 Promote policies to support job creation and growing enterprises</div> <div>8.5 Full employment and decent work with equal pay</div> <div>8.7 End modern slavery, trafficking, and child labour</div> <div>8.8 Protect labour rights and promote safe working environments</div>	<p>Aiming to generate economic value for its stakeholders with the business model it has developed with the awareness of being a fair employer and a safe operator, Turkish Airlines offers its employees a safe and fair work life that is open for development. Turkish Airlines, which accepts flight safety and security as a fundamental working standard that cannot be compromised under any circumstances, always aims for the highest standards in its operations.</p> <p>Conducting its operations in line with its principle of respecting human rights, Turkish Airlines assures all the rights of its employees with its ethical principles and policies. It provides a working environment where any practices that violate human rights such as modern slavery and forced labor, including human trafficking, cannot be found under the umbrella of the Incorporation.</p>	<div><div></div><div>Support to the Economy (p.10)</div></div> <div><div></div><div>Fair Employer (p.77)</div></div> <div><div></div><div>Reliable Operator (p.61)</div></div> <div><div></div><div>Business Ethics and Ethical Behavior (p.19)</div></div>

Supported SDGs	Sub-Goals	Description	References
	9.4 Upgrade all industries and infrastructures for sustainability 9.5 Enhance research and upgrade industrial technologies	<p>Turkish Airlines, the official flag carrier of the Republic of Türkiye and the airline that flies to most countries and international destinations in the world, has been constantly renewing its fleet since its foundation. With an average age of 8.7 years, Turkish Airlines has one of the youngest fleets in the world. The Incorporation aims to increase its fleet to 435 aircraft and expand its flight network with the new generation aircraft investment plan.</p> <p>Investing in R&amp;D and innovation, especially in digitalization activities, in order to ensure the endurance of its operations and increase business continuity, Turkish Airlines constantly improves its operating infrastructure. While focusing on solving problems with new generation technology companies thanks to its open innovation strategy, it develops new technologies by managing resource efficiency and carries out cooperation programs to create new opportunities.</p>	<p> Sustainable Aviation Fuels (p.48)</p> <p> Fleet Modernization (p.60)</p> <p> R&amp;D and Innovation (p.71)</p>
	11.2 Affordable and sustainable transport systems 11.5 Reduce the adverse effects of natural disasters 11.6 Reduce the environmental impacts of cities	<p>The aviation industry connects cities around the world, supporting economic activity and cultural exchanges. At the same time, the aviation sector has impacts on sustainable urban living, such as emissions and noise. Turkish Airlines invests in fleet modernization to reduce emissions and noise levels and contributes to reducing the negative environmental impact of cities through waste management practices.</p> <p>Emergency transportation becomes a top priority in disaster situations. In various emergency situations, particularly earthquakes, Turkish Airlines, in coordination with public institutions and NGOs, organizes emergency relief operations to meet the needs of people in disaster areas.</p>	<p> Fleet Modernization (p.60)</p>
	15.3 End desertification and restore degraded land 15.7 Eliminate poaching and trafficking of protected species	<p>Turkish Airlines signed the “United for Wildlife Buckingham Palace Declaration” (UFW), supported by IATA, which aims to prevent the illegal trade of wild animals and to raise sectoral awareness on this issue. Thus, it helps to prevent the illegal trade of wild animal parts such as ivory, rhino horns and tortoise shells. On the other hand, while environmentally friendly materials are preferred in the headset and blanket sets we offer to our passengers, the toys offered to our child passengers are produced with “Forest Stewardship Council (FSC)” certified products.</p>	<p> Sustainable Aviation Fuels (p.48)</p> <p> Environmental Management (p.50)</p>
	16.5 Substantially reduce corruption and bribery 16.6 Develop effective, accountable and transparent institutions 16.10 Ensure public access to information and protect fundamental freedoms 16.B Promote and enforce non-discriminatory laws and policies	<p>Turkish Airlines carries out its activities in line with the principles of transparency and accountability, in line with the inclusive, internationally accepted corporate governance and ethical rules that are responsible to its stakeholders.</p>	<p> Management Fundamentals (p.14)</p>
	17.6 Knowledge sharing and cooperation for access to science, technology and innovation 17.11 Increase the exports of developing countries 17.14 Enhance policy coherence for sustainable development 17.16 Enhance the global partnership for sustainable development 17.17 Encourage effective partnerships 17.18 Enhance availability of reliable data	<p>Turkish Airlines develops partnerships with various institutions and organizations in line with the 2030 Global Goals and common goals of sustainable development. By taking part in the sustainability initiatives created by international organizations that shape aviation practices, the practices of the Incorporation are developed and contribute to the formation of the international sustainability agenda.</p>	<p> Stakeholder Engagement (p.31)</p> <p> Support to the Economy (p.10)</p> <p> Responsible Company (p.36)</p>










## Stakeholder Engagement

In line with the principle of transparent and accountable management, Turkish Airlines evaluates stakeholder feedback and dialogue in decision-making processes. The aim is to meet stakeholder expectations through mutual communication activities and implemented practices.


Stakeholder expectations and opinions are received through various communication channels, the type and frequency of which vary according to the expectations and needs of the stakeholder group, an open, fair and constructive dialogue is established, and collaborations created in line with common benefits are strengthened.



STAKEHOLDER GROUPS	COMMUNICATION METHODS	FREQUENTLY ASKED QUESTIONS AND RESPONSES
<div></div> <div>EMPLOYEES</div>	Annual Reports (Annual), Sustainability Reports (Annual), Recruitment/Removal Interviews (Instant), Announcement Posters (Continuous), E-mail Messages (Continuous), Social Media (Continuous), Collective Agreements (periodic), Corporate Website (Continuous), Corporate Policies (Continuous), Trainings (Continuous), Ethics Hotline (Continuous), One-to-one Interviews (Annual), HR Releases (Quarterly), Empathy Intranet (Continuous), "HR Gaste" Employee Bulletin (Monthly), Individual Suggestion System (Continuous), Badge Ceremonies (Instant), Surveys and Researches (Instant), Internal Reports (Monthly / Quarterly), Unit Visits (Continuous), Onboarding - Retention Interviews (Continuous), Orientations (Continuous)	<p>In 2022, improvements were made in wages and benefits, increasing employment opportunities, employee health, career management, rewarding tools, transportation networks and physical conditions. In this context, flexible working hours continued to be implemented in order to respond to employee requests for information and improvement regarding hybrid working practices, while projects such as the employment of vocational students, the acceleration of the private health insurance process to be provided to employees working in foreign directorates, the overseas employee and manager orientation kit and the overseas wing project, which was created to facilitate the adaptation of newly recruited employees, were implemented.</p> <p>In order to ensure work-life balance, improvements were made in academic leave, companion leave, hourly compassionate leave, and advance leave practices, and the practice of granting administrative paid leave to female flight crew members until the legal paid maternity leave expiration date was introduced. On the other hand, requests from our employees regarding fringe benefits and wages were evaluated, improvements were made in social assistance fees and the scope of paid sick leave was expanded. Transitions between levels have been arranged for 2 years, and in order to ensure the continuity of the motivation of our employees in their working lives, an area has been created where our domestic employees of the Incorporation who wish to change units within the organization can submit their requests. Work has also started on the arrangement of remote overtime work.</p> <p>Actions were taken to improve the physical conditions and transportation networks of the campuses. Picnic, trekking and campus-based breakfast events were organized in response to employee requests for organizing motivational activities. In addition, we welcomed the summer season with TK FEST 2022, our internal communication festival with global participation. Our colleagues showed great interest in the festival held at two different campuses, the Istanbul Airport Operations Building Parking Lot and the Head Office Garden. TK FEST 2022, the first global internal communication event we have organized for more than 10 years, brought together thousands of colleagues, especially our senior management and executives. On the other hand, the most common requests of flight crews in 2022 were focused on flight-crew-boarding planning practices. In order to respond to these requests, measures were taken to increase coordination in planning between relevant units.</p>
<div></div> <div>AGENCIES</div>	Annual Reports (Annual), Sustainability Reports (Annual), Agency Visits (Monthly), Phone Calls (Daily), E-mail Communication (Daily), Agency Contracts (Continuous), TÜRSAB Demand and Complaint Notifications (Instant), Meetings and Interviews (Several Times a Year), Agency Portal and Notifications (Continuous), Official Notifications (In Case of Need)	During the period, improvements were made in response to agency requests regarding system infrastructure and commercial applications, and system trainings were organized for agency employees.
<div></div> <div>SHAREHOLDERS AND INVESTORS</div>	Annual Reports (Annual), Sustainability Reports (Annual), General Assembly Meetings (Annual), Financial Reports (Quarterly), Investor Conferences and Roadshows (Continuous), E-mail Messages (Continuous), Telephone Calls (Continuous), Corporate Website (Continuous), Face-to-Face or Online Interviews (Upon Request), PDP/ Material Disclosures (Instant)	Among the requests received from investors and shareholders in 2022, questions regarding the management of the recovery process following the Covid-19 outbreak, the effects of regional instability and wars on operations, domestic and international competition and regional demand change, the effects of developments in macro economy and commodity markets, the need for personnel in parallel with increasing operations, aircraft delivery and manufacturer-related problems, the repositioning of AnadoluJet and the implementation of the Turkish Cargo division come to the fore. Such requests for information were met as promptly and completely as possible through 7 investor conferences and roadshows, 78 teleconference calls, over 100 individual/institutional investor meetings, 4 investor conferences organised on the results of the financial statements and periodical reports during the reporting period.
<div></div> <div>BANKS AND FINANCIAL INSTITUTIONS</div>	Annual Reports (Annual), Sustainability Reports (Annual), Financial Reports (Quarterly), E-mail Messages (Continuous), Phone Calls (Continuous), Corporate Website (Continuous), Face-to-Face or Online Interviews (Upon Request), Financing Tenders and Contracts (Upon Need)	The requests of banks and financial institutions mainly focus on the financial and operational status of the Incorporation, future projections, post-pandemic precautionary measures, fleet planning for the coming years and information needs regarding the financial transactions they carry out. These requests are primarily provided through the Incorporation's Investor Relations website, and for the information that cannot be found here and/or for the issues that require detailed information specific to the transaction, data/information is obtained from the relevant internal unit of the Incorporation when necessary, and they are met in a timely and adequate manner through meetings and information sharing channels within the framework of the principles of confidentiality and data usage of the Incorporation.

STAKEHOLDER GROUPS	COMMUNICATION METHODS	FREQUENTLY ASKED QUESTIONS AND RESPONSES
<div></div> <div>CUSTOMERS</div>	Annual Reports (Annual), Sustainability Reports (Annual), Social Media (Continuous), Corporate Website (Continuous), Customer and Market Research (Continuous), E-mail Notifications and Phone Calls (Continuous), Mobile Applications (Continuous), Customer Portals and Digital Integration Applications (Continuous), Loyalty Programme (Continuous), Corporate Loyalty Programme (Continuous), Call Centre (Continuous), Complaint and Suggestion Forms (Continuous), Advertising and Promotional Films (Continuous), Meetings and Interviews (Continuous), Videoconferences and Phone Calls (On Demand), Exhibitions (Annual), Meetings and Exhibitions (Continuous), Inflight Entertainment System-IFE (Continuous), Complaint and Suggestion Forms (Continuous), Advertising and Promotional Films (Continuous), Cabin Crew Reports (Continuous)	<p>During the reporting period, the most frequently requested information by the customers focused on compliance with the corporate policies of the Incorporation in the fields of Environmental, Social, Governance (ESG), Occupational Health and Safety, Human Rights, Business Ethics, Fair Remuneration, Equal Opportunity, Prevention of Bribery and Corruption, Prevention of Child Labor, Data Security and passenger rights regulations in the countries of service and digitalization of corporate cards. These requests are responded with corporate policies that are also available on the Incorporation's website and in compliance with the principles set by the United Nations, International Labour Organization (ILO), United Nations Global Compact (UNGC) and other organizations. On the other hand, corporate customers' requests for information on the Incorporation's environmental management system, carbon reduction practices and renewable energy use are responded to through sustainability reports. The project for the digitalization of corporate cards is ongoing. Customers' requests, suggestions and complaints submitted via the call center and various other channels, particularly regarding flight planning, sales and ticketing issues, are responded to as soon as possible.</p>
<div></div> <div>SUPPLIERS AND CONTRACTORS</div>	Annual Reports (Annual), Sustainability Reports (Annual), Social Media (Continuous), Corporate Website (Continuous), E-mail Notifications (Continuous), Purchasing Contracts (Continuous), Meetings and Interviews (Continuous), Videoconferences and Phone Calls (Upon Request), Fairs (Annual)	<p>Expectations from suppliers and subcontractors regarding technical issues that will affect operational processes and improvement of physical conditions of working environments have been communicated to the Incorporation. The issue of taking necessary precautions in order not to disrupt operations is carried out through mutual negotiations, and evaluations and project designs related to the subject are carried out by our Incorporation.</p>
<div></div> <div>INDUSTRIAL ASSOCIATIONS, INTERNATIONAL ORGANIZATIONS AND REGULATORS</div>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), E-mail Notifications (Continuous), Meetings and Interviews (Regular), Working Groups and Joint Projects (Continuous), Videoconferences and Phone Calls (Upon Request), Audits (Annual), Presentations, Reports and Publications (Continuous), Events and Summit Meetings (Regular), Electronic Document Management System (If deemed necessary/as needed), Surveys (Upon Request)	<p>The main expectations of industry associations are focused on sectoral practices as well as company practices and policies on climate change and environmental sustainability. Reduction of carbon emissions, prevention of single-use plastic consumption, compliance with the Paris Agreement and related regulations, and the use of sustainable aviation fuels are among the main areas of implementation. In this context, actions were taken in line with the information, coordination and cooperation requests of sector authorities, particularly the International Air Transport Association (IATA), during the reporting period. We participated in the TrackZero2050 working group, where process and methodology approaches for tracking greenhouse gas emissions are discussed under the umbrella of IATA. We provided opinions on the continuous improvement and development processes of the IATA Environmental Assessment (IEnvA) program, the environmental management system specially designed by IATA for airline companies, which we directly participated in by obtaining Stage 2 certification in 2021. Participated in the SAF Readiness Survey organized by IATA to identify the strengths and weaknesses of airlines in the use of Sustainable Aviation Fuel.</p> <p>Upon the invitation of the International Civil Aviation Organization (ICAO), Turkish Airlines participated in the working group established by ICAO within the framework of Preventing Trafficking in Persons in Supply Chains, where the issues of ""combating modern slavery and human trafficking"" were brought to the agenda. Turkish Airlines has committed to voluntarily implement the CORSIA Scheme, which has been put into practice by ICAO as a global solution to reduce the impacts caused by carbon emissions arising from flight activities, starting from the pilot phase. During the reporting period, the decisions taken at the 41st ICAO General Assembly on the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) were closely monitored, and the relevant parties were informed about the decisions.</p> <p>Technical infrastructure and process improvement efforts are ongoing for intermodal services that offer the opportunity to combine different transportation ecosystems, and for products and services that will improve the passenger experience, including biometrics based on digitalization and the ability of the interline passenger to select a seat on the onward flight. Notifications and requests of the Directorate General of Civil Aviation (DGCA) were closely monitored during the reporting period, and necessary actions were taken immediately to ensure compliance with national and international regulations. We participated in the Workshop on Greenhouse Gas Emissions from Aviation Activities, organized for the process of monitoring greenhouse gas emissions from national and international aviation activities, and hosted one of its sessions. Support was provided for feedback requests of public institutions in their regulatory processes. Data was provided for the Preparation of Long Term Low Carbon Strategy (LTS) project and the National Emission Inventory study of Türkiye.</p>



STAKEHOLDER GROUPS	COMMUNICATION METHODS	FREQUENTLY ASKED QUESTIONS AND RESPONSES
 <b>TRADE UNIONS</b>	Annual Reports (Annual), Sustainability Reports (Annual), Collective Agreements (Periodic), Corporate Website (Continuous), Corporate Policies (Continuous), Meetings and Interviews (Daily), Working Groups (Continuous), E-mail Notifications and Phone Calls (Continuous)	Healthy communication with trade unions was maintained throughout the reporting period. In line with the demands for improving the social and economic welfare of the employees and improving the systems used in the execution of the work, protocols were concluded with the authorized union in order to make improvements in favor of the employees regarding the personal rights of our employees, and improvements were made in favor of the employees in the systems used by our Incorporation during the execution of the work.
 <b>UNIVERSITIES AND RESEARCH INSTITUTIONS</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), E-mail Notifications (Continuous), Phone Calls (Continuous), Training Programmes (Continuous), Videoconferences and Meetings (Monthly)	During the period, requests from state and foundation universities for training programmes, graduate programme collaborations and transportation support for academic studies were responded to in line with the possibilities. Master's Degree Programmes were coordinated with some universities in Istanbul and university students' requests for internship and employment at the Incorporation were responded positively as long as deemed appropriate in line with the evaluations.
 <b>MEDIA</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), E-mail Notifications, Phone Calls and Meetings (As needed), Press Releases, Filming (Continuous), Interviews and Announcements (Continuous)	During the reporting period, most of the information requests received from members of the media were related to line openings, press trips, fleet planning, sustainability-oriented activities and awards. Requests for information regarding the Incorporation were responded positively, taking into consideration the interests and sensitivities of the Incorporation.
 <b>NON-GOVERNMENTAL ORGANIZATIONS</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), Meetings and Interviews (As needed)	The most common request received from non-governmental organisations during the period is transportation support for field studies. Our Incorporation provides transportation support to the activities of non-governmental organisations that are in line with the company's goals and values.
 <b>LOCAL ADMINISTRATIONS</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), Meetings and Interviews (As needed)	In the reporting period, the requests of local administrations to eliminate the problems experienced in the transition to the Zero Waste system were met through practices carried out in accordance with the relevant regulations.
 <b>INDEPENDENT AUDITING AND RATING AGENCIES</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), E-mail and Phone Calls (Upon Request), Videoconferences and Meetings (Upon Request), Audits (Semi-Annual/Annual)	The processes of the Incorporation were audited and certified during the year in accordance with the standards complied with in line with financial and operational parameters. For these studies, 8-10 meetings were held with independent audit and rating institutions during the year, and information and document requests were responded to in a timely manner.
 <b>SOCIETY</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), Meetings (As needed), Social Responsibility Projects (Continuous)	Within the scope of our extensive flight network, the most common expectation directed to our Incorporation is to support education-oriented activities at the flight points. For the projects developed in this context, the Incorporation provides transportation support to social responsibility projects in line with the company's goals and values, within the limits of its capabilities.
 <b>SUBSIDIARIES AND AFFILIATES</b>	Annual Reports (Annual), Sustainability Reports (Annual), Corporate Website (Continuous), E-mail Notifications (Continuous), Meetings and Interviews (Regular), Joint Projects (Continuous), Videoconferences and Phone Calls (Monthly), Audit Reports (In line with the Audit Calendar), Face-to-face or Online Interviews (Upon request), Feasibility and Valuation Reports (As needed)	The requests received from our subsidiaries and affiliates were mainly in terms of determining the growth strategies of the subsidiary companies in line with the corporate strategies of the Incorporation and carrying out the processes in coordination with the internal units of the Incorporation, providing support in determining investment strategies by analysing the financial performances of the companies in a professional manner, and providing support in measuring the effectiveness and efficiency of the operations by examining the processes within the scope of compliance with legal regulations, contracts, corporate policies and procedures. In this context, budget preparation in accordance with the budget calendar and budget parameters of the Incorporation, supervision of the compliance of procurement transactions with the budget within the limits of subsidiary authorisation, periodic cash flow planning and reporting were ensured, necessary feasibility studies were carried out for the investment projects submitted to us by our subsidiaries, various scenarios were worked on, financial analyses were made and consultancy support was provided at the point of making the most appropriate decision. In addition, following the determination of the investment strategies of the Incorporation, all relevant parties were contacted and efforts were made to formulate subsidiary-based investment strategies. Within the scope of measuring the effectiveness of the operations of the subsidiaries, audits were carried out in our subsidiary companies within the scope of the annual audit plan in order to ensure effectiveness in risk management, to identify opportunities for improvement and to disseminate good practices.

# Corporate Memberships

Turkish Airlines develops collaborations, participates in international organisations and initiatives, and plays an active role in setting sectoral standards in order to develop sectoral activities and achieve common goals on sustainability priorities.

Membership Organizations and Initiatives	Level of Engagement
AACO - The Arab Air Carriers' Organization	Partner Membership
AACO DTTF – AACO Digital Transformation Task Force	Member
AACO AWG – AACO Aeropolitical Watch Group	Member
AACO SAFTF – AACO Sustainable Aviation Fuel Task Force	Member
AIRE- Airlines International Representation in Europe	Board Membership
AIRE Social Media, Communication, PR and Marketing Task	Member
AIRE ASTF – AIRE Slots Task Force	Member
AIRE STF – AIRE Sustainability Task Force	Member
AIRE EASA Regulatory Task Force	Member
ALTA- Latin American & Caribbean Air Transport Association	Partner Membership
ATA- Animal Transportation Association	Member
Global SAF Declaration	Signatory
HIB - Service Exporters' Association - Freight Transport and Logistics Services Committee	Board Membership/ Member
IATA- International Air Transport Association	Member / Board Membership
IATA 25by2025 Initiative	Signatory
IATA CARGO	Advisory Board Membership
IATA CAC- IATA Cargo Advisory Council	Member
IATA CSC – IATA Cargo Services Conference, Dangerous Goods Board, Live Animals and Perishables Board, Cargo Operations and Technology Board, Air Mail Board, Cargo Border Management Board, ULD Board	Board Membership/ Observer Member
IATA DTAC- IATA Digital Transformation Advisory Council	Member
IATA IAAC- IATA Industry Affairs Advisory Council	Member
IATA LAC – IATA Legal Advisory Council	Member
IATA TrackZero2050 Working Group	Member
IATA IOSA Maintenance Task Force	Member
iGA (Istanbul Grand Airport) Noise Working Committee	Member
IATA EOC- IATA Environmental Assessment Oversight Council	Member

Üye Olunan Kuruluş ve İnisiyatifler	Angajman Düzeyi
IATA SEAC SUPWG- Sustainability Environmental Advisory Council, Single-Use Plastics Working Group	Member
ICAO Ad Hoc Working Group on Combatting Trafficking in Supply Chain Working Group	Member
IPATA- The International Pet and Animal Association	Member
Istanbul Economy Summit	Board Membership
Pharma.Aero	Member
Star Alliance	Full Member & Committee Memberships
Star Alliance Chief Executive Board (CEB)	Member
Star Alliance Alliance Management Board (AMB)	Member
Star Alliance Membership Liaison and Quality Committee(MEMCO)	Member
Star Alliance Customer Experience Committee (CUSCO)	Member
Star Alliance Loyalty Committee (LOYCO)	Member
Star Alliance IT Committee (ITCO)	Member
Star Alliance Legal Committee	Member
Star Alliance Emergency Committee	Member
Star Alliance Safety Committee	Member
Star Alliance Sustainability Committee	Member
Star Alliance Sustainability Strategy Team	Member
Star Alliance Loyalty Strategy Team	Member
Star Alliance IT Strategy Team	Member
TIACA - The International Air Cargo Association	Board Membership/ Member
TIACA SWG - The International Air Cargo Association, Sustainability Working Group	Member
TUYID - Turkish Investor Relations Society	Member
TUYID Sustainability Working Group	Member
TUYID Emission Management Sub-Working Group	Sub-Working Group Presidency
UN Global Compact	Participant
UNGC SDG Innovation Accelerator for Young Professionals Programme	Participant
UNGC Business & Human Rights Accelerator Programme	Participant



# Responsible Company

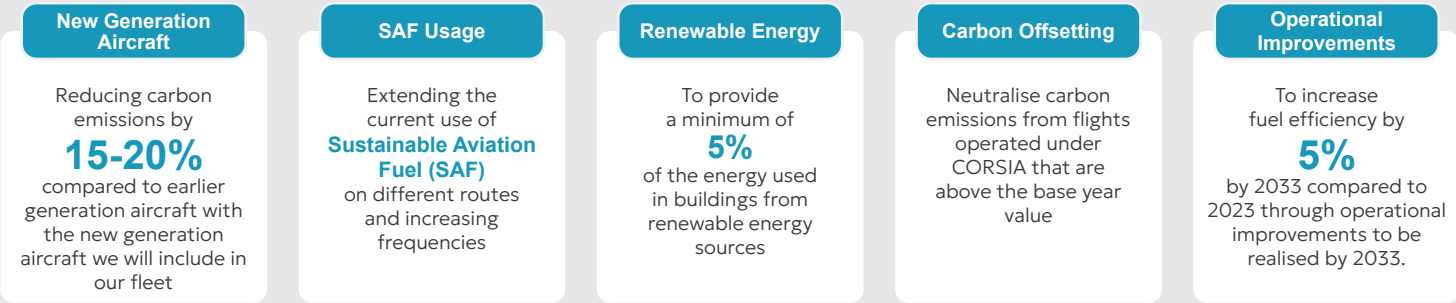
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# Combating the Climate Change

While expanding its flight network and operations in line with the increasing demand for air transport, Turkish Airlines works to mitigate the potential negative impacts of its operations in line with the findings of the United Nations Intergovernmental Panel on Climate Change (IPCC) on climate change.

## Sub-targets for the "2050 Carbon Neutral Airline" Target



In this context, the Incorporation considers combating climate change as a fundamental priority and integrates it into risk assessment, decision-making and implementation mechanisms for business processes.

Turkish Airlines adopts the targets set by the International Air Transport Association (IATA) for the aviation industry in terms of combating climate change. In this context, Turkish Airlines takes decisive steps to implement industry best practices by improving its performance in areas such as energy and emission management, sustainable aviation fuel studies, fleet modernisation and resource efficiency studies throughout its operations.

With Türkiye's ratification of the Paris Agreement and its commitment to net zero carbon emissions by 2053, we are reviewing our strategies in line with the agreements to which Türkiye is a party, global requirements and stakeholder expectations. In this context, Turkish Airlines supports the fight against climate change and pledges to be "Carbon Neutral by 2050".

While the responsibility for the impacts of Turkish Airlines on the economy, environment and society lies with the Board of Directors and the Executive Committee, issues related to combating climate change throughout the Incorporation are handled by the Sustainability Committee, which is composed of Turkish Airlines senior executives. In order to accelerate the efforts to combat climate change, an Emission Management Sub-Working Committee was also established during the reporting period. The Corporate Sustainability

Management Department is responsible for monitoring and reporting the activities carried out. Different units within the Incorporation carry out the planning and implementation of the activities to be carried out within the framework of their respective performance area. For example; Operational Fuel Management Department carries out activities related to aviation fuel efficiency and reduction of fuel consumption, Corporate Sustainability Management Department and Fuel Management Department carry out activities within the scope of sustainable aviation fuel, Directorate of Social and Administrative Affairs carries out activities within the scope of energy efficiency studies in the facilities and carries out activities for the realisation of the projects that can be implemented within this scope. Management, monitoring and reporting of greenhouse gas emissions are carried out by the Corporate Sustainability Management Department.

## Management of Climate Change Risks

Turkish Airlines considers climate change as a phenomenon that may significantly affect the aviation sector financially and strategically and addresses it both in general and in the context of sub-components such as energy and greenhouse gas emissions within the corporate risk management model. In this context, during the reporting period, the risks arising from climate change were analysed in detail and studies were carried out to plan the preventive activities that can be carried out within the scope of combating climate change.

Turkish Airlines believes that the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) provide a useful framework to increase transparency on climate-related risks and opportunities for the Incorporation, stakeholders and financial markets. In this context, during the reporting period it has been decided that the Incorporation, as a TCFD supporter, will report on TCFD. In order to understand the impacts of climate risks and opportunities on Turkish Airlines' business model and to ensure the flexibility and resilience of the business strategy, low, medium and high impact assessments of physical and transition risks were carried out by scenario analysis method. In the physical risk assessment, the RCP 2.6, 4.5 and 8.5 scenarios, respectively, from the scenarios presented by the Intergovernmental Panel on Climate Change (IPCC) were taken as reference. In transition scenarios, regional assessments were prioritised as much as possible. In this context, the International Energy Agency (IEA) NZE scenario was used to analyse the impact of regional and local targets and transition/action plans on Turkish Airlines. In carbon pricing, the International Energy Agency (IEA) APS, STEPS, SDS, NZE scenarios were used in order to see the widest impact range of

the analysis outputs while assessing low, medium and high impact. The Incorporation continues its action planning activities in accordance with the identified risk factors related to climate change and actively carries out its activities within the scope of TCFD reporting.

According to IATA projections, the aviation sector is expected to have a significant share in human-induced greenhouse gas emissions in the future. Accordingly, the sector aims to reach a net zero emission level in 2050 in line with the 1.5°C target of the Paris Agreement. To this end, IATA emphasises sustainable aviation fuel (SAF), new aircraft technologies, use of electricity and hydrogen energy, offsetting carbon emissions and carbon capture practices.<sup>1</sup> Turkish Airlines also shapes its climate action efforts in this direction.

Fuel efficiency applications are a prominent field of study in terms of emission reduction and cost savings. While adding new aircraft to its fleet, Turkish Airlines also favours models with high fuel efficiency and low emission levels. In addition, the acquisition of efficient aircraft models with high fuel efficiency to the fleet provides savings in maintenance, repair and operating costs. On the other hand, the fact that the interior design and features of new generation aircraft respond more accurately to changing passenger expectations has a positive impact on customer satisfaction and loyalty.

Extreme weather conditions caused by climate change pose various risks to flight operations and cargo transport activities as they may cause damage to aircraft and equipment, delays in take-offs and landings. This may lead to more fuel use and thus an increase in carbon emissions. Increased temperatures, combined with factors

such as lower air density and air pressure, and the need for more ventilation, will also increase the need for fuel and increase flight costs. In addition, measures to prevent icing risks in extremely cold and rainy weather and runway surface deformation risks in extremely hot weather will increase material consumption, and possible flight cancellations and deviations from plans may lead to extra fuel consumption and revenue losses. Regulations and taxes introduced by governments to combat climate change will increase the costs of airlines. Passenger demand may also be adversely affected as a result of disruptions and increased costs due to temperature increases.

On the other hand, as an opportunity, some tourism destinations may become more popular as a result of climate change. This may allow airlines to carry more passengers and increase occupancy rates due to increased demand. The use of environmentally friendly aircraft, innovative solutions including activities to reduce carbon footprint, investments in technological developments for fuel efficient flights, evaluation of new routes and destination opportunities that may arise due to climate change, requirements imposed by legal regulations on emissions, exploring and using new technologies and clean fuel sources can be considered as some of these opportunities.

<sup>1</sup> [www.iata.org/en/programs/environment/flynetzero/](http://www.iata.org/en/programs/environment/flynetzero/)



Energy and Emission Management

Establishing an effective energy management model is of critical importance for Turkish Airlines in terms of both climate and environmental impact management and financial implications. Aircraft fuels constitute the largest share of the energy consumed within the scope of the Incorporation's operations. Other fuel types also reach a significant level due to the magnitude of operations. Therefore, the management of aircraft fuels and other operational consumptions are carried out by different specialisation units. Coordination bodies have also been established to ensure that these processes are carried out in coordination. The Fuel Saving Board, established in this direction, operates with the participation of senior representatives from Flight Operations,

Ground Operations, Technical, Finance, Cabin Services, Corporate Security, Istanbul Station, Regional Flights, Cargo Operations and Integrated Operation Control departments and the General Manager. Business departments operating under the Directorate of Ground Operations, Directorate of Social and Administrative Affairs, Directorate of Catering and Inflight Products, Directorate of Cargo Operations, Technical Directorate , Directorate of Infrastructure and Operations and Directorate of Human Resources are involved in the management of energy consumption processes other than aircraft fuel. These business units also carry out activities to reduce greenhouse gas emissions arising from energy consumption. Monitoring, calculation, reporting and auditing

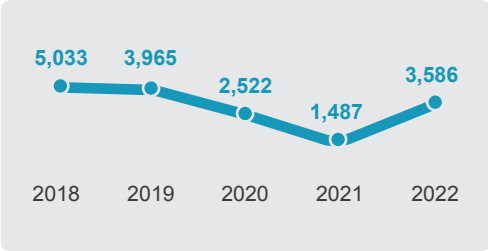
processes of greenhouse gas emissions are managed by the Corporate Sustainability Management Department.

The principles that Turkish Airlines follows in energy and emission management are declared in the Environmental Policy, Sustainability Policy and Energy Policy documents. On the other hand, corporate documents such as Fuel Saving Board Procedure, Fuel Saving Practices Monitoring and Control Procedure, Greenhouse Gas Information Management Procedure, legal regulations such as Regulation on Increasing Efficiency in the Use of Energy Resources and Energy, Regulation on Energy Performance in Buildings, Energy Efficiency Law guide the activities of the Incorporation. ISO 50001 Energy Management System Standard is followed in the development of energy management systems and ISO 14064-1 Standard for Calculation and Reporting of Greenhouse Gas Emissions and Removals at Organisation Level is followed in the calculation of greenhouse gas emissions.

Turkish Airlines reports its fuel consumption and greenhouse gas emissions in accordance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) implemented by the International Civil Aviation Organization (ICAO), European Union Emissions Trading System (EU-ETS) and United Kingdom Emissions Trading System (UK-ETS). These reports are verified by audits carried out by authorised third party independent auditors. Within the Incorporation, fuel savings, fuel efficiency values and greenhouse gas emission amounts are periodically reported to the senior management.

In 2022, 3,586 Turkish Airlines employees participated in the trainings organised to raise awareness of Turkish Airlines employees on combating climate change and GHG emissions.

Number of GHG Awareness Training Participants





In 2022,













































**3,586**

Turkish Airlines employees participated in GHG Awareness Trainings.





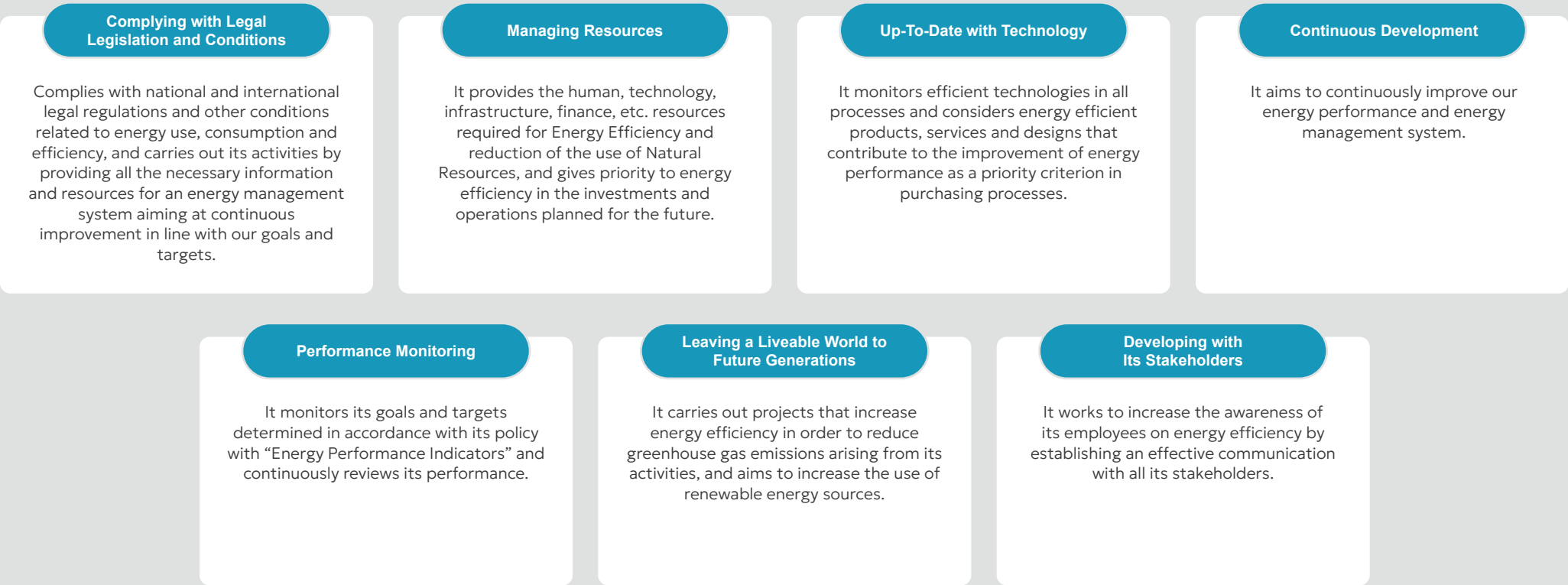
Targets for Combating Climate Change

2022 Target	Related SDGs	2022 Performance	Realisation Level	2023 Target
Offsetting all emissions under the EU ETS	 	6,619 Tonnes CO <sub>2</sub>	✓	Offsetting all emissions under the EU-ETS
NEW TARGET	 	NEW TARGET	NEW TARGET	Offsetting all emissions under the UK-ETS
NEW TARGET	 	NEW TARGET	NEW TARGET	Offsetting all emissions under CH-ETS
Providing GHG awareness training to 1,800 employees	 	3,586 Employees	✓	The 2022 target has been reached and a related target has not been set for 2023.
Reduce kg/ATK by 5%by 2025 compared to 2016	   	COMPLETED <sup>2</sup>	✓	-
45,000 tonnes of fuel savings	   	57,581 Tonnes	✓	60,000 tonnes of fuel savings
141,750 tonnes of CO <sub>2</sub> emission prevention	   	181,379 Tonnes CO <sub>2</sub>	✓	189,000 tonnes of CO <sub>2</sub> emissions prevented
Monitoring and calculation of Category 1, 2, 3, 4, 5, 6 emissions	   	100%	✓	Monitoring and calculation of Category 1, 2, 3, 4, 5, 6 emissions
Verification of 2022 GHG emissions	 	100%	✓	Verification of 2023 GHG emissions
Responding to the Carbon Disclosure Project (CDP) Climate Change Programme	 	100%	✓	Responding to the Carbon Disclosure Project (CDP) Climate Change Programme
Monitoring the emissions from our related flights within the scope of CORSIA and verifying the 2021 emission report and submitting it to DGCA	 	100%	✓	Monitoring the emissions from our related flights within the scope of CORSIA and verifying the 2022 emission report and submitting it to DGCA
NEW TARGET	 	NEW TARGET	NEW TARGET	Being among the organisations supporting the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and reporting in this context
NEW TARGET	   	NEW TARGET	NEW TARGET	The continuity of the number of routes flown using SAF
NEW TARGET	   	NEW TARGET	NEW TARGET	Realisation of SPP Projects to be located in the working areas of the Incorporation in various regions of Türkiye
NEW TARGET	   	NEW TARGET	NEW TARGET	Ensuring the continuity of meeting at least 5% of the energy in our new buildings from renewable sources

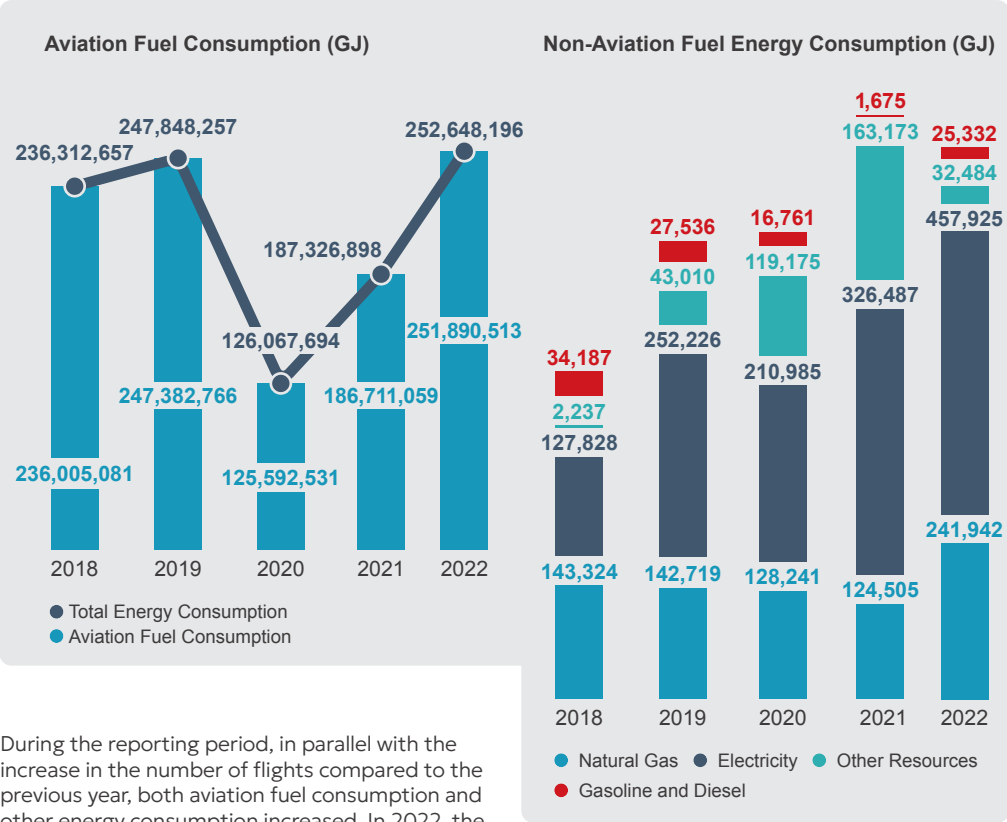
<sup>2</sup> The target performance area, which was tracked in kg/ATK units in the previous reporting period, started to be calculated in lt/100 ASK units in the reporting period. As of the reporting period, the targeted performance was realized by reaching 3.10 lt/100 ASK.

Energy Policy

Turkish Airlines Inc. adopts the principles of using energy with maximum efficiency, reducing the use of natural resources and sustainable development. In this context, Turkish Airlines declares its Energy Policy to bring together its employees, customers, suppliers, subcontractors, affiliates, all business partners, and shareholders for the same purpose.



Energy Consumption and Greenhouse Gas Emissions



During the reporting period, in parallel with the increase in the number of flights compared to the previous year, both aviation fuel consumption and other energy consumption increased. In 2022, the share of aviation fuels in total energy consumption of 252,648,196 GJ was 99.7%.

In parallel with the increased flight operations, total GHG emissions have also increased. Accordingly, a total of 22.98 million tonnes of CO<sub>2</sub>e GHG emissions occurred across the operations of the Incorporation in 2022.

	2018	2019	2020	2021	2022
Fuel Consumption (million tons)	5.3	5.6	2.9	4.2	5.7
Fuel Saving (tonnes)	29,608	55,492	22,760	37,082	57,581



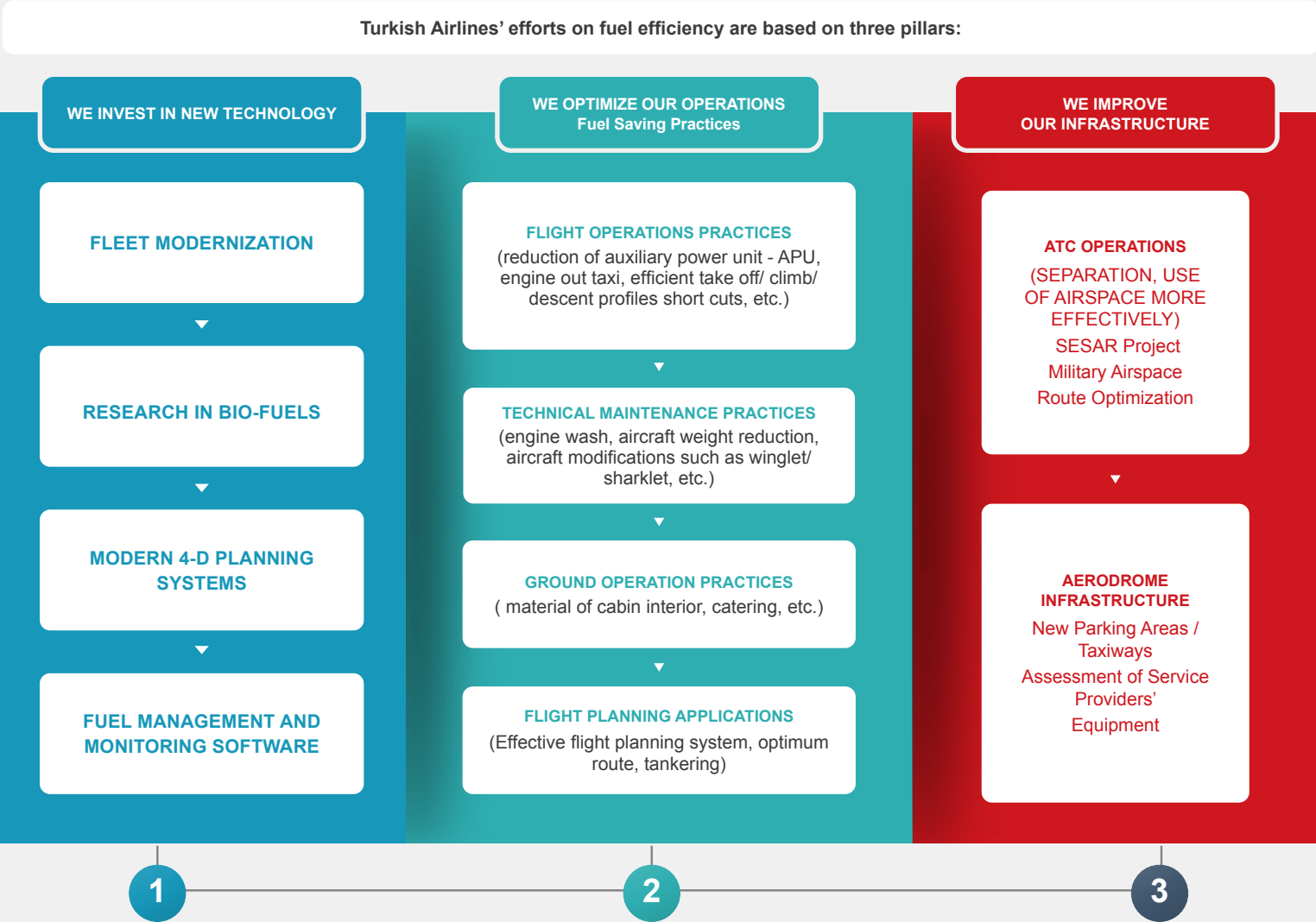


Fuel Efficiency

Fuel saving practices form the basis of Turkish Airlines' strategy to combat climate change and reduce greenhouse gas emissions. Various fuel efficiency parameters are continuously measured and monitored in accordance with the comprehensive fuel saving policy of the Incorporation, which supports the short and long term targets set by IATA. The Fuel Saving Board, which is chaired by the General Manager, reviews and monitors the action plans implemented within the framework of the Fuel Efficiency Programme.

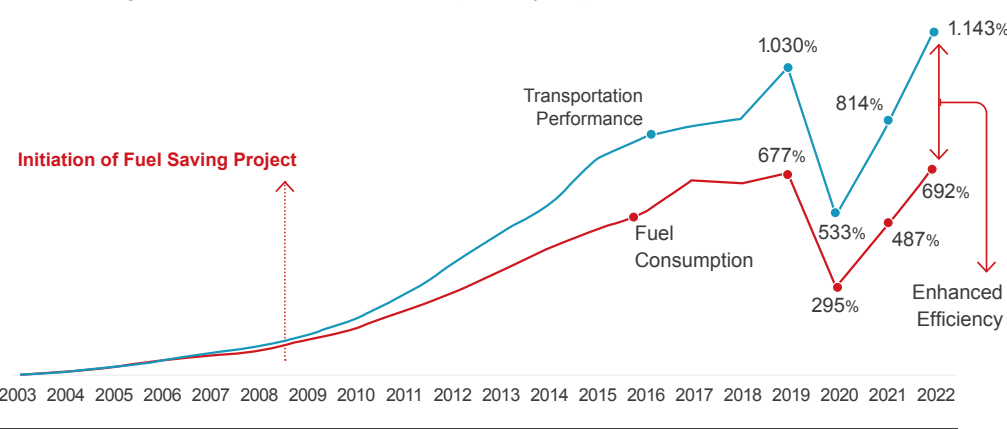
The Fuel Efficiency Performance of Turkish Airlines graph on page 45 shows the transport performance of Turkish Airlines between 2003 and 2022 and the corresponding fuel consumption. Thanks to the successful implementation of fuel efficiency projects since 2008, when the Fuel Saving Project started, the amount of fuel consumed per unit of transport activity has significantly decreased.

Based on 2008, it is seen that by 2022, transport performance has increased by **1,143%**, while fuel consumption has increased by **692%**.



## Fuel Efficiency Performance of Turkish Airlines

Fuel Efficiency Performance of Turkish Airlines (Last 19 years)



Based on 2008, it is seen that by 2022, transport performance has increased by 1,143%, while fuel consumption has increased by 692%. The year-on-year increase in the difference between transport performance and fuel consumption in the graph clearly shows our improving efficiency performance.

In order to increase fuel savings in flight operations, applications such as the use of auxiliary power unit, single engine taxiing, low flap use at take-off and landing, monitoring of extra fuel demands, NADP2 Noise Abatement Departure Procedure, idle reverse on landing, Continuous Descent Approach are implemented.

On the other hand, monitoring of aircraft aerodynamics, spare airport selection within the scope of flight planning, extra fuel planning monitoring, zero fuel weight difference monitoring, statistical APU fuel planning, reduction of catering

and domestic water weight and centre of gravity studies also help to achieve significant fuel savings.

In addition to these, engine washing operations carried out at regular intervals in line with the manufacturer's recommendations and painting of aircraft with Base Coat & Clear Coat system contribute to the reduction of fuel consumption and carbon emissions by reducing aircraft weight.


With all these efforts, a total of 57,581 tonnes of aviation fuel, corresponding to 2,539,366 GJ of energy in 2022, was saved and 181,379 tonnes of CO<sub>2</sub> was reduced. Thus, the total amount of CO<sub>2</sub> avoided since 2008 has reached 2.1 million tonnes and fuel savings has reached 671,433 tonnes.

As of the reporting period, Turkish Airlines has achieved its target of reducing fuel consumption per ATK by 5% by 2025 compared to 2016. In 2023, a total of 60,000 tonnes of fuel savings is targeted.

## Fuel Savings and Greenhouse Gas Emission Reduction Achieved by Basic Practices

	Fuel Savings (Tonne)				GHG Emission Reduction (Tonne CO <sub>2</sub> )			
	2019	2020	2021	2022	2019	2020	2021	2022
Reduced flap take-off/landing	9,257	5,192	7,513	9,608	29,160	16,355	23,666	30,265
Engine out taxi in	6,228	1,841	2,526	5,745	19,618	5,799	7,957	18,095
Idle reverse on landing	9,917	5,145	7,966	9,886	31,239	16,207	25,093	31,140
Continuous Descent Approach	4,291	2,631	3,744	3,942	13,517	8,288	11,794	12,417

\* For each kilogram of fuel saved, 3.15 kg of carbon dioxide (CO<sub>2</sub>) emission is prevented.

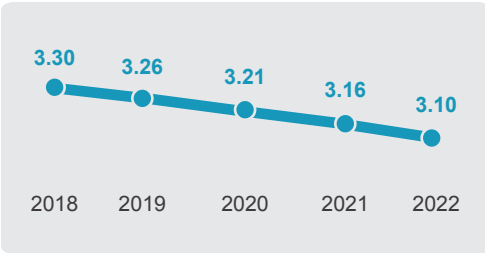


In 2023, a total of

**60,000**

tonnes of fuel savings is targeted.

## Fuel Consumption per 100 Available Seat Kilometres (Litres/ 100 ASK)



ASK (Corrected by adding ACTK for cargo operations)

## Energy Efficiency and Emission Reduction Practices in Ground Operations

Aircraft fuels account for the largest portion of the energy consumption in the operations of the Incorporation. Although ground operations have a lower share in the total due to their size, they cause a significant energy consumption. The largest consumption in ground operations consists of electricity and natural gas.

Turkish Airlines provides the necessary resources such as human, technology, infrastructure, finance, etc. for energy efficiency and reduction in the use of natural resources. ISO 50001 Energy Management System is implemented in our Incorporation. Potential projects to increase energy efficiency in our high energy consuming facilities have been identified according to energy audit reports and our efforts in this regard are ongoing. In this context, as of the reporting period, our electricity consumption decreased by approximately 21.8% compared to 2019.

In 2022, 2% monthly electricity and natural gas consumption savings were achieved by revising the ambient air temperatures for summer and winter months. A total of 188,000 m<sup>3</sup> of natural gas was saved annually with the application of heaters to the boiler systems used to meet the hot water needs in the buildings. On the other hand, approximately 96,000 m<sup>3</sup> of natural gas was saved annually with the revision made in the Do&Co heating line.

During the year, the air conditioning system in Atatürk Airport Training Building was replaced with a system that can recover heat and works with a more environmentally friendly refrigerant gas, resulting in a thermal efficiency of 63.6%. Thanks to these efficiencies, an annual saving of 40% was achieved in the electrical energy consumed in the system in question. The air conditioning system in the live animal cargo area of the Istanbul Airport CFB building was renewed with 100% fresh air and heat recovery, and 65% thermal efficiency was achieved. Thanks to these efficiencies, an annual saving of 20% was achieved in the electrical energy consumed in the system. On the other hand, water heating applications with solar collectors were included in the project to reduce the amount of natural gas and electricity in the cargo facility planned for Çukurova Airport.

In 2022, improvement projects were carried out to increase air quality and reduce emissions other than GHGs

throughout the operations. For example, an ecology unit with electrostatic and activated carbon filtration application was installed for the exhaust air of the restaurant located in the Crew Terminal area of Istanbul Airport OC (Operational Centre) Building. In this way, 87% filtration rate was achieved in this unit with an air flow rate of 7,500 m<sup>3</sup>/h. The boiler room of Istanbul Airport Mobilisation Building was also renovated during the year, reducing the gases transferred to the outside air by 5-10%. In addition, the old system providing ventilation-air conditioning in the Atatürk Airport Training Building was replaced with a system operating with an environmentally harmless refrigerant gas.

In 2022, it is planned to install a charging unit for electric vehicles in the Operations Centre parking garage project. With the project, the construction works of which will start in 2023, infrastructure preparations are being made for 560 charging units in the first stage in the car park building, which is expected to accommodate 3,700 vehicles, and the number of charging units will be increased in proportion to the increasing use. In the near future, 15% of the total number of vehicles that will use this car park will be electric.

The needs and requirements of our Incorporation are constantly reviewed and solar energy investments are planned in appropriate areas accordingly. In our new buildings, it is aimed to meet at least 5% of the energy from renewable sources. For all of our electricity consumption in 2022 in our existing buildings in the AHL region, the YEK-G Certificate issued by EPIAŞ, which states that the electricity generated is provided from renewable sources, has been obtained. In the AHL region, 100%, and approximately 12% of the total electricity consumption of AHL (Atatürk Airport) and IHL (Istanbul Airport) Regions is provided from renewable sources. All of the electricity used in the buildings in the AHL area was purchased from suppliers generating from renewable sources. In this context, a total of 63,921.6 GJ of renewable energy with YEK-G certificate issued by EPIAŞ was purchased during the year.

Work is underway to install solar energy panels on the roofs of our AHL Cargo and Sedat Şekerçi Flight Training Centre buildings, and feasibility studies are being carried out for the use of renewable and alternative resources in our facilities.

**2023 Period SPP  
(Electricity Generation from  
Solar Energy) Projects**

**Installation of  
5,000 kW  
capacity SPP on the roof of  
Atatürk Airport Cargo facility**  
(3,294,215 kg/year CO<sub>2</sub> emission will be prevented)

**Establishment of a GES with  
a capacity of  
534 kW  
on the land of TAFİ Aydın  
Çıldır Plant**  
(419,801 kg/year CO<sub>2</sub> emission will be prevented)

Installation of SPP on the roof of Flight Training Facility (capacity determination studies are in progress).



Internal Carbon Pricing

Turkish Airlines implements internal carbon pricing in order to increase low-carbon services, fuel efficiency, sustainable aviation fuel use and to support investments in innovative technologies and R&D projects. In this practice, which is shadow pricing, a price is set for the cost of carbon emissions per tonne on behalf of the company based on various assumptions. Internal carbon pricing practices using the shadow pricing mechanism have been included in the Climate Transition Plan prepared by Turkish Airlines considering different climate scenarios.

Carbon Offset Practices

GHG emissions arising from Turkish Airlines operations are managed in accordance with national and international regulations and standards. In this context; emission sources and emissions are monitored, emissions are calculated, information on emissions are reported and verified by third party independent organisations. Reporting is carried out in accordance with the requirements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), European Union Emissions Trading System (EU-ETS), United Kingdom Emissions Trading System (UK-ETS) and TS EN ISO 14064-1 Guidelines and Specifications Standard for Establishment Level Calculation and Reporting of Greenhouse Gas Emissions and Removals.

Emission credits corresponding to the emissions verified under the European Union Emissions Trading System (EU-ETS) and the United Kingdom Emissions Trading System

(UK-ETS) are purchased and surrendered to the authorities of the relevant Emissions Trading Systems. In this context, a total of 8,968 tonnes of CO<sub>2</sub> was offset in 2022. Although offset obligations within the scope of CORSIA have not yet started, we will offset our emissions above the base year emission values in the following years with carbon credits to be obtained from projects in accordance with the CORSIA Draft.



Emission Credits Surrendered to The Authorities

	2018	2019	2020	2021	2022
Surrendered emission credits in scope of EU ETS (ton CO <sub>2</sub> )	10,617	13,240	13,835	10,838	6,619
Surrendered emission credits in scope of CH ETS (ton CO <sub>2</sub> )	-	0	48	0	52
Surrendered emission credits in scope of UK ETS (ton CO <sub>2</sub> )	-	-	-	3,130	2,297
Total Surrendered emission credits (ton CO <sub>2</sub> )	10,617	13,240	13,883	13,968	8,968
Reported number of passenger journeys	668	686	669	672	476

A total of  
**8,968**  
tonnes of CO<sub>2</sub>  
was offset in 2022



With CO<sub>2</sub>mission,  
**2,941**  
tonnes of CO<sub>2</sub> resulting  
from the business travels  
of our employees was  
offset.



In line with the increasing sensitivity on sustainability issues, the voluntary carbon offset program [CO<sub>2</sub>mission](#) was launched in August 2022 in order to meet passenger expectations and to emphasize the importance of taking action together in the fight against climate change. With the CO<sub>2</sub>mission Programme, Turkish Airlines provides travellers with the opportunity to be involved in the process of improving the world by supporting sustainable development projects. Within the scope of the project, passengers are offered the opportunity to offset the emissions of not only Turkish Airlines flights, but also all flights with other airlines. Passengers are offered 3 different portfolio/package options to offset emissions: "Renewable Energy", "Social Benefit" and "Green World". The projects within the portfolio/package options consist of globally certified, carbon credit generating, climate change combating and social development projects that support 9 different Sustainable Development Goals. A carbon offset certificate is created for our passengers who perform the offsetting process by contributing the desired amount to the portfolio of their choice. Passengers can access their online certificates at any time via the platform, share their certificates on social media, and even present carbon offsetting to their loved ones. Within the scope of the CO<sub>2</sub>mission programme, emissions from all business travels of our employees are offset by Turkish Airlines. 2,941 tonnes of carbon emissions resulting from 16,891 business trips in 2022 were offset by our Incorporation.





## Sustainable Aviation Fuels

The 77th General Assembly of the International Air Transport Association (IATA) approved the net zero target for the global air transport industry for 2050. In line with this target, Turkish Airlines started to use biofuels, one of the recommended practices and called sustainable aviation fuel, on flights as of 2022. These fuels cause up to 87% less greenhouse gas emissions compared to conventional kerosene fuel. Thanks to the clean combustion that occurs with the use of sustainable aviation fuel, harmful particles of SOx and NOx emissions are reduced.

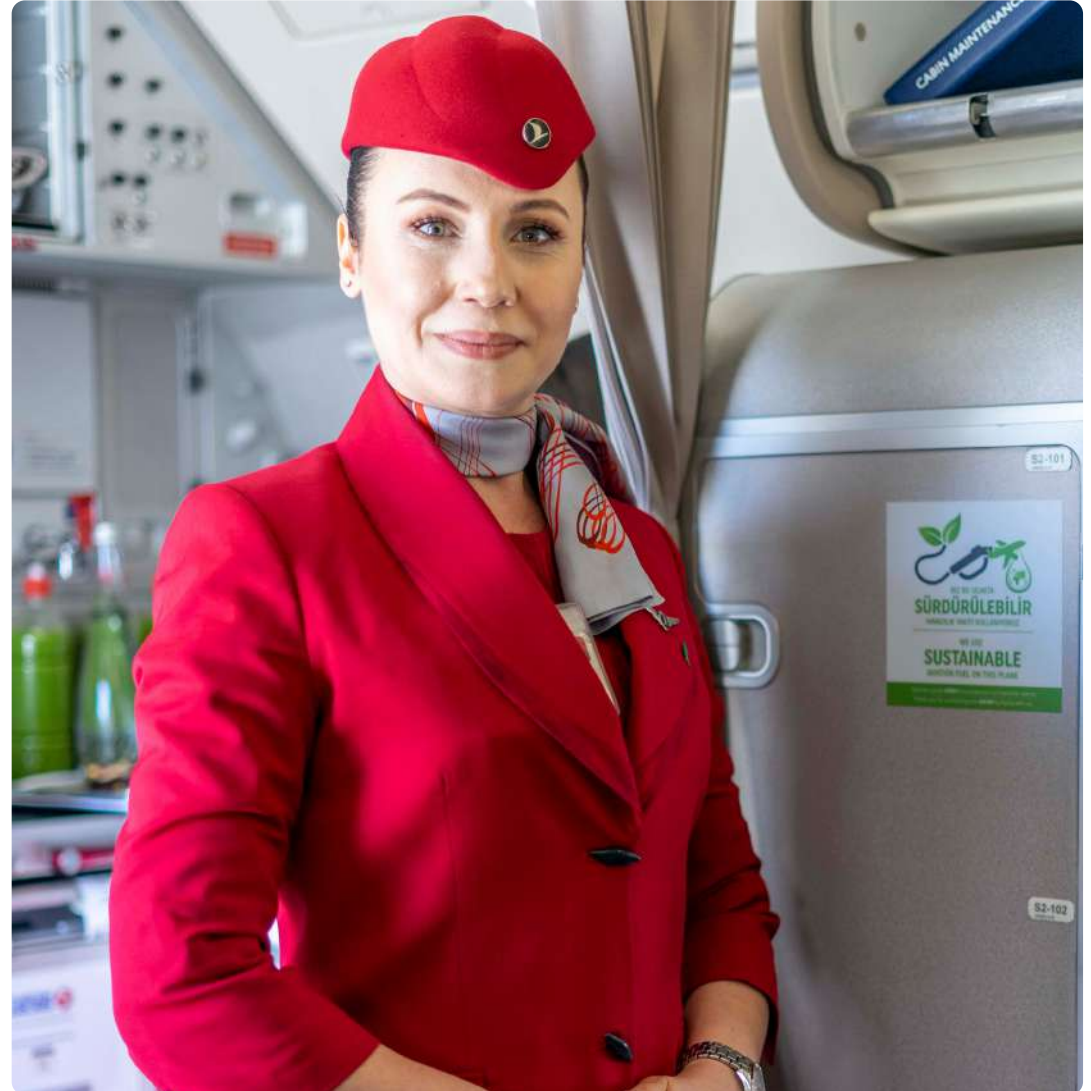
Turkish Airlines aims to increase the use of biofuel, which it has started to use on its flights, in terms of destinations and frequency of use. In this context, after the first use of aviation fuel obtained from sustainable sources on Istanbul Airport - Paris Charles De Gaulle Airport flight

TK1823 on 2 February 2022, the use of SAF has been expanded by starting to be used regularly on Paris, Oslo, Gothenburg, Copenhagen, Stuttgart, Stockholm, Brussels and Lyon routes. The loading of this environmentally friendly fuel onto the aircraft is carried out by TFS, a subsidiary of Turkish Airlines. Biofuel supplied by Neste is stored by TFS, blended with conventional jet fuel and supplied to the aircraft. In addition, biofuel is used on the Lyon, Marseille, Oslo, Strasbourg, Bordeaux and Toulouse routes on return flights to Istanbul Airport and is supplied by the fuel suppliers we work with at these airports.

Turkish Airlines actively uses sustainable aviation fuels in its operations and is also involved in various collaborations for the development of these fuels. Turkish Airlines is a signatory to the Global SAF Declaration, including Rolls-Royce and AIRBUS, and plans to maximise the use of SAF within the limits of technical, regulatory, safety and commercial viability.



These fuels cause up to  
**87%**  
less greenhouse gas  
emissions compared to  
conventional kerosene  
fuel.





# Green Class

Connecting the most countries in the world, Turkish Airlines develops the Green Class flight concept with its practices carried out with a sense of responsibility towards the environment and society.



## Applications to be included in Green Class in 2023

- New FSC-certified inflight products
- Compostable, biodegradable or PEFC certified cardboard cups
- Plant-based, biodegradable Business Class "Welcome Drink" mixers
- GRS certified slippers made from 80% recycled material
- Reduced density polyethylene in-cabin waste collection bags
- Wood mixers
- Blankets and pillows using recycled yarn
- Eye patches, socks, ear plugs, toothbrush heads made from recycled raw materials
- Toothpaste box with recycled packaging
- Wheat straw blend toothbrush

# Environmental Management

In line with its sustainability vision, Turkish Airlines has a comprehensive environmental management model in order to minimise the environmental impact of its operations, products and services and implements corrective practices with the principle of continuous improvement.

The environmental impacts that may arise in the operations of the Incorporation are identified and categorised through the [Environmental Aspects and Impacts List](#). The identified impacts are managed within the framework of the principles set out in the [Environmental Policy](#). These two documents, which are made available to stakeholders on the corporate website, form the basis of the environmental management system. In the process of managing existing and potential impacts, the system is secured by following international standards. These standards are the [ISO 14001 Environmental Management System Standard](#), which has been implemented since 2013, and the IATA Environmental Assessment Management System Programme (IEnvA), which is specially designed by the International Air Transport Association (IATA) for airline companies, which has been implemented since 2020. The business processes of the Incorporation are periodically subjected to independent audits and management systems are certified. In the reporting period, the certification rate of the management system standards spread to all relevant business processes across the operations of the Incorporation reached 92%. As a result of the audits carried out by an independent third-party organisation authorised by IATA, Turkish Airlines was awarded the IEnvA Programme Stage 2 Certificate, which is the highest-level certificate. Turkish Airlines became the first airline to directly participate in the IATA Environmental Assessment Programme by obtaining Stage 2 Certification.

The Board of Directors and the Executive Committee are the highest level responsible bodies of the Incorporation in terms of environment as in other areas. Environmental management activities at operational level are carried out by the Chief Investment and Technology Office. The Chief Investment and Technology Office presents the environmental management activities and the

performance achieved to the senior management for their information and opinions through regular Management Review Meetings.

Compliance with legal regulations is a prioritised element in the environmental management activities of the Incorporation. In this context, monitoring and control activities are carried out in order to ensure that all activities are carried out in compliance with the relevant legal regulations as well as the commitments voluntarily adopted by the Incorporation. As a result of the evaluations made in this direction, it was observed that there was no non-compliance with environmental legislation during the reporting period and no legal or administrative sanctions were imposed against the Incorporation due to environmental impacts.

During the year, there were no emergencies or environmental accidents with a significant environmental impact and there were no leaks or spills that may have a negative impact on the environment.

It is aimed to ensure that the environmental management system of the Incorporation is in compliance with globally recognised good practices beyond the legal requirements and to increase the environmental performance.

For this purpose, it is ensured that the necessary financial resources are created for the healthy realisation of the environmental management activities and projects planned to the extent of the size of the Incorporation's operations. In this context, the Incorporation allocated USD 20.1 million for environmental management activities in 2022.

Training activities are carried out throughout the Incorporation in order to increase environmental management awareness and professional competencies of employees. Accordingly, a total of 6,263 person\*hours of environmental training was provided to 8,350 Incorporation employees and 56 person\*hours of environmental training was provided to 75 contractor company employees in 2022. In addition, Corporate Sustainability training, which includes information on the management of social, environmental and governance (ESG) issues, was organised for 4,409 person\*hours with the participation of 13,227 employees.

Supplier environmental audits are carried out in order to ensure and improve the compliance of environmental management practices in the supply chain with certain standards. In this context, environmental audits were carried out in 40 supplier company operations in 2022.

Corporate Sustainability training, which was organised for

4,409

person\*hours

with the participation of

13,227

employees.



Environmental Policy

Abiding by the Rules

It complies with the aviation regulations along with the other legal and other requirements on the environmental issues that it is liable to comply with and undertakes to comply with voluntarily; it aims to extend beyond compliance with laws by the projects, applications, and initiatives it supports and plays an active role.

Managing the Environmental Aspects

It detects the environmental aspects and environmental impacts of all its activities, products, and services, and develops action plans to prevent, decrease and, if possible, eliminate all negative environmental impacts at source throughout its life cycle. It applies improvement-oriented management systems and methods to keep significant environmental aspects under control.

Minimizing Adverse Environmental Impacts

It gives top priority to protection of environment while carrying out all its activities, products and services. It supports the fuel efficiency initiatives to decrease and eliminate the factors that may worsen the climate change. It monitors and reports the greenhouse emissions regularly, and shares the results with all its stakeholders. It takes the necessary measures and sets goals to decrease its emissions, and develops action plans to attain these goals, and monitors the status of such actions regularly. It develops projects based on Zero Waste principle and waste management hierarchy in the waste management practices. Considering the environmental impacts of its products and services, it supports the sustainable products and services, and gives priority to preferring such products and services whenever possible. It acts being aware of its impact on the local pollution. It takes measures against noise pollution, water emission, odor emission, and waste generation. It places importance on protection of the ecosystem and biological diversity.

Decreasing the Consumption of Natural Resources

It uses the natural resources effectively and efficiently in line with the sustainability principle. It ensures the creation of the infrastructure required to increase the resource and energy efficiency and decrease their consumption, and supports the projects and applications developed to that end.

Considering People and the Environment While Growing

It adopts the sustainable growth strategies to leave a better world to the next generations while extending all its activities, products, and services and planning its new investments. It targets to decrease its emissions and noise level with its next generation environment-friendly aircraft that increases fuel efficiency by modernizing its fleet. It places importance on protection of the natural ecosystems and biological diversity.

Developing Along with Stakeholders



























It works to increase the environmental awareness of its own employees, provides trainings to its employees on environmental issues. It shares its good environmental practices with all its stakeholders; popularizes them; and encourages its stakeholders to participate through multidirectional communication.

Improving Consistently

It measures its environmental performance regularly against the performance criteria it has determined, monitors its development, and shares it with all its related parties through the Sustainability Report it publishes annually. It evaluates the feedbacks coming from the national and international rating agencies, its employees from all levels of its organization, and all its related parties, considers every possible feedback, and takes actions to improve its Environmental Management System consistently. It reviews the Environmental Policy periodically, updates it when necessary, and shares it with its related parties.



Environment Objectives

2022 Target	Related SDGs	2022 Performance	Realisation Level	2023 Target
No non-compliance with environmental regulation	 	100%	✓	No non-compliance with environmental legislation
No environmental accidents, environmental emergencies or incidents	  	100%	✓	No environmental accidents, environmental emergencies or incidents
Ensuring the continuity of TS EN ISO 14001 Environmental Management System Certificate	  	100%	✓	Ensuring the continuity of TS EN ISO 14001 Environmental Management System Certificate
Ensuring the continuity of Stage 2 certification in IEnvA Programme	  	100%	✓	Ensuring the continuity of Stage 2 certificate in IEnvA Programme
Reducing water consumption per employee by 5% compared to the previous year	  	13.42 m³/person	✓	Reducing water consumption per employee by 5% compared to the previous year
Providing environmental and waste management training to at least 3,800 employees	 	14,201 person	✓	The 2022 target has been reached and a related target has not been set for 2023.
Participation in the UN Global Compact	      	100%	✓	The 2022 target has been reached and a related target has not been set for 2023.
NEW TARGET	  	NEW TARGET	NEW TARGET	Increasing and expanding the number of flights operated with the Green Class concept

## Resource Efficiency

In line with its Environmental Policy, Turkish Airlines aims to use natural resources efficiently in its operations and to continuously improve its performance by developing innovative practices in this field. In this context, the quantities of consumption materials such as water, paper and plastics are monitored and practices are implemented to optimise consumption due to the size of operations, with energy resources being the largest consumption area.

### Water Consumption

It is evident that the vital importance of water resources is gradually increasing with both climate change and the increasing world population. In this context, Turkish Airlines carefully monitors water consumption as a resource used intensively in its operations and carries out activities to ensure efficient use.

With the significant increase in operations during the reporting period, total water consumption also increased, but per capita water consumption decreased significantly compared to previous years. In this context, while 364,508 m<sup>3</sup> of total water consumption was realised during the year, per capita water consumption was 13.42 m<sup>3</sup>/person, below the pre-pandemic 2019 value, which is extremely positive for environmental impact management performance.

New practices implemented during the year had a major impact on the water efficiency achieved. In this context, practices such as the use of drip irrigation system in landscaping areas, the preference of more economical battery models in the modernization works carried out in the wet areas of Trabzon, Sabiha Gökçen and Antalya Airport CIP halls, and the backup of booster system lines that carry water from the Water Pump Centre (WPC) building to different operational buildings with each other have been effective in achieving significant water savings during the year.

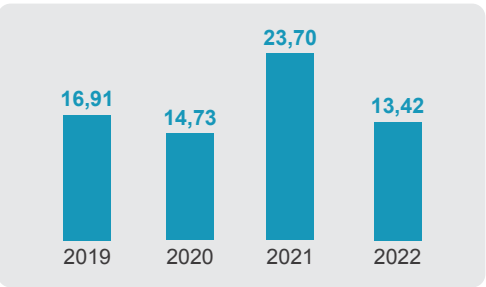
Planning studies for the use of new technologies to improve water efficiency level in the future periods and for the improvement of existing practices are also ongoing. In this context, a rainwater collection and utilisation system has been included in the cargo facility project planned for Çukurova Airport. With this

application, it is aimed to reduce the use of network water with rainwater to be directed from approximately 6,000 m<sup>2</sup> roof area. Similarly, feasibility studies are being carried out for the establishment of rainwater and grey water storage systems at Istanbul Airport. At the same time, in order to increase water efficiency in the buildings and landscaping areas at Istanbul Airport, project studies are being carried out to use Leadership in Energy and Environmental Design (LEED) approved nozzles that save up to 30% water in irrigation systems used in landscaping areas. This project is planned to be implemented in 2023.

Waste water generated throughout operations is discharged into waste water channels within the framework of legal regulations. In this context, 357,345 m<sup>3</sup> of wastewater generated in Turkish Airlines operations in 2022 was discharged into wastewater channels. The water efficiency activities carried out also have a direct impact on reducing the amount of wastewater discharge.

In this framework, a recycling system project that will ensure the reuse of 65% of the blowdown water of the cooling towers in the energy buildings has been implemented during the year. Thanks to the system to be implemented in 2023, our target is to reduce the make-up water requirement of the cooling towers by 16-17%, thus reducing the amount of wastewater.

### Water Consumption per Person (m<sup>3</sup>/person)



In this context,  
**357,345**  
m<sup>3</sup> of wastewater  
generated in Turkish  
Airlines operations in  
2022 was discharged  
into wastewater  
channels.



## Reducing the Use of Chemicals

Control and reduction of chemicals used in operations is an important part of environmental impact management activities. Efficiency studies carried out in anti-icing and aircraft painting processes are prominent areas of work in terms of controlling chemical substances.

"Anti-icing/de-icing" operations, which are carried out in order to eliminate icing risks during the cold season, aim to clean the aircraft surface from icing and deposits by spraying liquids with chemical contents on the aircraft surface. The guidelines issued by international authorities do not stipulate a precise protocol for the amount of liquid to be used, and it is requested to use liquid "as required". When determining the amount of liquid to be used in anti-icing/de-icing operations, Turkish Airlines aims to reach an optimum level of use that is sufficient to ensure flight safety but also to prevent the environmental impact arising from unnecessary chemical use. For this purpose, in order to keep the amount of liquid used at an optimum level, the control of the de/anti-icing operation process is organised according to certain scenarios (liquid usage exceedance, active frost weather conditions, etc.) and implementation plans are decided by discussing the latest findings with senior management meetings before the icing season. Through on-the-job trainings, the technical knowledge of senior managers, cockpit crew members and all station employees receiving de-icing service is updated and their awareness is raised. Application data are analysed during the season and discussions are held on the optimisation of liquid mixture ratios used at stations with high usage data and the most accurate liquid application methods.

Another process where chemical use occurs is aircraft painting applications. The painting system adopted by Turkish Airlines allows the aircraft in the fleet to be painted 2 times instead of 3 times on average during their 20-year economic life. In this way, the use of chemicals is reduced by 33%. Efficient paint application resulted in a saving of USD 0.8 million in 2022. Less chromium-containing options with reduced environmental impact are used in the primary paint used for painting the aircraft of the Incorporation. Chromium-free products are also preferred in chemicals used for paint removal and liquid gaskets used in window replacements.

Reducing Paper Consumption

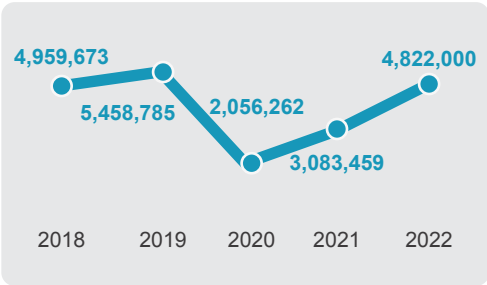
Paper materials are used in many processes in the operations of the Incorporation. The application with the highest performance in reducing paper material consumption is the Mobile Boarding Pass. In this way, both significant material savings and improvement in customer experience by saving time for passengers are achieved. In 2022, a significant increase was recorded with the Mobile Boarding Pass application, which prevented the printing of 4.8 million physical boarding passes. In addition, 6.4 million pieces of paper printing was prevented with Web check-in and SMS check-in applications.

The digital card transformation of the Miles&Smiles programme, which aims to enable our passengers to travel faster and more smoothly in a digitalised world, continued in the reporting period. Thanks to the digital card, which customers can access via the mobile application, 3.85 million paper waste was prevented in 2022, while 2.35 million card printing and shipping was avoided.

Digitalisation efforts are not only limited to the services we offer to our passengers, but are also extended to all operational areas. Within the scope of digitalisation efforts in the business units of the Incorporation, 25 projects have been implemented so far, resulting in 281 tonnes of paper savings in 2022.

With the mobile boarding pass and Miles&Smiles digital card applications, cost savings of more than USD 2.5 million were achieved in addition to increased environmental performance.

Number of Mobile Boarding Pass Applications



With the mobile boarding pass and Miles&Smiles digital card applications, cost savings of more than

USD **2.5** million were achieved in addition to increased environmental performance.

Cabin Modification Projects

Modification works are carried out in aircraft cabins in line with changing passenger expectations and consumption habits. In line with the developing technology, in-cabin components are also revised. During these modifications, Turkish Airlines prefers new technology cabin seats and components that reduce material usage and aircraft weight. The use of the new generation seats manufactured by our subsidiary company, which are lighter than their counterparts, in the fleet of the Incorporation will provide savings in annual fuel consumption and reduction in CO<sub>2</sub> emissions as well as material efficiency.





## Environmentally Friendly Material Preferences

In the selection of materials to be used in the products and services, human health and environment are taken into consideration and responsible alternatives are preferred.

The use of reusable service and transport equipment such as plates, cups and cutlery sets in in-flight catering services, especially in international flights, enables significant material savings. Analyses and researches are being carried out for opportunities to reduce other types of materials used in the aircraft.

Since the previous periods, all travel and toy sets offered to passengers on board have been offered without the use of plastic packaging, thereby preventing significant plastic material consumption and waste generation. In this context, 46,693 tonnes of plastic consumption was prevented by preventing the consumption of plastic toys with all travel and toy set packaging offered to passengers in 2022.

Since 2017, child passengers have been offered "Forest Stewardship Council (FSC)" certified toys made from industrially produced forest products instead of plastic toy sets. In this context, 677,809 FSC-certified toy sets were offered to our child passengers in 2022 and more than 4.9 million FSC-certified toy sets in total since 2018, and environmentally friendly products were preferred instead of plastic alternatives.

In addition to the FSC-certified toy sets, environmentally friendlier practices have also been adopted in the headphones and blankets offered to passengers in the cabin. Since it would be inconvenient to offer these products without packaging in terms of personal hygiene, a change was made in the packaging material used, and since 2017, instead of conventional plastic, a material that can be recovered by biodegradation and composting in accordance with TS EN 13432

standard has been used in the packaging of headphones and blankets. Although these packages made of corn starch have higher production costs compared to conventional plastic packages, we prefer these packages as they are a product that will contribute to the prevention of plastic waste generation at all points where we fly. With this preference, a total of 178,869,290 biodegradable and compostable packages have been used since 2018 and 31,860,243 biodegradable and compostable packages in 2022, thus preventing the consumption of single-use conventional plastics. Over 60 tonnes of packaging materials were avoided through packaging optimisation and environmentally friendly material choices. Passenger blankets are made of OEKO-TEX 100 certified recycled materials. In 2022, the number of blankets produced from this material to be used in our operations reached 1,552,460. The slippers served in the aircraft have GRS (Global Recycling Standard) certificate and are made of 80% recycled material. The water saving information obtained from the slippers and slipper covers we offer to our passengers is also presented to the passengers on the FSC-certified card.

**31,860,243**  
biodegradable  
and compostable  
packages in 2022,  
thus preventing  
the consumption  
of single-use  
conventional plastics.



Number of Products with Reduced Environmental Impact	2018	2019	2020	2021	2022
Forest Stewardship Council (FSC) Certified Toy Sets	2,268,000	1,647,700	0	323,925	677,809
Biodegradable and Compostable Headphone Packaging in accordance with TS EN 13432 Standard	37,698,863	37.790.212	9,872,042	16,722,548	30,307,783
TS EN 13432 Certified Biodegradable and Compostable Blanket Packaging	13,497,804	20.791.553	4,412,240	6,223,785	1,552,460
OEKO-TEX 100 Certified Passenger Blankets	1,509,204	2.181.610	572,215	1,144,145	1,552,460
Vegan Cosmetic Sets	-	-	-	63,471	1,313,320

In the reporting period, we continued to offer vegan cosmetic sets to passengers in order to promote the use of healthy ingredients in cosmetic products offered to passengers. In this context, a total of 1,313,320 cosmetic sets with vegan ingredients were offered to passengers in 2022. Our new travel sets started to be served with sustainable content products. The material of the toothbrush in the set was changed and produced with 37% wheat straw and 63% recycled polypropylene raw material. The new toothbrush is biodegradable in 12 months. In addition, kraft packaging was preferred instead of the plastic earplug box included in the set. Thanks to these practices, 80% plastic reduction was achieved in the travel sets we offer to our passengers.

In addition, we significantly reduce the amount of plastic by making changes that will not affect passenger comfort and satisfaction in travel sets containing products that our passengers may need during the flight and in the product contents within the set. As part of the strategy to reduce single-use plastics, plastic combs and shoehorns were removed from the travel sets. In this way, the consumption of 3.7 million plastic materials has been prevented since 2019.

With the development of material technologies and ecological innovation studies, material alternatives are also developing. In this context, developments in the field of consumables are closely monitored; the continuity of supply of materials that are suitable for use in food and airline catering services and that are deemed to be sustainable is investigated. Replacement of all cardboard cups currently used in beverage service with compostable, biodegradable, plastic-free and Programme for the Endorsement of Forest Certification (PEFC) certified cardboard cups, printing of all menu cards on FSC certified paper, envelopes used in economy class hot sandwich packaging and presentation of cutlery sets, Studies have been completed for paper cup holders used in business class catering, the use of FSC-certified

paper in toilet paper and patient bags, and the use of wooden mixers instead of plastic mixers, and blankets and pillows produced using recycled yarn, and it is aimed to start implementation in the coming period.



A total of  
**1,313,320**  
cosmetic sets with  
vegan ingredients  
were offered to  
passengers in 2022.



## Green Building Practices

Green building certification is the basis of the practices followed in the control of environmental impacts arising from buildings. In this way, the efficiency of operational buildings in terms of environmental and economic performance starting from the design phase to the utilisation process is secured. On the other hand, the materials used in these buildings are also aimed to have high sustainability qualities.

In all new building and area projects, office and facility renovation works of the Incorporation, special certified products with reduced environmental impact, recycled materials and products with high energy efficiency are preferred as much as possible. In this context, EPD certified glass, MAS approved acoustic baffle ceiling materials with green label, carpets with GUT label, wood coatings with FSC certificate, LVT floor materials with green label with recycled content, upholstery fabrics with Oeko-Tex certificate, Tier-2 certified transformers, green building certified water batteries, Eurovent certified air conditioning

and ventilation devices and certified solar panels with international standards are among the materials preferred in such projects.

Nine different buildings at Istanbul Airport have been certified by the US Green Building Council with the LEED (Leadership in Energy and Environmental Design) v4 BD+C certificate, while the Turkish Airlines Domestic Lounge and Main Lounge buildings have been certified with the silver LEED v4 ID+C certificate. In addition to these buildings, in 2022, the Operations Centre and Crew Terminal (OC) Building received platinum business certification, while Smartist Cargo Terminal - Lean LEED v4 BD+C and Istanbul Airport Main & Domestic Lounges - Silver LEED v4 ID+C certification.

In 2023, we aim to obtain LEED certification for our Taksim Sales Office - LEED BD+C, Istanbul Airport Main & Domestic Lounges Expansion Project - LEED ID+C, Main Catering Facility - LEED BD+C, Food Production Facility - LEED BD+C and Smartist Cargo Phase 2 Facility - LEED BD+C buildings.



## Waste Management

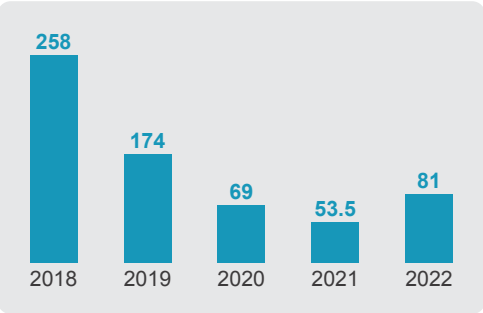
Waste management activities throughout Turkish Airlines operations are carried out in accordance with the Environmental Policy and relevant legal regulations. The principles and methods to be followed in waste management processes are determined by the Waste Management Procedure. "Zero Waste" principle is followed throughout operations and waste hierarchy principles are adopted in waste management. In line with the principles of waste hierarchy, the main priority is to prevent waste generation. If waste cannot be prevented, it is aimed to minimise the amount. Efforts are made to recycle or recover as much of the resulting wastes as possible into the economy through recycling or recovery methods. Wastes that cannot be recovered are disposed of through licensed companies. All wastes generated are regularly reported to the Ministry of Environment, Urbanisation and Climate Change according to the types and codes specified in legal regulations.

In 2022, a total of 2,232 tonnes of waste, of which 2,103 tonnes was non-hazardous waste and 129 tonnes was hazardous waste, was generated in Istanbul and other domestic locations. Thus, the amount of hazardous waste per employee decreased to 4.4 kg. Of the waste generated, 81 tonnes was packaging waste. The 0.9 tonnes of waste generated during the year was classified as

Waste Amount (tonnes)



Recycled Packaging Waste (tonnes)



The amount of hazardous waste per employee decreased to

4.4 kg



non-recoverable medical waste and was disposed of by licensed companies.

Waste management trainings are organised in order to increase the knowledge and participation of the employees of the Incorporation on waste management. In 2022, 5,851 employees participated in the waste trainings offered periodically to all employees, and a total of 4,442 personxhours of training was provided. Employees were also encouraged to participate in Zero Waste activities with award-winning waste sorting activities carried out through the mobile application.

In order to reduce waste generation in operations, reusability and recyclability opportunities are evaluated. In this context, headphones offered to passengers are sterilised after use and material loading bags are repaired and reused. Broken headphones that cannot be repaired are delivered to licensed recycling companies and iron, plastic and copper raw materials are recovered. Textile products such as blankets, pillows and pillowcases provided on board the aircraft are recycled and used in fibre production at the point where they cannot be reused. In this context, 2,129 tonnes of textile products were recycled. Wooden materials used for fixing the cargo are upcycled in the carpentry workshop to produce wooden transport pallets used in cargo operations.

## Disposal of Airframes

Turkish Technic Inc., a subsidiary of the Incorporation, carries out the disposal of the aircraft that have completed their useful life. Aircraft that have completed their economic life are first subjected to teardown process. During dismantling, it is aimed to separate the components and materials that can be reused or recovered and to bring them back to the economy.

The scrap body obtained at the end of dismantling is sold to the scrap company provided that various requirements are fulfilled.

### These requirements are;

- Carrying out a risk analysis before the cutting of the scrap at the airfield,
- Obtaining hazardous and non-hazardous substance documents,
- Declaration of the competence certificates obtained by the personnel to be employed from professional qualification institutions,
- Notification of mobile hazardous waste tracking while the scrap is taken out of the facility,
- Sharing the transport licence of the company that will transport the scrap waste and the disposal documents and contracts of the scrap company or the company to be contracted.





# Responsible Catering

Since its foundation, the quality level achieved in Turkish Airlines in-flight catering constitutes a significant part of the Incorporation's increasing customer satisfaction and quality perception.

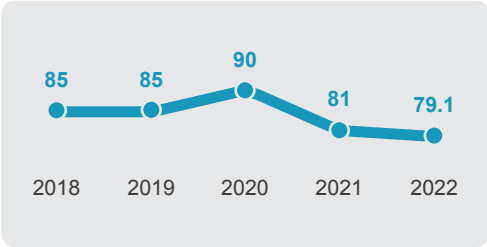


During the reporting period, as a result of the feedback and evaluations of millions of passengers, the Incorporation was honored with the World's Best Business Class Catering award at the Skytrax Awards and Europe's Best Food and Beverage Service award at the APEX Awards, which is the most strategic indicator of the Incorporation's success in this field.

Considering the 71.8 million number of passengers we have reached in 2022, the operational size of in-flight catering services becomes apparent. These services are provided by Turkish DO&CO, a Turkish Airlines subsidiary.

In 2022, 72.5 million menus were served to Turkish Airlines passengers. Of this, 55.2 million meals were served on international flights and 17.2 million meals were served on domestic flights. The total weight of catering served to passengers reached 3.2 million tons.

Domestic Supply Ratio in Catering (%)



Our fundamental and definite rule is that catering services are carried out at the highest level of health and hygiene norms. All meals are prepared in accordance with high hygiene standards under the control of expert food engineers in compliance with the ISO 22000 Food Safety Management System. The raw materials used in the preparation of the meals are supplied from ISO 22000 certified suppliers. Turkish Airlines understands that reaching certain quality standards in its supply chain and auditing suppliers for compliance with these standards is crucial to creating a positive brand image among the general public as well as passengers. To this end, Turkish Airlines conducts an on-site inspection program at its suppliers via services received from an expert and independent firm – (SGS) Supervise: Monitoring, Surveillance and Control Services – and Bureau Veritas firm on the basis of its corporate standards, policies and procedures. Thus, it aims to see the status of the supply chain worldwide and to be able to intervene early by reducing the risks of potential problems and disruptions.

In addition to the quality and variety of catering services prepared according to the highest level of health and hygiene rules with creative solutions realized by Turkish Airlines and Turkish DO&CO, efforts to reduce the climate and environmental impacts arising from catering operations within the framework of the Sustainability Policy are carried out with dedication.

By largely supplying food domestically, both local production is supported and the climate impacts arising from the raw material logistics processes are reduced. In this context, 79.1% of the food supply in 2022 was made from domestic suppliers.

For the health of the passengers, the food served is always fresh and made from the highest quality ingredients without the use of any additives. The composition of the catering is planned on a wide scale in accordance with the preferences of the passengers, considering the flight destinations. In 2022, Turkish Airlines provided 3,959,384 individual meal services in line with the personal preferences of its passengers.

Studies are carried out for the recycling of wastes generated in the production, distribution, and post-consumption processes of catering products. For instance, packaging, oil and other organic wastes generated during the production and distribution process are separated and recycled through licensed companies. To recycle the catering waste generated in the cabin in a healthy way, in-flight waste sorting is carried out at suitable destinations. In this context, in-flight waste sorting activities, which were carried out on 68 destinations in 2018 and 124 destinations in 2019, were suspended during the pandemic, and the practice was resumed on 73 destinations in 2021 and continued on 127 destinations in 2022.

In 2013, with the introduction of the new flight concept, the total weight of catering equipment was reduced by replacing all tools and equipment with lightweight products and superior design features. The preference for lightweight materials in catering equipment is important not only in terms of fuel savings and carbon emission reduction in both flight and logistics, but also in terms of reducing in-flight waste. For this reason, the Incorporation aims to further lighten the weight of catering equipment through innovative solutions and innovation efforts.



In 2022, Turkish Airlines provided

**3,959,384**

individual meal services in line with the personal preferences of its passengers.





# Fleet Modernization

Turkish Airlines was established in 1933 with a fleet of five aircraft. Over the years, fleet modernization investments accelerated with a great leap forward in the 2000s, expanding the Turkish Airlines fleet both in terms of the number of aircraft and diversifying it in terms of aircraft classes.

As a result of these efforts, the Incorporation's fleet, which consisted of 65 aircraft at the beginning of 2004, increased by 6.1 times by the end of 2022. By the end of 2022, Turkish Airlines fleet reached 394 aircraft in total with 263 narrow-body, 110 wide-body aircraft and 21 cargo aircraft, with an average fleet age of 8.7 years. As a result of fleet modernization efforts, which were accelerated during the reporting period, the number of aircraft is targeted to reach 435 by the end of 2023.

Our Incorporation, which is rapidly progressing towards becoming the youngest and the most modern fleet in Europe with the aim of expanding and rejuvenating its fleet, is taking important steps towards strengthening its brand by purchasing new technology-equipped, fuel-efficient, and environmentally friendly aircraft that meet the evolving passenger traffic and changing customer needs, taking into account cost analyses, and weighing importance to passenger comfort and safety.

The A321 NEO and B737 MAX aircraft, which are new generation aircraft that were ordered in 2013 and joined the fleet in 2018, resulted in an average fuel saving of 15% compared to the old generation narrow-body aircraft. To maximize the product quality and fuel advantage of the A321 NEO and B737 MAX aircraft joining our fleet, they are used in production more than other narrow-body aircraft in the fleet. On the other hand, thanks to the advantages provided by the addition of new generation aircraft to the fleet, additional frequency increases on many destinations will be possible in the future.

Having increased the number of aircraft in its fleet by 19% in the last 5 years and by 506% in the last 20 years, the Incorporation has 49 A321NEO, 14 A350-900 and 14 B787-9 type aircraft on order from the manufacturers as of the end of 2022. In line with our 2023-2033 fleet plan, we aim to increase the number of new generation narrow-body aircraft in our fleet. Accordingly, we plan to achieve significant savings in fuel consumption per seat in the narrow-body passenger aircraft fleet in the coming years.

Based on the fact that new generation narrow-body aircraft consume 15% less fuel, and new-generation wide-body aircraft consume 20% less fuel, USD 310 million saving achieved in fuel costs during the reporting period.

In line with its growth targets in cargo operations, Turkish Airlines continued to operate the A330-200F and B777-200LRF aircraft it added to its fleet throughout 2022. In addition to the cargo aircraft added to its fleet from manufacturing companies, the cargo operation was supported by leasing wet lease cargo aircraft in 2022.

Turkish Airlines manages these changes in its fleet by evaluating them at the end of each year and updating its fleet projections within the scope of opportunity assessment, risk management, sustainability, dynamic capacity planning and strategies to increase the breadth and density of its flight network. Considering the emission reduction targets in the Kyoto Protocol, Paris Agreement and IPCC (Intergovernmental Panel on Climate Change) 1.5-degree Celsius reports, the fleet modernization projection of our Incorporation is of critical importance on climate strategies and in reducing greenhouse gas emissions, which is the most important environmental dimension of the airline industry.

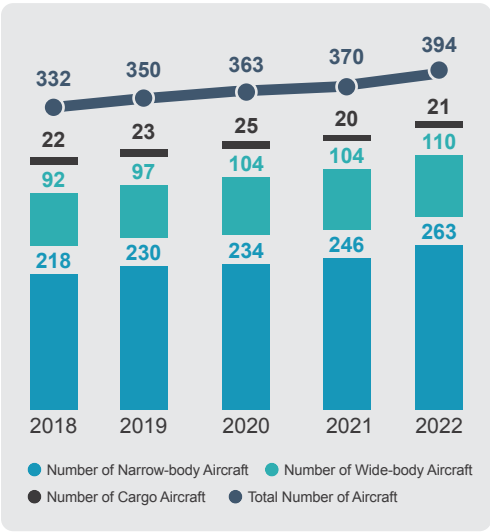
## Noise Management

Another positive impact of fleet modernization investments on the environmental performance of the Incorporation is in the area of reducing the acoustic impact of its operations in line with Turkish Airlines Environmental Policy.

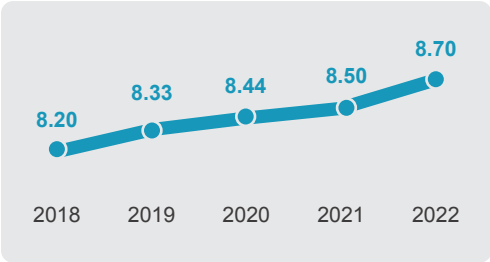
For each new aircraft joining the fleet, a Noise Certificate is obtained from the Directorate General of Civil Aviation. The Noise Certificate is a certificate issued to an aircraft upon the assessment that it complies with the specified noise standard when maintained and operated in accordance with the relevant requirements and operational limits. Technical Directorate, Airworthiness Review Management carries out the necessary studies for each aircraft to obtain a Noise Certificate in accordance with national and international aviation requirements and monitors its updates. This certificate ensures compliance with landing and take-off noise level limits at airports.

In 2022, 16 aircraft with noise-reducing vortex generators were obtained. The low noise level of aircraft manufactured with new technologies also contributes to reducing the acoustic impact of operations. We aim to increase the noise reduction performance with the addition of current aircraft orders to the fleet.

## Number of Aircraft



## Average Fleet Age







## Reliable Operator

Flight Safety and Security	63
Employee Health and Safety	68
Business Continuity	71
Innovation, R&D and Digital Transformation	72
Customer Satisfaction	74



# Flight Safety and Security

Turkish Airlines' top priority is to continuously strengthen its reputation as a reliable operator for its stakeholders.

To this end, the Incorporation takes measures to ensure the safety and security of its customers and business partners, business continuity, uninterrupted and uninterrupted operations and an unparalleled travel experience in all areas of its operations. It implements innovation and R&D activities in order to continuously improve processes, practices and service quality. Thus, it aims to continuously increase customer satisfaction.

Flight safety and flight security is more than a priority for Turkish Airlines; it is a fundamental operating norm that cannot be ignored for any reason or under any circumstances. For this reason, flight safety and flight security are taken seriously in line with comprehensive corporate policies that go beyond legal requirements, with responsibilities extending from the highest level to all relevant operational units.

Although closely related to each other, flight safety and flight security are two main areas of work with different focuses, carried out by teams with different specializations and different business processes. While flight safety activities focus on the activities carried out to identify all potential hazards and risks within the scope of flight operations and to keep risks at an acceptable level, flight safety activities cover activities and measures to protect customers, employees and all relevant stakeholders, and to ensure the safety of facilities, aircraft and other assets.

## Flight Safety

Flight safety is one of the main factors that are taken into account at the highest level in the process of formulating Turkish Airlines' strategic goals and action plans. The Incorporation was awarded the IOSA certificate of the International Air Transport Association (IATA) in 2005. The determination of flight safety processes and the activities performed in this field are carried out in accordance with the regulations of the International Civil Aviation Organization (ICAO), the European Aviation Safety Agency (EASA) and the Republic of Türkiye Ministry of Transport and Infrastructure Directorate General of Civil Aviation (DGCA).

The main principles, processes and practices followed in flight safety activities are defined and implemented in Turkish Airlines' [Safety Policy](#) and Safety Management System. The definitions and implementation principles of all activities carried out to ensure flight safety and to continuously improve implementation and performance are presented to the employees through the Safety Management Manual. Within the scope of the Safety Management System, safety programs specific to flight, dispatch, training, cabin, maintenance, catering, ground and cargo operations are implemented to ensure effective risk management.

The activities carried out within the scope of the Safety Management System are under the responsibility of the Corporate Safety Directorate, which reports directly to the General Manager. However, the Safety Management System is structured to cover all levels of the organization and their interactions with the operational environment. Periodic meetings are organized with the participation of the General Manager and relevant managers from all levels of management in order to evaluate safety performance and continuously

improve the Safety Management System in line with the Company's safety policies and objectives. The Safety Review Board, Safety Action Group and Safety Representatives review the effectiveness of the activities and adequacy of risk measures at periodic meetings. Through the activities of these bodies, an environment is created for employees and business partners to contribute to the improvement of the Safety Management System. In 2022, in order to increase efficiency in Safety Action Group meetings, different meetings were organized for flight operations and maintenance and ground operations. An information panel consisting of the performance indicators of each operational area was created in order to provide accurate and continuous information to the members of the Board of Directors on safety performance. Thus, monthly updates ensure that safety performance is realized in line with policies and targets.

As an ever-growing airline, Turkish Airlines' main priority in the field of flight safety is to maintain and improve its safety performance in proportion to the growth of the Incorporation in the short term, and to develop a real-time, data-driven, anticipatory and predictive system approach by utilizing the latest technological capabilities in the medium term. Thus, Turkish Airlines aims to become a leading and guiding airline in the sector in terms of safety management and practices in the long term.

In 2022, in order to increase flight safety during the return to normalcy after the pandemic, joint efforts were continued with civil aviation authorities and systematic improvements were made for ground and maintenance safety. As a result of the improvements made in the performance evaluation process of companies providing operational services, it was possible to work with companies that can comply with higher safety criteria in supplier selection.

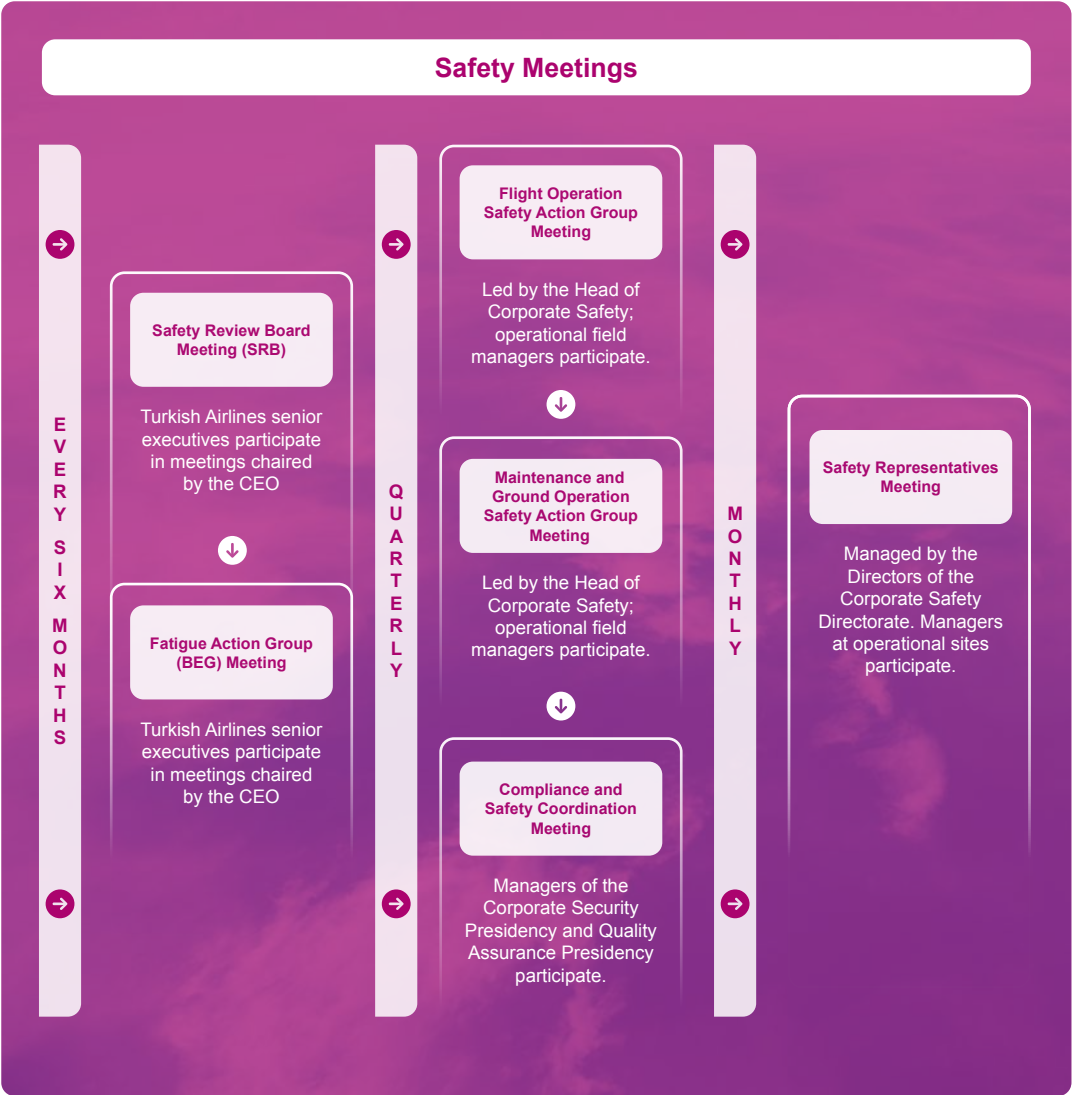


On the other hand, in parallel with the rapid growth of the aircraft fleet, decisive steps were taken to prevent any kind of unsafety that may occur before, during and after the flight. In this context, in-flight practices have started to be monitored more closely, and software that can simulate all the details of the flight one-to-one and in three dimensions has been integrated into the safety management system so that both engineers and safety control pilots can fully comprehend the occurrence of important events. In order to increase flight safety, the project, which was developed to share certain flight parameters with the teams working on the relevant flight as of October 2022, has started to be implemented in Airbus and Boeing wide body fleets.

With all these efforts, Turkish Airlines managed to achieve 98% of its safety targets in 2022. In 2022, safety level was improved with new projects implemented. In 2023, when the 90th anniversary of the Incorporation will be celebrated, it is aimed to improve the safety performance in parallel with the targeted growth.

The trainings provided to employees within the Training Academy aim to develop a positive safety culture as well as the knowledge and skills required for the effective operation of the Safety Management System. Through training and internal communication activities, it is aimed that all managers and employees of the Incorporation share a common awareness regarding the hazards and risks that arise during operations.

A safety category has been created on Ideaport suggestion portal in order for the Incorporation employees to give suggestions to improve safety performance. In this way, employee suggestions regarding operational safety are collected throughout the year and evaluated within each quarter, and the top 3 suggestions are rewarded.



## Fatigue Risk Management

Due to its acute and chronic effects on cockpit and cabin crews, fatigue risks have an important place in flight safety risk management. Therefore, Turkish Airlines carries out activities to measure, assess and prevent fatigue risks in line with the standards and legal requirements set by National and International Civil Aviation Authorities.

Within the scope of the Fatigue Risk Management System, which is integrated into the Turkish Airlines Safety Management System, the processes detailed for cockpit and cabin crews, fleet and operational structure are supported by the bio-mathematical model created through international scientific research and operational experiences. In 2022, the most up-to-date versions of the systems used in fatigue risk management were successfully integrated into the planning systems.



## Safety Risk Management

The Safety Management System implemented by Turkish Airlines is used as an operational risk management system that identifies hazards and risk factors that have arisen or may arise and eliminates or minimizes such hazards and risks. The main objective of Safety Risk Management is to keep the risk level at an acceptable level by continuously evaluating the factors affecting the operational areas within the framework of a system approach and addressing them with a systematic, data-based, predictive and dynamic approach. All methods and principles regarding the identification, assessment and control of hazards and risks related to safety in flight operations are determined by procedures. These procedures are described in detail in the Safety Management System Manual.

Pilot reports, Safety Performance Indicators (SPI), meeting decisions on safety, internal surveys, maintenance technical reports, bulletins of foreign and national authorities, activities and board decisions of subsidiaries are analyzed to identify potential threats that may have an impact on flight safety. The level of risk is determined by calculating the probability posed by these threats and the severity that they may cause in case of occurrence. Risk mitigation actions are planned for risks at unacceptable levels. Measures to keep the level of these risks at an acceptable level are defined and safety programs specific to flight, cabin, maintenance, catering, ground and cargo operations are created.

## Safety Audit

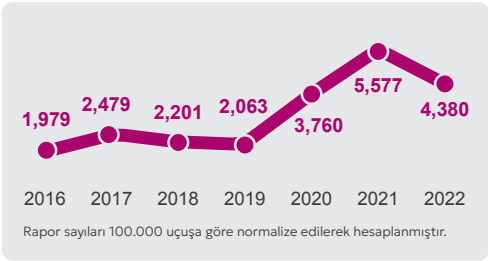
Establishing an effective system audit model is a vital element of a successful safety management system. Audit activities are considered as an important feedback mechanism to ensure that operations are carried out at a superior level of safety.

Turkish Airlines carries out its operations under the supervision of the civil aviation authorities of the countries where it operates, particularly the Turkish Ministry of Transportation and Infrastructure, Directorate General of Civil Aviation.

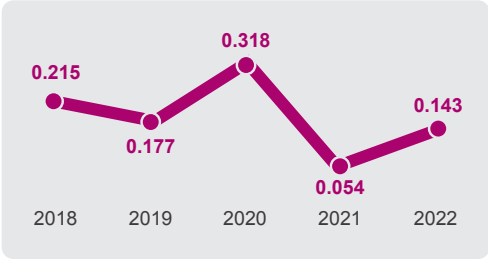
The International Air Transport Association (IATA)'s Operational Safety Audit Program (IOSA), which sets the most comprehensive operational safety standards for the aviation industry, is a globally recognized program that audits whether airline companies perform their operations in a healthy and safe manner. Since 2005, Turkish Airlines has been a member of the IOSA Program and successfully completed the IOSA audit conducted in 2022. Turkish Airlines aims to maintain its success in the IOSA audit to be repeated in 2024.

In addition to external audits, planned or unplanned internal audits are organized by the Quality Assurance Department to evaluate the effectiveness of the Safety Management System. All these audits are considered by the Incorporation as an opportunity and feedback mechanism to make the operations even safer.

### Reporting Performance



### SAFA Ratio (%)



## Safety Assessment of Foreign Aircraft (SAFA) Program

The purpose of the Safety Assessment of Foreign Aircraft (SAFA) Program, led by the European Aviation Safety Agency (EASA), is to identify and resolve any factors that may adversely affect flight safety and to ensure airworthiness. Within the framework of the SAFA Program, the cockpit, cabin, cargo compartments and the general condition of the aircraft are evaluated in terms of safety before and after the flight, and the flight crew, aircraft documents and the technical condition of the aircraft are checked in accordance with national and international regulations and all rules that may directly or indirectly affect safety.

The SAFA rate calculated within the scope of the program is determined by evaluating the number of registrations obtained and the safety status of the airline as a result of the inspections carried out in the last 12 months. In 2022, the Incorporation closed the year 2022 with a SAFA ratio of 0.143, as a result of the inspections performed on Turkish Airlines aircraft by 39 Civil Aviation Authorities at 51 international airports.

### Flight Safety Activity Data

	2020	2021	2022
Number of Aircraft Accidents (Number)	0	0	0
Sanctions for Non-Compliance with Flight Safety Regulations (Number)	0	0	0



## Flight Security

The basic principles of flight security activities followed throughout Turkish Airlines operations are determined by the [Security Policy](#). The Incorporation's Senior Vice President of Security in the field of aviation security is the Head of Security, who is approved by DGCA, is the authorized manager responsible for aviation security. The Security Management System established within the Incorporation is carried out by the Security Department, which reports directly to the General Directorate under the management of the Head of Security.

The Head of Security is responsible for meeting national and international security requirements as well as additional security measures requested by the country's civil aviation authorities for the stations where flights are operated in order to ensure the protection and security of passengers and aircraft against illegal acts. In addition, it ensures that risky stations are identified and, if necessary, additional security measures are taken at these points.

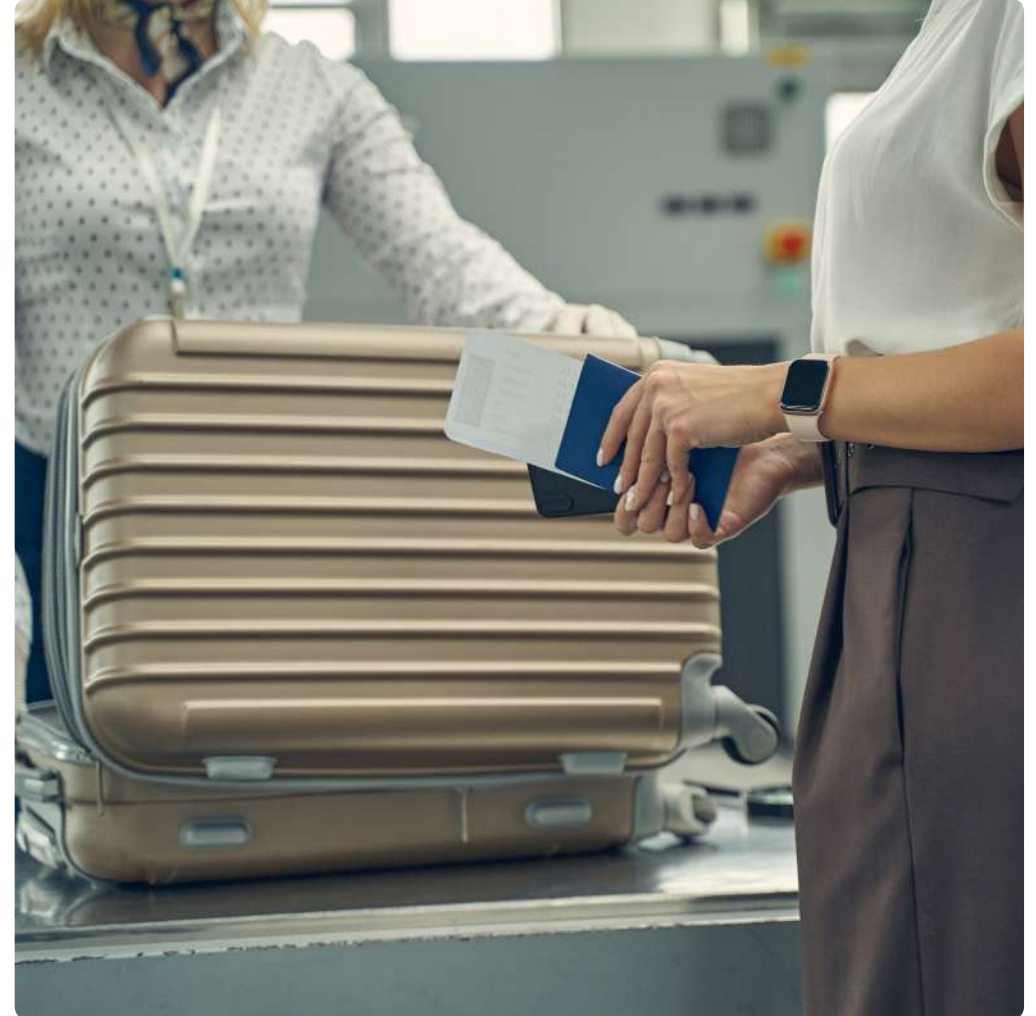
The Aviation Security Management, operating under the Security Directorate, is responsible for the implementation of the practices determined in line with the updates in the national and international aviation security legislation in coordination with the relevant units, intervention to suspicious objects and escorting of inadmissible passengers (INAD) to ensure the safety of the Incorporation's aircraft and flights. Within the scope of aviation security practices, passengers traveling with the Incorporation's aircraft, cabin luggage and under-flight luggage are subject to control by airport security. In addition, additional security services requested by the authorities of the country of flight are provided by the Incorporation.

Risk Assessment and Investigation Management conducts planned or incident-based unplanned security inspections at domestic and international airports where flights are planned to be operated and at risky stations where flights are operated, as well as security inspections at hotels where flight and cabin crews are and/or are planned to be accommodated and at the city offices of the Incorporation. The

Department is responsible for identifying risks by evaluating the security weaknesses and their impacts identified during the security inspections, taking corrective actions to mitigate these risks, and conducting observations and controls to ensure the continuity of these activities. The Directorate also reviews the security notifications made by the Incorporation employees, performs risk assessment of the security incidents experienced and ensures that risk mitigating activities are implemented.

Security practices to be followed in all operational and managerial processes and the duties and responsibilities of the Incorporation employees and service providers are determined by the Security Program. The Security Program is prepared by the Security Directorate in line with the National Civil Aviation Security Program and the security standards of the International Civil Aviation Organization (ICAO), European Civil Aviation Conference (ECAC) and International Air Transport Association (IATA) in accordance with national and international requirements and with the approval of the Directorate General of Civil Aviation. The Security Program is compliant with the European Union Regulations for flights to EU member states and with the security legislation of the US Transportation Security Administration for flights to the USA. All managerial and operational personnel operating in the field of security processes of the Incorporation are responsible for adhering to the instructions in the Security Program and reporting to the Head of Security in case of any contrary situation. The Incorporation's Security Policy is published on the website of the Incorporation. In addition, the sections of the Incorporation's operational manuals related to safety issues are prepared in compliance with the Safety Program.

Flight security activities are subject to periodic internal and external audits. Civil aviation authorities of the countries where flights are operated also conduct security inspections on aircraft. Within the scope of IOSA requirements, flight security activities and audit results are reported to the senior management at the Security Review Board Meetings held twice a year.



## Flight Security Risk Management

Success in flight security practices is achieved through a proactive risk management approach. Planned or incident-based unplanned security inspections are carried out for the facilities where flight personnel will be accommodated and the Incorporation offices. Based on the assessment results obtained, the measures to be taken are decided and implemented by the relevant units according to the security risk score and level determined based on threat levels, vulnerabilities and possible impacts.

Pursuant to the Secure Flight Passenger Tracking System, measures are taken to refuse to provide travel services on the Incorporation flights to passengers who behave in a manner that threatens the safety of passengers and employees, commit crimes or misdemeanours on board the aircraft or at the airport, damage or endanger the safety of the aircraft, commit acts that cause material or moral damage to the employees of the Incorporation and service providers, or act in an unlawful manner that disrupts discipline and order by disobeying airport or in-flight rules and instructions of the officers.

Flight Safety Trainings	2018	2019	2020	2021	2022
Number of Participants (person)	10,890	12,226	13,595	13,300	13,649
Cockpit Crew	932	1,476	2,620	936	2,175
Cabin Crew	2,634	2,992	2,528	2,432	5,884
Other Employees	7,324	7,758	8,447	9,932	5,590
Training Duration (person*hour)	16,463	27,144	15,472	22,503	17,062
Cockpit Crew	533	816	1,321	470	2,719
Cabin Crew	1,601	2,280	1,898	1,502	7,355
Other Employees	14,329	24,048	12,253	20,531	6,988

### Flight Security Awareness Activities

Maintaining flight security at the highest level depends on continuously increasing the knowledge and awareness of the relevant persons. For this purpose, flight security information and communication activities, internal surveys and training activities are carried out for the employees of the Incorporation. In order to encourage reporting of errors, non-punitive reporting procedures are carried out within the framework of the application confidentiality principle. All kinds of suggestions, requests and notifications regarding safety issues can be submitted via [security@thy.com](mailto:security@thy.com).





# Employee Health and Safety

One of the prerequisites for being a reliable operator is to ensure the health and safety of its employees, business partners, contractors and all stakeholders in its locations of operation. In this context, Turkish Airlines considers employee health and safety as a fundamental operational norm and an integral part of its corporate culture.

Accordingly, the Incorporation takes an approach beyond legal requirements when determining employee health and safety practices and implements exemplary practices on an international scale.

The Occupational Health and Safety Policy, which includes the [Occupational Health and Safety \(OHS\) principles](#) to be followed throughout Turkish Airlines operations, is made available to all relevant stakeholders on the corporate website. The management procedures established in the light of the policy principles are included in the Occupational Health and Safety Management Handbook. Collective bargaining agreements with trade unions include the basic elements of occupational health and safety and the conditions for compliance with applicable laws and regulations.

ISO 45001 Occupational Health and Safety Management System is referenced in Turkish Airlines operations. Certification of the standard is ensured through independent audits. Although Turkish Airlines' business units that carry out main operations and operating locations are included in the scope of the standard, when all operations are considered, the ratio of business units covered by ISO 45001 certification has reached 92% as of 2022.

The General Manager is the highest level executive responsible for occupational health and safety management throughout the Incorporation. The Occupational Health and Safety Committee, which includes employee representatives, ensures direct participation of employees in decision-making processes related to health and safety. Occupational health and safety issues are discussed at the Compliance Review Board (CRB) meetings held twice a year with the participation of the General Manager and relevant managers. Actual work in the field of occupational health and safety is carried out by occupational physicians, nurses and occupational safety specialists working within the Occupational Health Management.

As of 2022, there are 9 OHS Committees across the operations of the Incorporation with 165 members, 122 of which are employee representatives.

# Occupational Health and Safety Performance

All occupational safety incidents, including near miss incidents, that occur throughout Turkish Airlines operations are recorded through online reporting systems. The results obtained are analysed and root causes are identified and necessary measures are implemented.

In 2022, accident frequency rate is calculated as 15.58 and accident severity rate as 116.27 for every 1,000,000 working hours. During the reporting period, while 2,674 near misses were reported, there were no fatal occupational accidents or reported occupational diseases.

The mental health of the Incorporation's employees is carefully monitored as well as their

physical health and well-being. All necessary support is provided to the employees by Incorporation to ensure that both flight and ground personnel in critical positions are physically and mentally ready for duty. Basic occupational health and safety activities include emergency preparedness and drill planning, training of teams, activity and site-based risk assessment studies, execution of site inspections, review of compliance with legal regulations, examination of near miss and accident records, evaluation of subcontractor activities, OHS aspects of purchased services, equipment and materials, personal protective equipment requirement analyses and evaluation of supplier employees' activities at the Incorporation locations.

In 2022, a total of **24,461** person\*hours of occupational health and safety training was organised with the participation of **91,104** employees.



Occupational Health and Safety Data <sup>1</sup>	2018	2019	2020	2021	2022
Accident Frequency Rate	8.6	12.69	4.57	7.82	15.58
Accident Severity Rate	172	123	37	63	116.27
Number of Occupational Disease Cases	0	0	0	0	0
Fatality as a Result of Work Accident	0	0	0	0	0
Number of Field Surveillance	-	426	204	632	460
Number of Physician Activities	157,016	161,992	125,326	117,699	184,219

<sup>1</sup> In previous years, Accident Frequency Rate and Accident Severity Rate data were calculated only within the scope of direct employment. In 2022, since the employees of contractor companies are also included in these data, the figures show a significant difference compared to previous years.



As of 2022, the ratio of business units covered by ISO 45001 certification has reached **92%**.

ISO 45001 Occupational Health and Safety Management Systems Awareness Training, was completed by **21,322** employees by the end of 2022.

Occupational Health and Safety Trainings

The Incorporation organises training activities to increase the awareness of the occupational health and safety among its employees and business partners, to equip each of them with the OHS knowledge they will need in their own activities and to develop synergy around occupational health and safety awareness. The training portfolio includes basic topics such as legal rights and responsibilities of employees, principles of OHS culture, occupational safety risks, safe use of work equipment, causes of occupational accidents, emergency plans, occupational health and safety for evacuation and rescue officers. In 2022, a total of 24,461 person\*hours of occupational health and safety training was organised with the participation of 91,104 employees.

The online ISO 45001 Occupational Health and Safety Management Systems Awareness Training, which was prepared to inform employees about the ISO 45001 Standard and to convey their responsibilities, was completed by 21,322 employees by the end of 2022.



Number of OHS Trainings Participants	2018	2019	2020	2021	2022
THY Employees	-	14,951	20,563	153,579	91,104



Disaster and Emergency Management

Preparedness for disasters and emergencies is becoming a vital element of occupational health and safety for a company like Turkish Airlines, which manages a large operation in a wide geography. As an airline company, emergency preparedness gains great importance in terms of the role we undertake in disaster situations as well as the risks on our operations.

The general procedures to be followed by Turkish Airlines in case of emergencies are described in the Emergency Management Plan Handbook. The Incorporation has established a specially designed Emergency Management Centre with all necessary technical infrastructure for the management of emergencies. Members of the Emergency Management Centre establish the procedures to be followed in their units. The activities carried out within this scope are managed by the Crisis Management and Support Department.

Periodic training and drills are carried out to keep emergency preparedness alive throughout the operation. In this context, a total of 1,428 employees participated in 48 Disaster and Emergency Trainings organised in 2022, and 5,097 person\*hours of training was provided. A team of 23 people, mostly occupational safety specialists,

received 2-week theoretical and practical Urban Search and Rescue Training from Disaster and Emergency Management Presidency.

Unplanned drills are organised in order to improve the preparedness of the Incorporation employees for emergencies and the ability of emergency teams to respond to incidents. In this context, 96 drills were conducted during the year.

Natural disasters and crisis are situations that require immediate response and it is vital to reach the disaster or crisis area as soon as possible. The fast and reliable transport capabilities of air cargo play a critical role in supporting relief operations and meeting the needs of disaster victims. Thanks to its agile structure and fast decision-making capability, Turkish Cargo successfully manages disaster logistics and delivers relief supplies to disaster areas quickly and effectively.

Turkish Airlines is the official transport sponsor of the Red Crescent, one of the largest aid organisations in Türkiye. Within the scope of our sponsorship agreement, we support the transport of an average of 100 tonnes of disaster, emergency and various aid materials every year. This agreement continued throughout 2022.

Disaster and Emergency Preparedness Studies	2018	2019	2020	2021	2022
Number of Disaster and Emergency Trainings	20	24	10	19	48
Disaster and Emergency Training Number of Participants	273	400	145	215	1,428
Number of Disaster and Emergency Drills	17	58	8	97	96





## Business Continuity

Business continuity in Turkish Airlines operations is managed in direct relation with the risk management model in all business processes including fleet planning, technical integrity, flight safety and security, employee health and human resources management, legal compliance and information security.

For this purpose, various national and internationally recognised system standards that differ according to the relevant business process are followed to ensure the managerial reliability of business continuity. In this context, system standards such as ISO 9001 Quality Management System, ISO 10002 Customer Satisfaction Management System, ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System, ISO 27001 Information Security Management System, ISO 50001 Energy Management System, IEnvA (IATA Environmental Assessment Stage 2), ISO 14064-1 Greenhouse Gas Calculation and Verification Standard are followed in the operations of the Incorporation as of 2022, and system continuity is ensured through periodic internal and external audits

and certification studies. Considering the overall business units of the Incorporation, the certification rate of ISO 9001, ISO 14001 and ISO 45001 system standards reaches 92%.

In addition, Turkish Airlines holds the IOSA certificate issued by IATA and operationally applies the standards established in 8 different disciplines within the scope of IATA's IOSA Programme. Within the scope of this certificate, Turkish Airlines is audited every two years by international audit organisations authorised by IATA. At the end of the current audits, the rate of compliance with IOSA standards is over 99%.

In an airline company such as Turkish Airlines, which carries out large-scale physical operations in a wide geographical area, it is of utmost

importance for business continuity to ensure continuous airworthiness by maintaining the availability of the aircraft fleet. In this context, Turkish Airlines has been certified as a Continuous Airworthiness and Maintenance Organisation with the approval of the Directorate General of Civil Aviation. Thus, Turkish Airlines became the first company in Türkiye to receive airworthiness review authorisation for the aircraft in its commercial fleet. The Incorporation carefully carries out continuous airworthiness and maintenance management activities for all aircraft in its operating licences (AOC). In this context, it is ensured that the aircraft in the fleet comply with the applicable airworthiness requirements at any time during their operational life and remain in a condition favourable for safe operation.



# Innovation, R&D And Digital Transformation

In terms of the size it has reached, Turkish Airlines operations touch the lives of millions of passengers and cargo customers every year. Even the slightest improvement in any process of this complex operation means making a difference in the lives of thousands of people.



One of the indispensable objectives for the business units of the Incorporation is to create continuous innovation and further improve business processes. Turkish Airlines closely monitors many issues fuelled by technology, such as innovative products and services in customer experience, making operations more efficient, and developing new products and services that can generate revenue, and endeavours to implement them at an early stage. Within the scope of the open innovation strategy, various initiative programmes are implemented, and initiatives are closely monitored. Various studies and projects are being developed in the fields of contactless technologies, mobile and web applications and artificial intelligence, which have gained a lot of importance especially after the pandemic.

Innovation activities at Turkish Airlines are carried out under the responsibility of the Corporate Innovation and Projects Directorate. On the other hand, Business Development Management under the Directorate of Regional Flights, Directorate of Marketing, Directorate of Ground Operations and Directorate of Cabin Crew also develop innovation projects.

The corporate innovation system operates on the principle of evaluating internal and open innovation resources and transforming them into outputs and consists of a combination of many complementary processes and activities. The Corporate Innovation Platform, one of the important components of the system, underwent a significant transformation by being renewed under the umbrella of the new brand Ideaport. As a result of this, in addition to the fiction in which each employee makes step-by-step progress by entering ideas only related to the business area of the unit to which he/she is affiliated, all business areas of the Incorporation are provided with the opportunity to submit ideas and initiate collaborations with ecosystem stakeholders,

Suggestion System Data	2018	2019	2020	2021	2022
Number of employees sharing suggestions (person)	6,268	4,316	7,144	507	1,560
Number of employee suggestions	16,716	21,995	24,259	25,129	3,548
Number of implemented suggestions	659	1,100	1,225	1,227	713
Financial benefits from employee suggestions (USD million)	55	132	163	185	250

thus supporting all processes of the Incorporation with the innovative perspectives of the employees. Thanks to the renewed suggestion system, an integrated structure that makes the source of the ecosystem, information, trends and technology, which hosts all processes of corporate and open innovation, accessible, has been created.

The first step in the identification process of innovation and R&D activities is the idea development phase. In the identification of ideas that can be implemented, suggestion systems entered by employees working in business units throughout the Incorporation are utilised, and employees who make successful suggestions are encouraged with financial rewards. In 2022, 3,548 ideas were entered into the Corporate Innovation Platform and the total number of suggestions reached 27,870. 648 of these ideas were implemented during the reporting period, and the total financial benefit from the system exceeded USD 250 million.

During the reporting period, the Innovation Idea System Awards, which are held twice a year throughout the Incorporation, have been reorganised to be held every month. Accordingly,

employees were encouraged to upload their entrepreneurial ideas to the system. In 2022, Idealist, a public innovation programme was launched, where all individuals other than Turkish Airlines employees and business partners can submit their ideas to the Incorporation.

Various practices and programmes are carried out to create an innovation-oriented synergy within the Incorporation and among its stakeholders. Within the scope of the Terminal Initiative Programme, which was established to collaborate with new generation initiatives in line with the open innovation strategy, partnerships are established with many initiatives in the field of aviation and technology, as well as universities, technocities, technology transfer offices and venture centres. Innovative projects are carried out in line with approaches such as Design Thinking and Lean Start Up. Within the scope of the Terminal Startup Acceleration Programme, 10 startups are selected each term and a 12-week training process is implemented. With the Invest On Board application, investor presentation videos of startups are featured on in-flight displays (IFE) to support the process of finding investors.

R&D Activity Data	2018	2019	2020	2021	2022
Number of R&D employees	666	752	719	829	442
R&D expenditure (USD)	11,800,612	7,691,853	8,857,844	4,254,596	8,611,503
Number of R&D projects	33	49	40	20	92
Number of new products and services developed	53	10	6	6	5

During the reporting period, within the framework of the cooperation with Okan University under the coordination of the Türkiye Exporters Assembly, the Incorporation continued to improve its innovation system with the mentorship provided by expert academicians. In order to ensure effective execution of innovation activities throughout the Incorporation, innovation leadership system was established within the presidencies. Innovation leaders support the realisation of innovative ideas generated within business units and the coordination of large-scale innovation activities to be implemented throughout the company. Thanks to the Directorate Innovation Boards, which were put into practice under the leadership of the Innovation Centre, it is aimed to project and implement innovative ideas more effectively and quickly.

In 2022, the Design Hackathon organised with the aim of collective problem solving and developing an innovative perspective, the improvement areas identified in Turkish Airlines maintenance and repair processes were opened to the solution proposals of young entrepreneurs. In the competition programme, 85 applications submitted by entrepreneurs over the age of 18 across Türkiye were evaluated and the best projects submitted by the best 10 teams were determined and awarded. On the other hand, Travel Hackathons, where young talents develop innovative, digital applications to be used in various stages of travel, continued to be organised.

R&D activities within the Incorporation are carried out within Turkish Technic Inc. and at the R&D Centre established within Turkish Airlines Technology Inc. In 2022, 442 personnel took part in the R&D activities of the Incorporation and 38 R&D activities were carried out.

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## Digital Transformation

Turkish Airlines carries out digital transformation efforts to transfer many business processes carried out by human beings within the operations to robotic systems and to direct the existing workforce to processes where they can generate more added value. In 2022, many projects continued to be developed in this direction.

Robotic Process Automation (RPA) studies are being carried out to analyse and improve the business processes of the Incorporation. In this context, it is aimed to direct employees to more value-added processes by transferring the work done by human hands to 6 different robots, which we call metal collars. In this context, 15 business processes were automated as a result of 4 phases.

With the R&D project carried out during the reporting period, it is possible to perform the borescope inspection of the aircraft engine with the newly developed Engine Rotation Device instead of manual rotation of the engine shaft and blades by the technicians. With the use of the Engine Rotation Device, the inspection process will be carried out in a safer, faster, more accurate and labour efficient manner.

During the reporting period, software development studies were carried out in order to perform the Electrical Load Analysis applications, in which the aircraft can operate safely and the flight-critical systems are evaluated to perform under routine and extreme operating conditions, digitally instead of manually. Thanks to the unique software developed, these studies will be carried out in a completely digital environment, and the load analyses of each aircraft will be archived and updated instantly.

With the project carried out in 2022, a drone platform was developed to facilitate the detection of structural damage caused by lightning and similar external effects on the aircraft exterior during maintenance. With the developed system, it is possible to take images by performing a fully autonomous flight in the hangar and to provide

meaningful information to the user by processing the images taken with machine learning algorithms. With this application, it is aimed to shorten the maintenance time and to follow more accurate and consistent data.

With the SmartDock Vehicle Routing System developed by Turkish Cargo during the reporting period, the right vehicle is directed to the right door thanks to the vehicle content that customers specify through the web portal. While cargo status information is transferred to customer systems digitally with the Shipment Tracking API developed during the year, users can be directed between any two points in warehouse operations, without the need for personnel initiative with the Work Order Application; the process can be followed over the hand terminals of the carrier teams.





# Customer Satisfaction

One of the most important values built by Turkish Airlines over the years of its operations is high-level customer experience and loyalty. The fundamental principles followed in the activities carried out for establishing these values are determined by the [Customer Satisfaction Policy](#) and [Quality Policy](#) documents.

[ISO 10002 Customer Satisfaction Management System Standard](#) and [ISO 9001 Quality Management System Standard](#) are followed in the activities carried out in line with these policies. Standard compliance is certified as a result of periodic audits. When all operations of the Incorporation are evaluated, the ratio of business units within the scope of ISO 9001 certification has reached 92% as of 2022. On the other hand, our Incorporation, which has ISO 10002 Customer Satisfaction Quality Management System Standard certification since 2015, differentiated itself from many of its competitors in the world with this certificate and achieved the success of being one of the two airlines holding this certificate in the Star Alliance Alliance, which includes 26 airlines.

Efforts to improve Customer Satisfaction are carried out in line with the processes specified in the Customer Relations Handbook, Ground Handbook, Flight and Service Disruptions Procedure, DGCA SHY Passenger Legislation and European Union EC-241/04 Legislation. These activities, which are carried out under the responsibility of the Directorate of Marketing, are subject to internal audits conducted by the Directorate of Quality Assurance and periodically independent external audits.

## Responding to Changing Customer Expectations

Various communication channels are used to keep up to date with the expectations of customers that vary over time, to plan applications that will respond effectively to these expectations, and to learn about the problems experienced by customers in service processes. The aim is to continuously improve the customer experience with the measures created through this learning. In this context, customers were responded to in an average of 6.7 days in case of disruptions they experienced in 2022. The rate of baggage disruptions during the year is 0.53%.

During the reporting period, a specialized team was assembled to identify and re-evaluate feedback that could not be resolved at the first contact. Portuguese was added as the 9th communication language option on social media accounts. A mass feedback communication project was implemented, enabling proactive and standardized communication. With the infrastructure that allows name change on the ticket, which was not possible before, customers demanding name change on their tickets for valid reasons were offered this opportunity.

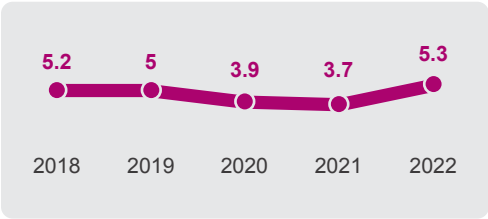
In cases of damage and disruptions in cargo transports, the compensation and indemnity process is carried out in the light of national and international legislation, and the cases are meticulously handled and finalized in the fastest way possible. For 2022, the average case finalization time was 41 days.

Creating innovative practices to improve customer experience has been an important component of Turkish Airlines' competitive advantage in its sector from past to present. One of the applications developed in this context is the Stopover Programme. Within the scope of the programme, Business Class passengers are provided with 2 nights accommodation in 5-star hotels, while

Economy Class passengers are provided with 1 night accommodation in 4-star hotels. Thus, passengers can stay in the relevant destination free of charge and benefit from the activities offered by the city. As of the reporting period, Turkish Airlines provided Stopover accommodation service at 108 destinations in 42 countries.

In 2022, Turkish Cargo carried out new service and process development activities in order to respond to changing customer expectations more efficiently. In this context, TK PREMIUM services is defined for important shipments requiring short travel time, TK URGENT, which offers the fastest solution in the sector for urgent last-minute shipments, and "Diplomatic On Board Courier" services for diplomatic cargo shipments whose operational processes are completed under the supervision of a consular officer. Cool dolly service ensures the protection of product integrity by using temperature-controlled dolly in the transfer of temperature and time-sensitive cargo such as pharmaceuticals and perishable products between warehouse and apron. Within the scope of the Avi Center application launched during the year, a customised operation area with appropriate technical infrastructure was built to handle and store live animal shipments under proper conditions.

### Baggage Irregularity Rate (‰)



### SmartIST

Turkish Cargo has completed the installation of SmartIST, the largest air cargo facility in Europe and the third largest in the world, designed to meet the market needs in anticipation of and increase in air cargo traffic in the world.

SmartIST, built on an area of 205,000 m<sup>2</sup> at Istanbul Airport, has an annual cargo handling capacity of 2 million tonnes. After the completion of the second phase, it is planned to reach an area of 340,000 m<sup>2</sup> and a cargo handling capacity of 4 million tonnes. In addition to its operational capacity, this high-tech facility has taken its place among the most modern facilities in the world by incorporating systems such as Work Order, ULD Utilisation, AR, RPA, ASRS&PCHS. Together with its infrastructure, SmartIST supports Turkish Cargo in achieving its goals of becoming the world's 3rd largest air cargo carrier and making Istanbul the world's most important logistics centre.



### Customer Satisfaction Assessments

In order to better understand passengers, to identify their needs more accurately and to produce more accurate solutions for these needs, Turkish Airlines regularly receives feedback from its customers through surveys on a weekly, monthly and quarterly basis. Customer satisfaction surveys are conducted through the In-Flight Entertainment System (IFE), and the results of the surveys are evaluated monthly and shared with the relevant business units, particularly with the Directorate of Cabin Crew and Directorate of Ground Operations, through the Voice of the Customer Reports, and with the Senior Management through the Customer Experience Executive Committee held every two months. In order to create detailed reports for the improvement of service processes, catering, seat type, in-cabin products, sustainability, internet speed and many other topics are evaluated in the surveys.

According to the results of the survey conducted during the reporting period, Turkish Airlines' customer satisfaction rate for 2022 is at 83%. With the feedback obtained, projects and applications are designed to improve the customer experience. The target set by the General Manager every year to increase customer satisfaction is measured through surveys and it is monitored whether the target of the Incorporation is met or not.

In addition to the feedback we receive from our passengers, customer satisfaction surveys are conducted periodically in order to increase the quality of product & service delivery in cargo transport activities; survey outputs are used as input in areas where improvement and development are required; and action is taken by expert units in necessary areas. The customer satisfaction rate in cargo transport is monitored as 82% for 2022.

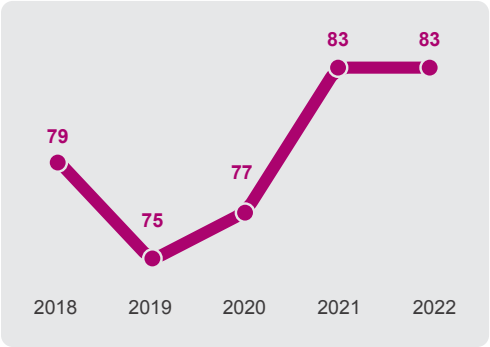
In order to respond ideally to the changes in customer behaviours, expectations and habits in cargo transportation, a Customer Experience-oriented and development-oriented organisational restructuring has been implemented to maximise our customers' experience in cargo services. The services offered to our customers with the privilege of Turkish Cargo have been mapped in detail and customer experience improvement activities have started to be monitored within this framework. Regular meetings are held with the general and regional managements of key customers, during these meetings, the changing expectations of the customers from the sector and Turkish Cargo are learned from the first person, and in line with these expectations, meetings are organised with the relevant units of our Incorporation and actions are taken in order to respond to the expectations quickly.





Turkish Airlines' customer satisfaction rate for 2022 is at **83%**

#### Customer Satisfaction Rate (%)



Responsible Marketing Practices

In its marketing activities, the Incorporation pays attention to conduct a responsible practice by following the principles of business ethics and fair competition. The Incorporation's sustainability umbrella brand Tomorrow On-Board, launched during the reporting period, reinforces the Incorporation's promise of being a responsible operator with its logo, identity and manifesto.

In communication with customers, attention is paid to provide accurate and clear information, not to use deceptive content, to prevent the use of elements that can be considered as discriminatory discourse in terms of race, language, religion, gender and lifestyle in the texts and visuals used, and to minimise the environmental impact of the physical materials used. Considering the cultural and socio-economic differences and values of each region, a social responsibility approach is taken to support and develop these values. In advertising and promotional activities, the procedures of the countries where the broadcasting is made are taken into consideration and the relevant legal legislation and ICC (International Chamber of Commerce) principles are followed.

The sustainable and responsible operation criteria of our Corporate Club customers and B2B customers and their requests in this direction are evaluated and included in the application portfolio to the extent that they are in line with the policies of the Incorporation.

Within the scope of responsible marketing practices, Turkish Airlines carries out activities to contribute to the development of local economies, support social development and create social benefits. In addition to providing

aviation services, these activities are also supported through donations, sponsorships and various practices. In 2022, transportation support was provided in the categories of cargo transportation, discounted tickets and additional baggage allowance for many humanitarian aid programmes (food parcels, water wells, orphanage aid, health screenings, emergency aid, etc.) and field organisations in Türkiye and abroad by developing cooperation with approximately 30 different local and international non-governmental organisations.



As the official transport sponsor of the Turkish Red Crescent, one of Türkiye's largest aid organisations, Turkish Airlines provides support for the transport of approximately 500 tonnes of blood and blood products, blood tubes and transfusion boxes and 100 tonnes of disaster, emergency and various aid materials every 2 years. Turkish Airlines employees also support blood donation campaigns organised at least twice a year. In addition, in 2022, in coordination with the Turkish Red Crescent, approximately 1,500 families and 4,000 children were directly provided with aid in the form of food parcels and shopping cards on behalf of the Incorporation.

In order to provide the necessary contribution to the National Technology Move as the flag carrier airline, the Incorporation offers comprehensive support in the field of transportation by cooperating with the T3 Foundation for the Teknofest event. Non-governmental organisations operating in the fields of sports, peace and development were supported through the Sport for One Humanity project carried out in cooperation with the United Nations Alliance of Civilisations and Turkish Airlines. Plastic caps are collected and donated to the Spinal Cord Paralytics Association of Türkiye at regular periods from all of the Incorporation campuses. Within the scope of the Upcycling for the Future Project, unused cabin crew bags are transformed into children's shoes and delivered to children all over Türkiye. On 11 February, International Women and Girls in Science Day, RASIT organisation was supported as the transportation sponsor.

As an important part of the global supply chain, Turkish Cargo supports projects and activities that facilitate international trade. In this context,

Turkish Cargo supported the Uganda Project carried out by The Global Alliance for Trade Facilitation. In this project, which was initiated with the aim of developing and expanding Uganda's exports, Turkish Cargo contributed to the digitalisation and capacity building of Uganda's air cargo sector by sharing training and best practices. Within the scope of the project, firstly, Cargo Operations Training was provided to the team consisting of Ugandan public and private sector employees. During the training, which was held at Turkish Airlines Aviation Academy, expertise and experiences on perishable cargo transport were shared. In addition, Ugandan officials had the opportunity to observe the operational process from start to finish on a field trip to SMARTIST, the largest air cargo facility in Europe and the third largest in the world.

In order to encourage Turkish exporters, Turkish Cargo also collaborated with the Turkish Exporters Assembly (TIM) to offer a special discounted cargo transportation programme for TIM members, covering cargo operations departing from Türkiye and to specific destinations. With the Destination of The Week programme, discounted cargo transportation services are offered to exporters through agencies on routes determined by the Incorporation. These practices support the expansion of exports to different destinations.

On the other hand, Turkish Cargo continues to sponsor social development-oriented projects by evaluating their free transport requests. These activities, including humanitarian aid, environment and charity initiatives, continued during the reporting period.



## Accessibility: Differences Add Value

Turkish Airlines launched the **"Differences Add Value"** programme to facilitate access to aviation services for individuals with disadvantages or special service needs.

Within the scope of the programme, Incorporation carries out various social responsibility activities as well as efforts to improve internal and external processes. The practices implemented within the scope of the programme are planned based on the feedback obtained from consultation with NGOs and organisations representing special passenger groups.



### Customised Service for Passengers with Special Conditions

Privileged services offered to passengers with special conditions start before the flight. For example, passengers with disabilities can buy discounted tickets for their companions travelling with them, provided that they show the document issued by the Ministry of Family and Social Policies indicating that they have the "right to be accompanied". In order to facilitate the travelling process of disabled passengers, "Priority" stickers are attached to their baggage and they are provided to receive their baggage with priority at the destination.

In 2022, within the scope of the improvements carried out at Istanbul Airport, two special service points were designed in the check-in area for the waiting and pre-check-in preparation needs of disabled and mobility-impaired passengers, and the PRM waiting areas on the departure floor were also revised in accordance with the needs of disabled and mobility-impaired passengers. A similar arrangement was made in the baggage claim area and special areas for disabled and pregnant passengers were created around each carousel.

During the reporting period, Istanbul Airport started to receive service from a private organisation for the area where passengers with stretchers wait at the airport during the pre-travel period. Thus, passengers with stretchers wait for their flights in a spacious and sterile area under the supervision of a doctor.

Passengers in need of special services can contact the ticket sales offices, by phone or via the website before the flight and request accompaniment, transport and wheelchair services for transfers between the aircraft and the terminal building during take-off and landing. In order to better communicate with hearing-impaired

passengers, cabin crews receive sign language training. As a result of the trainings continued in 2022, the number of cabin crew members who know sign language reached 592 and the number of TGS personnel reached 63.

In order for hearing-impaired passengers to understand the in-flight safety films without the need for assistance, the films are broadcast with animated sign language translations.

### We Help Our Passengers Overcome Their Fear of Flying

For the first time in Türkiye, Turkish Airlines Aviation Academy has developed a special programme to help passengers with flight phobia overcome this problem. Within the scope of the programme, firstly, the participants are informed about the structure of the aircraft and atmospheric conditions by pilots and technical trainers. Then, flight simulation is performed in the simulator cabin. In this way, it is aimed to eliminate the feelings of fear and anxiety experienced under normal and severe turbulence conditions. In the last step, the participants take off with the crew to a destination.

In 2022, 61 people and 1,000 people in total participated in the "Overcoming Fear of Flying Programme", which has been continuing since 2007, and overcame their fear of flying.

### Sunflower Name Badge Project



Differences such as autism, dementia, anxiety disorders, speech difficulties, reading difficulties, visual difficulties, etc., which make life difficult for individuals in their daily processes, can cause individuals to experience difficulties in their travel experiences and to experience a more challenging airport and flight process.

Thanks to the Sunflower badge application, which has been implemented to minimise these difficulties that passengers may experience during their travels, ground operation staff and cabin crew who see the specially designed badge can directly understand that the passenger may need more help, support or more time in some processes. Passengers can obtain their badges free of charge from the Special Service Counters at Istanbul Airport without presenting any medical report and can use them throughout their travels. In addition, passengers can continue to use the same card on their next journeys and at points where the Sunflower badge is valid.



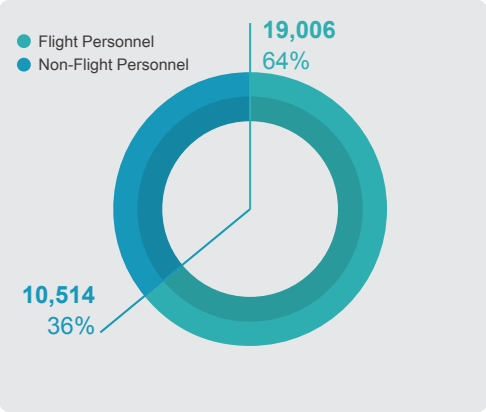


# Fair Employer

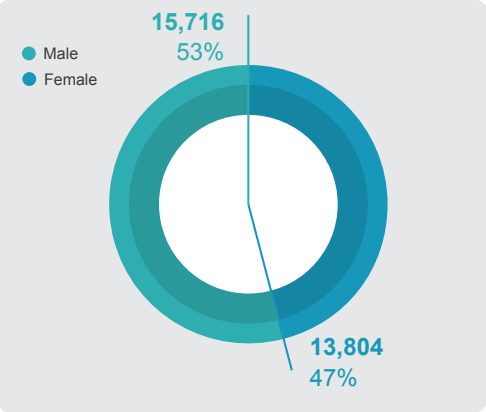
Gender Balance	80
Talent Management	83

As in its 90-year journey, the most significant strength of Turkish Airlines in its future success journey will be its young, dynamic and qualified workforce. For this reason, the Incorporation offers a working environment where development and team spirit are supported and diversity and equality are observed.

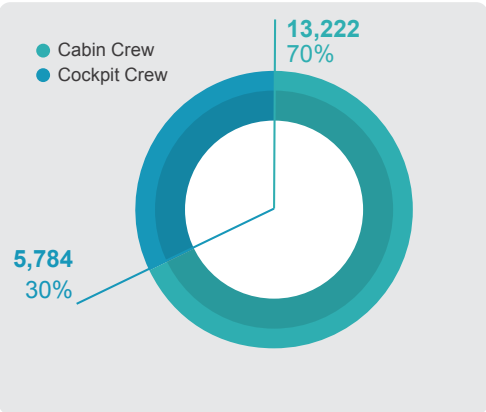
Employees by Category (%)



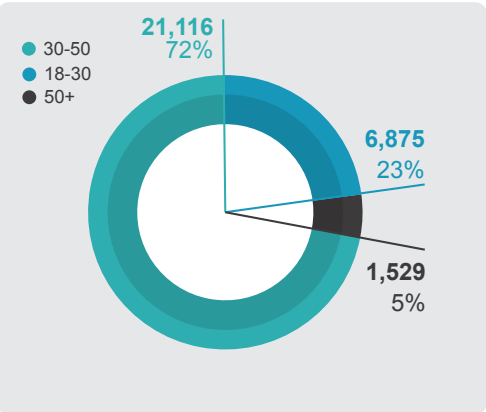
Employees by Gender (%)



Flight Personnel by Category (%)



Employees by Age Group (%)



As of 2022, Turkish Airlines has a total of **29,520** employees. Of these, **5,784** are cockpit employees, **13,222** are cabin crew and **10,514** are non-flight personnel.



# Gender Balance

Established in 1933 as a boutique airline, Turkish Airlines has grown significantly over the years and has become the airline that flies to the most countries in the world today. In parallel with this development in operations, a wide range of employees from different countries and cultures has emerged.



Turkish Airlines' ability to bring together differences into a whole and direct them towards a common goal plays an important role in its success. Accordingly, the corporate culture emphasises diversity and inclusiveness as a core value.

The fundamental principles set out in the Turkish Airlines [Code of Business Conduct and Ethics](#) Manual demonstrate that the Incorporation is an employer that prioritises equal opportunities and values diversity and different cultures.

## Supporting Female Employment

In line with the importance it attaches to gender equality, Turkish Airlines carries out practices aimed at facilitating women's participation in working life and improving their career opportunities. These activities are considered as part of the business strategy, the performance of managers in this direction is encouraged, the results obtained are periodically reported to the senior management and their evaluations are received.

By 2022, the ratio of female employment among Turkish Airlines' direct employees reached 47%. In 2021, Turkish Airlines joined the "25by2025 - Advancing Gender Balance by 2025" initiative led by the International Air Transport Association (IATA) and made a

commitment to increase the number of female employees in pilot and senior managerial roles by 25% by 2025. In this context, as of 2022, the ratio of female employees among flying personnel has reached 48%, while this ratio is 66% among cabin crew members. The ratio of women in pilot positions, which increased by 53% to 5.81% during the period, is above the world average.

Turkish Airlines has also initiated efforts to increase the proportion of women involved in decision-making processes in aviation management. During the year, the ratio of female members in the Board of Directors increased to 11%, while the ratio of female employees in executive positions rose to 26%. The proportion of women in mid-level management positions increased to 32%, and 12% in senior management positions.

Although there are no obstacles in recruitment and evaluation processes, and even encouraging practices, it is seen that the representation of women in technical roles is not at an adequate level. In recent years, the aim has been to increase the proportion of female engineers in the technical team through practices for engineer roles. In 2022, the number of female engineers increased by 30% and reached 221. Thus, the ratio of female engineers was realised as 47%. In information technology positions, the ratio of female employees reached 38%.

In order to strengthen the weight of female employees in the employee demographic, efforts are made to increase the number of female candidates in recruitment processes. As a result, 58% of job applicants, 58% of shortlisted candidates and 64% of candidates interviewed in 2022 were women.

In 2022, the number of female engineers increased by

**30%**

and reached

**221**





During the year, various practices were implemented to increase the number of female managers in revenue generating roles. In this context, vacancy announcements were made for the recruitment of female executives for Overseas Sales Supervisor roles. In the evaluations made, 14 female candidates were appointed to sales supervisor roles.

In 2022, 23% of the employees promoted in domestic operations and 20% in international operations were women. Among employees promoted to managerial positions for the first time, 37% in domestic operations and 83% in international operations were female managers. In this context, 252 supervisory and higher-level managerial positions were filled by female employees.

Aviation professions are carried out in a dynamic working environment that requires continuity. Leaving professional life for a while may cause difficulties in returning to working life. Therefore, employee continuity is of utmost importance. Pregnancy and the birth process may also cause female employees to move away from business life due to various transition difficulties. Turkish Airlines provides various opportunities for female employees in order to prevent the loss of qualified female personnel. In this context, physician and psychologist support is provided to support the physical and mental health of our employees who are expecting a child. Turkish Airlines applies 20 weeks of paid maternity leave for female employees, which is legally 16 weeks, and offers 6 months of unpaid leave for each child in addition to this period. In addition, female employees can work part-time until their children reach primary school age and benefit from support payments for nursery and other care services. In addition to these opportunities,

elderly care service support is also provided for the care of family elders under the responsibility of our employees. In 2022, 3,000 employees benefited from nursery and elderly care assistance. During the year, 6 employees benefited from the right to part-time work after childbirth and 121 employees benefited from the right to partial work.

Turkish Airlines offers various flexibilities to its female flight crew before and after childbirth. For example, female flight personnel may be considered to be on administrative leave during their pregnancy or may prefer to work in the office. During the reporting period, 184 female employees used administrative leave for pregnancy.

Pregnant cabin crew members are not scheduled to travel to countries that are not recommended for travel by the World Health Organisation. In order to ensure that cabin crew members who are breastfeeding their babies are not separated from their children at night, no overnight assignments are planned for two years.

During the year, the Company continued to increase the number of milk rooms available for the use of female employees and to improve childcare facilities. In this context, the ratio of facilities with milk rooms was increased by 5% to 55%. The daycare centre project, which will operate 24/7 at Istanbul Airport for the benefit of flight employees, continued.

In 2022, 119 female employees of Turkish Airlines went on maternity leave. Including those who took leave in the previous period, 198 female employees returned from maternity leave. Of the employees returning from maternity leave, 99.7% did not quit their jobs in the last 12 months.

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## Supporting Disabled Employment

Turkish Airlines offers favourable working conditions and various flexibilities to support the employment of disabled individuals. In 2022, the Incorporation has 206 employees with disabilities, 56 of whom are women, and 26 of them are in chief and higher managerial positions.

In order to facilitate the employment of disabled employees and improve their working conditions, various activities were carried out during the reporting period. In this context, a workshop was organised to listen to the experiences and suggestions of disabled employees. In line with the demands and feedback received at the workshop, relevant units were informed in order to take remedial actions. In this context, field audits have been initiated in order to improve the level of accessibility in the fields of activity, and improvements are targeted to be completed in 2023.

The Differences Bring Value committee, which is voluntarily formed by our disabled employees, meets at regular intervals to evaluate the feedback received from employees and to propose remedial actions to the relevant units.

### Human and Employee Rights

Turkish Airlines prioritises the dignity and well-being of all its stakeholders, particularly its employees, customers and business partners. The Company's human and employee rights approach and principles are set out in the [Human Rights and Employee Rights Policy](#). Within the scope of the policy, Turkish Airlines is committed to operate in compliance with the international principles, standards and national legislation set out in the Universal Declaration of Human Rights, International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, United Nations Global Compact, United Nations Guiding Principles on Business and Human Rights, United Nations Women's Empowerment Principles (WEPs), Worst Forms of Child Labour Convention (ILO/No.182).

The use of child labour is strictly forbidden throughout the operations of the Incorporation, and no one may be forced or compelled to work without his/her consent

or by denying his/her legal rights. This principle also applies to Turkish Airlines suppliers and business partners.

Turkish Airlines respects the right to organise and collective bargaining rights of its employees. Accordingly, 85% of employees are members of Hava-İş Union. The Collective Bargaining Agreement includes general employment procedures and rules, social benefits, remuneration rules and basic occupational safety rules.

### Work and Private Life Balance

The well-being, mental and physical health of employees in aviation activities is of special importance. In order to maintain this integrity, a good balance between work and private life is required. In this context, Turkish Airlines offers flexible working hours, extended legal leave periods, part-time working opportunities, unpaid leave due to spousal reasons, paternity leave and companion leave in order to support its employees to create a balance between their work and private lives. In addition, every employee who starts working at Turkish Airlines starts with 20 days of leave instead of 14 days per year and is entitled to 7 days of compassionate leave.

### Fair Remuneration

Turkish Airlines' employee wage determination processes are carried out in accordance with the principle of equal pay for equal work in line with the conditions set out in the Collective Bargaining Agreement. Wage differences between employees are based solely on seniority and rank, and no gender-based differences occur. In this context, the basic wages of male and female employees performing the same duties are equal. Wage increases are also applied equally to female employees on maternity leave. On the other hand, practices that will attract successful and talented employees to stay in the Incorporation are targeted by taking sectoral competition conditions into consideration in determining remuneration.

Turkish Airlines [Remuneration Policy](#) has been prepared to define the principles of remuneration of the members of the Board of Directors and senior executives in accordance with the provisions of the CMB.





# Talent Management

In the aviation industry, the human element is among the important factors affecting service quality. For this reason, Turkish Airlines considers talent management as a whole and aims to be a preferred workplace for the most qualified professionals in the industry. To this end, the Incorporation implements practices to keep employees' motivation and creativity alive and to support individual and professional development. The Incorporation aims to create a strong employee experience, increase employee loyalty and thus maintain the continuity of the qualified labour force through its work life practices.

## Career Development

Turkish Airlines follows an HR Development Journey Programme designed differently according to employee categories in order to plan the career journeys of its employees and develop their professional and personal skills and competencies in line with this planning. Within the scope of the programme, employees are first subjected to a position-based measurement and evaluation application through a system with a content specific to the Incorporation in cooperation with experts and academicians. In the light of the feedback received from these assessments, the process of competency determination and development programme creation is initiated. Following this, the required trainings are planned.

The Take-Off Project, which was launched in 2021 to facilitate the employment of talented young people in the aviation industry, continued in the reporting period. The Take-Off Junior project aims to recruit new graduates and the Take-Off 101 project aims to recruit 3rd and 4th year students of universities to the sector. Employee candidates are also reached through university career days and various events.

During the reporting period, the development process for an Overseas Station Supervisor was initiated to be assigned at overseas stations when needed. Within the scope of the project, candidates applying for internal vacancies were subjected to the Assessment Centre application and successful candidates attended training programmes.

## Turkish Airlines Aviation Academy

Turkish Airlines Aviation Academy provides training and consultancy services to airline and cargo companies, travel agencies, universities, airport operators, other companies and individuals in the civil aviation sector, as well as the Incorporation's employees. Operating since 2011 as IATA's Regional Training Partner and Authorised Training School, Turkish Airlines Aviation Academy holds various national and international accreditations and approvals. With its expert staff, the Academy provides in-class and online training to its trainees in a wide range of courses under three categories: Corporate Solutions, Organisational Development and Language Skills.

In addition to the general catalogue trainings planned by considering the development needs of the Incorporation's employees, different training programs specific to the needs are also offered within the scope of the Academy. Training activities are carried out through various channels such as classroom trainings, virtual trainings, digital trainings, distance trainings and Youtube broadcasts.

The professional and personal development trainings that the employees of the Incorporation are required to receive in line with their duties and in accordance with national and international legislation are carried out. In addition to these,

certificate programmes such as Business English, Finance Micro MBA, Project Management, Lean Thinking and Lean Management, Development of Overseas Managers were organised in line with the needs of the Incorporation employees. Live Broadcast Seminars were organised with the participation of expert academicians and professionals from the business world as speakers. In order to support employees to specialise in their professional fields and to facilitate their access to education, Incorporation encouraged employees to participate in Master's Degree Programmes by collaborating with various universities in the 2022-2023 academic year. During the year, a master's programme with Ibn Haldun University and a number of certificate programmes were established. On the other hand, test assessment services were received from many universities in order to confirm the English level of the flight crew.

During the year,

USD **437** thousand

was allocated for training activities.



National and International  
Accreditations and Partnerships

General Directorate of Civil Aviation  
Authorized Training Institution

- Passenger Services
- Load Control and Communication
- Ramp
- Cargo and Mail
  - Oversight and Management
  - Safety Management System
  - Aviation Security
  - Dangerous Goods

Language Proficiency Service Provider  
and Authorized Exam Center

Aviation Training Course Authorized by  
the Ministry of National Education

IATA Regional Training Partner  
Certificate

IATA Certificate of Accreditation for Air  
Transportation of Dangerous Goods  
Training

IATA Competency Based Training and  
Assessment Provider Accreditation  
(IATA CBTA Provider Certificate of  
Accreditation)



Improving Employee Experience

In order to support employees throughout their  
work life and to improve their experience at Turkish  
Airlines, several practices are carried out throughout  
the process from recruitment to retirement. These  
activities carried out by the Employee Experience  
Department are designed in line with the feedback  
obtained from on-boarding and retention interviews.

The employee satisfaction level is monitored through  
surveys conducted at periodic intervals. As a result  
of the study conducted in 2022, the employee  
satisfaction rate was evaluated as 79%.

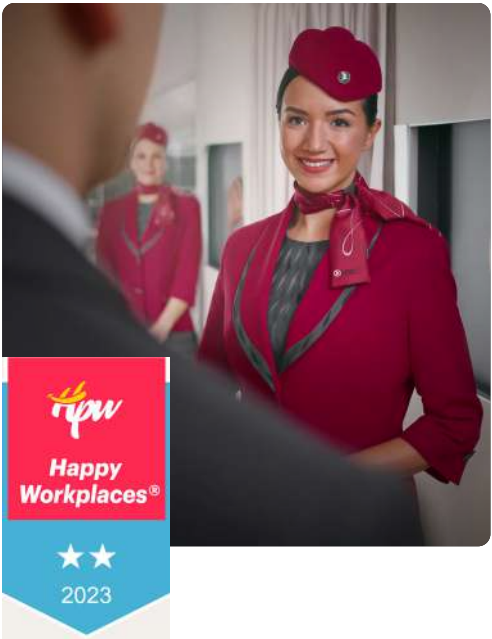
Turkish Airlines employees are provided with a  
wide range of benefits such as a comprehensive  
service network, catering, private health insurance,  
private health insurance discounts for employee  
families, maternity, breastfeeding, funeral service  
and marriage leave and allowances, extended  
maternity leave, nursery care benefits, discounted  
travel opportunities and contracted institutions.  
On the other hand, transportation, nutrition and

In 2022, within the scope of the Happy Place  
to Work Türkiye Survey, thanks to our leading  
employee experience practices and people-  
oriented approach, we were awarded the  
Outstanding Employee Experience Certificate  
and Award and ranked among

"Türkiye's Happiest  
Workplaces".

office ergonomics practices are designed with an  
employee-oriented approach. The Recognition and  
Appreciation Platform enables employees to interact  
with and support each other.

The intra-company mobile application, through  
which employees can share their work priorities and  
development plans with their managers, aims to  
increase collaboration within the organisation and  
make talents visible. In addition, through this mobile  
application, employees can be informed about brand  
agreements, surprise gifts, club activities and internal  
notifications.



Employee Retention

Turkish Airlines aims to reduce employee turnover  
rate by keeping employee loyalty high through  
periodic needs and expectations analyses. Thus,  
it is aimed to keep the qualified human resources  
within the company. Procedures and policies such as  
Human Resources Procedure, Employee Experience  
Procedure and Employee Experience Map are  
followed in order to utilise the relations of employees  
with the Company more effectively and efficiently.

During the reporting period, 2,910 new colleagues  
joined the Turkish Airlines workforce and 922  
employees left their jobs. Of the new recruits,  
1,832 were employed as flight crew and 1,078 were  
employed in non-flight crew roles. In 2022, the  
employee turnover rate was 3% in total, with 1.5%  
for male and female employees working in domestic  
operations. In international operations, employee  
turnover rate was 3% for female employees and 4%  
for male employees, totalling 7%. Thus, in 2022, the  
employee turnover rate across the Incorporation,  
including domestic and international operations, was  
realised as 3.2%.

In the reporting period, a new title scale was created  
by changing the existing job descriptions by reaching  
an agreement with the Trade Union. It was aimed to  
improve employee motivation by designing salary  
levels based on the new title scale. In parallel with  
this, a similar practice was implemented for local  
employees working in foreign operations.

The employee  
turnover rate across  
the Incorporation,  
was realised as



3.2%.

## Employee Volunteering

Turkish Airlines employees meet in various independent communities and associations to carry out voluntary activities in their areas of interest and sensitivity. The Incorporation supports these voluntary activities of the employees. One of these volunteer groups is the Family Support Team.

The Family Support Team consists of volunteer company personnel to provide organised friendship support to the families, relatives and relatives of employees in various crisis situations. The Family Support Team has an average of 700 members, although the number of members is constantly changing due to its voluntary nature and the need for psychological support. All volunteers are trained on family support processes and psychological trauma by psychologists every two years.

During the reporting period, the Turkish Red Crescent was supported with the voluntary participation of ground personnel and sales office employees.



## Flight Training Center

Turkish Airlines Flight Training Center provides training services at international standards to domestic and international customers as well as the employees of the Incorporation with national and international authorizations obtained as a result of audits conducted by Turkish Civil Aviation and many foreign civil aviation authorities. In 2022, approximately 45,000 people were trained under the roof of the Flight Training Presidency, including the cockpit crew, cabin crew, dispatcher and load master trainees of the Incorporation.

Trainings are provided in two campuses comprising 24 actual simulators (27 simulator competencies), 75 classrooms and a conference hall in an indoor area of 41 thousand m². With a total of 650 instructors, 522 of whom are specialised in their respective branches, 522 of whom are in charge of cockpit and 128 of whom are in charge of cabin trainings, and 367 personnel, 1,650 trainees can be served at the same time. With its technical capacity and training staff, the Flight Training Centre is among the most comprehensive training centres in Europe, Middle East and Africa.



### Flight Training Centre Equipment

#### Cockpit Trainings

- 24 Full Flight Simulators (FFS)
- 7 Flight Training Devices (FTD)
- 2 B737/A320/A330 VSIM classrooms with a capacity of 16X2 = 32 students
- 6 Computer Based Training (CBT) classes

#### Cabin Trainings

- 3 Mock-Ups
- 1 Fire Fighting Training Device (RFFT)
- 6 Door and Window Training Devices
- B777, B787 and A320 Evacuation Slide
- 4 Emergency Station Zones
- Ditching Pool
- 6 Cabin Service Training Devices (CST)

In 2022,  
**310,876**  
hours of training was  
provided for cabin crew and  
**610,469**  
hours of training was  
provided for cockpit crew at  
the Flight Training Centre.



In line with international accreditations, ground, flight and practical trainings are provided for cabin and cockpit crews to maintain their competencies and acquire new competencies. In addition, dispatcher, load master and SAFA trainings are provided and training services are provided to local and foreign companies. All flight crew trainings aim to increase knowledge, skills and competences in areas such as communication, taking responsibility, leadership and team management, problem solving and sound decision making. Training programmes are regularly updated to ensure that trainings meet national and international standards, and the continuity of authorisations is ensured.

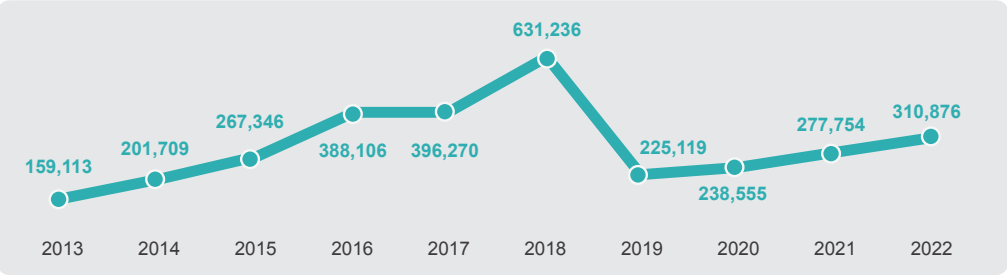
At the THY First Aid Training Centre, first aid identification cards and certificates approved by the Ministry of Health are issued to flight crews as well as employees working in ground units. First aid instructors are trained at the THY First Aid Instructor Training Centre. The Private Flying Bird Pilot Training Course has a licence to open and operate a workplace, and personnel are provided with a training of trainer course approved by the Ministry of National Education. On the other hand, the relevant personnel are also provided with practical trainings to increase fuel efficiency.

In 2022, 310,876hours of training was provided for cabin crew and 610,469 hours of training was provided for cockpit crew at the Flight Training Centre.

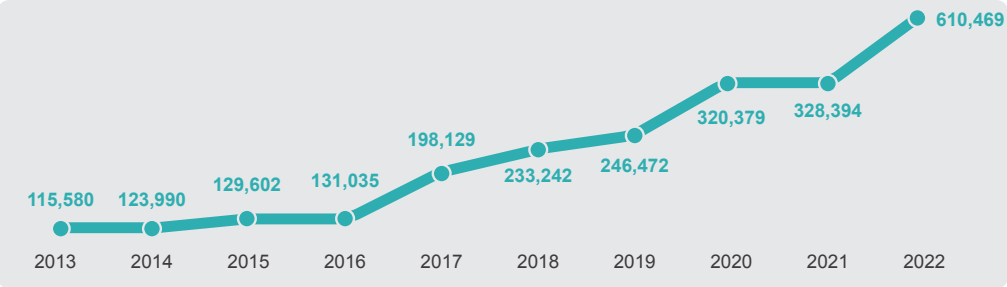
In addition to meeting the internal training needs of the Incorporation, the Centre continues to provide services to 86 customers. Flight Training Centre generated USD 6,025,000 revenue from training sales in 2022. It is expected to generate USD 5 million in revenue from training sales in 2023. Flight Training Directorate has added an interface to [pisano.com.tr](http://pisano.com.tr) to report nonconformities that may affect safety, which have arisen or are likely to arise in the training of its customers, and to examine and follow up the relevant notifications.

Within the scope of R&D studies regularly conducted every year in aviation psychology, the research titled "A Psychosocial Perspective on Unstable Approach: A Sequential Mixed Methods Study" was presented at the 34th European Aviation Psychology conference held in Gibraltar in September 2022. The research was published with the same title in the journal "Transportation Research Procedia" of Elsevier International in December 2022.

Cabin Crew Training Hours



Cockpit Crew Training Hours



Flight Training Centre Accreditations

- Flight Simulation Training Device (EASA FSTD) Organisation accreditation
- DGCA approved ATO Training accreditation
- ATO and Cabin Crew Basic Training authorisations issued by Civil Aviation Authorities such as Iraq, Kuwait, Libya, Rwanda, Tajikistan
- DGCA Approved Cabin Crew Basic Training Organisation accreditation
- Authorisation to provide practical training with DGCA Approved CEET certificate
- European Resuscitation Council approved Defibrillator Training accreditation
- Ministry of Health approved First Aid Basic, Update and OED Training accreditation
- Ministry of Health approved First Aid Trainer's Training accreditation
- Hazardous Material Rules Training authorisation
- Accreditation to provide "Training of Trainer" approved by the Ministry of National Education
- Accreditation to provide DGCA approved Aircraft Security Training
- Accreditation to provide DGCA approved SAFA Ramp Auditor Training
- Accreditation to provide DGCA approved Flight Dispatcher Training



## Performance Indicators

Financial and Operational Performance	2018	2019	2020	2021	2022
Net Revenue (million USD)	12,855	13,229	6,734	10,686	18,426
Passenger Revenue	10,918	11,167	3,792	6,390	14,291
Cargo Revenue	1,647	1,688	2,722	4,015	3,735
Other Revenue	290	374	220	281	400
Operating Profit (million USD)	1,191	876	-255	1,414	2,779
EBITDAR (million USD)	3,349	3,107	1,866	3,744	5,377
EBITDAR Margin (%)	26.0%	23.5%	27.7%	35.0%	29.2%
Net Debt	7,687	10,107	14,120	11,596	8,714
Total Assets	20,732	24,724	25,530	26,537	30,944
Total Investments	2,940	4,315	4,903	4,193	5,499
Fleet Investments	1,291	2,402	2,926	2,061	2,879
Leasing Repayments	906	974	1,541	1,786	1,655
Other	743	939	436	346	965
Return on Equity (%)	13%	11%	-16%	14%	32.87%
Total Flight Miles (nautical mile)	467,942,609	500,095,380	254,970,056	379,947,624	515,501,080
Available Seat*Km (million Km)	182,031	187,717	75,009	127,781	201,735
Revenue Passenger*Km (million Km)	149,169	153,202	53,253	86,708	162,665
Revenue Passenger (person)	75,167,807	74,282,064	27,951,286	44,791,503	71,817,525
Passenger Load Factor (%)	81.9%	81.6%	71.0%	67.9%	80.6%
Flight Destinations	310	322	324	333	342
Number of Landings	511,064	507,352	240,353	357,206	472,707
Distance Flown Km (thousand)	866,630	926,224	472,246	703,643	954,708
Cargo & Mail Carried (ton)	1,412,423	1,544,341	1,494,276	1,880,949	1,678,953
Excess Baggage Carried (ton)	7,717	11,848	7,513	22,181	31,519
Baggage Irregularity Rate (‰)	5.2‰	5‰	3.9‰	3.7‰	5.3‰
Turkish Airlines-Only International Routes	146	154	155	142	152
Turkish Airlines-Only International Routes within Top 20 Airline Companies	209	219	216	203	223
Turkish Airlines-Only International Destinations within Top 20 Airline Companies	30	30	24	22	21
Fleet Data					
Fleet average age	8.20	8.33	8.44	8.50	8.70
Total number of aircraft	332	350	363	370	394
Number of narrow-body aircraft	218	230	234	246	263
Number of wide-body aircraft	92	97	104	104	110
Number of cargo aircraft	22	23	25	20	21
R&D Expenditure (USD)	11,800,612	7,691,853	8,857,844	4,254,596	8,611,503

Financial and Operational Performance	2018	2019	2020	2021	2022
Number of R&D Employees	666	752	719	829	442
Number of R&D Projects	33	49	40	20	92
Direct Economic Value Generated (million USD)	12,855	13,229	6,734	10,686	18,426
Direct Economic Value Distributed (million USD)	11,686	12,644	7,264	9,411	15,710
Operating Costs	9,827	10,477	6,103	8,051	13,473
Salaries and Benefits Paid to Employees	1,772	2,067	1,097	1,298	2,140
Dividend Paid	0	0	0	0	0
Taxes and Similar Payments to the Government	41	52	41	37	57
Donation, Sponsorship and Corporate Responsibility Expenditures	46	48	23	25	40
Tax Paid					
Republic of Türkiye (million TL)	773,139,271	1,441,302,581	898,893,051	1,472,755,988	4,139,375,929
Other States (million TL)	59,865,126	66,849,176	59,912,800	54,248,048	241,316,083
Airports (million USD)	1,108,276,906	1,120,050,112	425,535,737	740,139,335	1,310,017,369
Local Procurement Rate by Expenditure (%)	79.56%	69.01%	76.55%	62.50%	89.32%
Local Procurement Rate by Number of Suppliers (%)	-	73.62%	78.64%	76.80%	74.16%
Code of Ethics, Anti-Bribery and Anti-Corruption Training					
Total training participants (number of people)	5,910	4,320	2,420	6,207	9,463
Total training hours (person*hour)	2,955	2,160	1,210	3,103	4,416
Ethical Line Grievances (number)	245	278	134	179	436
Discrimination Grievances (number)	9	5	2	4	1
Total Amount of Significant Cash Fines Paid (million TL)	-	-	-	1.1	-
Non-monetary Sanctions (number)	-	-	-	1	-
Incentives from Government and International Institutions (million USD)	62	110	164	187	183
Employee Suggestion System Data					
Number of Employees Giving Suggestions (number)	6,268	4,316	7,144	507	1,560
Number of Suggestions Received From Employees (number)	16,716	21,995	24,259	25,129	3,548
Number of Suggestions Implemented (number)	659	1,100	1,225	1,227	713
Financial Benefit from Employee Suggestions (million USD)	55	132	163	185	250

Environmental Performance	2018	2019	2020	2021	2022
Total Energy Consumption (GJ)	236,312,657	247,848,257	126,067,694	187,326,898	252,648,196
Direct Energy Consumption (GJ)					
Aviation Fuel	236,005,081	247,382,766	125,592,531	186,711,059	251,890,513
Natural Gas	143,324	142,719	128,241	124,505	241,942
Gasoline and Diesel	34,187	27,536	16,761	1,675	25,332
Indirect Energy Consumption (GJ)	127,828	252,226	210,985	326,487	457,924
Conventional Electricity	127,828	252,226	210,985	326,487	394,003
Renewable Electricity	-	-	-	-	63,921
Other Resources	2,237	43,010	119,175	163,173	32,484
Fuel Consumption					
Aviation Fuel (Ton)	5,351,589	5,609,587	2,847,903	4,233,811	5,711,803
Natural Gas (m³)	4,149,367	4,131,857	3,712,707	3,604,558	7,004,464
Gasoline (liter)	6,640	2,091	3,489	265,936	404,554
Diesel (liter)	940,453	774,876	469,721	413,430	349,411
Fuel Saving (GJ)	1,305,713	2,447,197	1,003,716	1,635,316	2,539,366
Fuel Saving (Ton)	29,608	55,492	22,760	37,082	57,581
Fuel Efficiency (Fuel consumption per 100 Available Seat Km) (Litres/100 ASK)	3.30	3.26	3.21	3.16	3.10
Energy Intensity					
Electricity Consumption per Employee (GJ/Employee)	9.17	11.19	8.75	8.09	8.89
Electricity Consumption per Surface Area (GJ/m²)	0.45	0.64	0.49	0.42	0.60
Natural Gas Consumption per Surface Area (GJ/m²)	0.22	0.43	0.45	0.74	0.44
Total Greenhouse Gas Emissions (Tons CO <sub>2</sub> e)	17,028,599	17,877,124	9,094,999	16,591,244	22,983,093
Category 1 Emissions	17,004,857	17,834,081	9,059,793	13,462,858	18,170,030
Category 2 Emissions	23,742	43,043	35,205	56,377	64,219
Category 3-4-5-6 Emissions	-	-	-	3,072,009	4,748,844
Greenhouse Gas Emission Savings Provided by Efficiency Projects (Ton CO <sub>2</sub> )	94,069	179,740	72,312	117,815	182,987
Carbon Credits Surrendered to the Authorities (tons CO <sub>2</sub> )	10,617	13,240	13,883	13,968	8,968
Emission Credits Surrendered Under EU ETS	10,617	13,240	13,835	10,838	6,619
Emissions Credits Surrendered Under CH ETS	-	0	48	0	52
Emissions Credits Surrendered Under UK ETS	-	-	-	3,130	2,297
Passenger Flight Offset (number)	668	686	669	672	476
NOx Emissions (ton)	59,001	61,846	31,398	46,678	63,040
Total Water Withdrawal (m³) - Municipal water	56,608	64,903	38,022	255,238	364,508
Water Withdrawal per Person (m³/person)	-	16.91	14.73	23.70	13.42
Waste Water Discharge (m³) (Waste Water Channel)	-	-	-	237,418	357,345

Environmental Performance	2018	2019	2020	2021	2022
Solid Wastes (Ton)	498	1,577	1,269	1,608	2,313
Recycled Non-hazardous Wastes	124	1,249	1,163	1,449	2,103
Recycled Hazardous Wastes	115	153	36	105	128
Disposed Non-hazardous Wastes	0	0	0	0	0
Disposed Hazardous Wastes	1.00	1.00	0.60	0.50	0.90
Recycled Packaging Wastes	258	174	69	53.50	81
Products with Reduced Environmental Impacts (unit)					
Forest Stewardship Council (FSC) Certified Toy Sets	2,268,000	1,647,700	0	323,925	677,809
Biodegradable and Compostable Headphone Packaging in accordance with TS EN 13432 Standard	37,698,863	37,790,212	9,872,042	16,722,548	30,307,783
TS EN 13432 Certified Biodegradable and Compostable Blanket Packaging	13,497,804	20,791,553	4,412,240	6,223,785	1,552,460
OEKO-TEX 100 Certified Passenger Blankets	1,509,204	2,181,610	572,215	1,144,145	1,552,460
Vegan Cosmetic Sets	-	-	-	63,471	1,313,320
Leaks and Spills					
Total Incidents (number)	0	0	0	0	0
Amount of Leaks and Spills (ton)	0	0	0	0	0
Environmental Management Expenditure (USD)	-	8,211,709	11,477,784	8,433,014	20,062,805
Environmental Trainings					
Training Participants (person)	-	-	-	3,227	8,425
Company Employees	-	-	-	2,731	8,350
Contractor Employees	-	-	-	496	75
Training Duration (person*hour)	-	-	-	2,210	6,319
Company Employees	-	-	-	1,946	6,263
Contractor Employees	-	-	-	264	56
Supplier Environmental Audits					
Number of Suppliers Subjected to Environmental Audit	0	0	0	52	42
Number of Suppliers Audited for the First Time	0	0	0	0	0
Number of Suppliers Failed in Audit	0	0	0	0	0
Number of Suppliers whose Contract was Terminated After the Audit	0	0	0	0	0
Number of Suppliers Given Development Program After the Audit	0	0	0	0	11
Number of Suppliers Completing the Development Program	0	0	0	0	11
Number of GHG Awareness Training Participants	5,033	3,965	2,522	1,487	3,586
Number of Waste Management Training Participants	0	342	22,459	3,227	5,851



Employee Demographics	2018	2019	2020	2021	2022
Total Workforce (number)	30,874	34,222	33,583	33,191	37,379
Direct Employment	26,739	29,491	28,668	27,532	29,520
Female	12,332	13,579	13,129	12,682	13,804
Male	14,407	15,912	15,539	14,850	15,716
Contractor Employees	4,135	4,731	4,915	5,659	7,859
Female	941	1,096	1,099	1,167	1,214
Male	3,194	3,635	3,816	4,492	6,645
Employee Category (number)					
Cockpit Crew	5,213	5,839	5,756	5,561	5,784
Female	241	297	303	296	318
Male	4,972	5,542	5,453	5,265	5,466
Cabin Crew	10,513	12,247	12,281	12,033	13,222
Female	7,161	8,243	8,105	7,910	8,770
Male	3,352	4,004	4,176	4,123	4,452
Technical Team - Engineer	413	402	368	353	471
Female	170	177	169	171	221
Male	243	225	199	182	250
Technical Team - Technician	172	203	189	152	173
Female	11	11	11	1	2
Male	161	192	178	151	171
Non-flight Personnel	11,013	11,405	10,631	9,938	10,514
Female	4,930	5,039	4,721	4,476	4,715
Male	6,083	6,366	5910	5,462	5,799
Total Workforce by Contract Type (number)					
Indefinite Term Employment Contract	25,472	28,214	27,580	26,519	28,404
Female	11,756	12,999	12,640	12,232	13,359
Male	13,716	15,215	14,940	14,287	15,045
Temporary Employment Contract	1,118	1,167	1,081	1,007	866
Female	505	519	483	444	319
Male	613	648	598	563	547
Part-time Employees	149	110	7	6	250
Total Workforce by Education Level (number)					
Primary education	45	74	68	48	42
High school	4,443	5,024	4,486	3,997	4,193
University and Above	22,251	24,393	24,114	23,487	25,285
Total Workforce by Age Groups					
18-30	9,914	10,658	8,632	6,456	6,875
30-50	15,590	17,484	18,713	19,705	21,116
50+	1,235	1,349	1,323	1,371	1,529
Senior Management Structure (number)					
Female	54	61	59	56	66
18-30	1	1	0	0	0

Employee Demographics	2018	2019	2020	2021	2022
30-50	50	56	56	49	61
50+	3	4	3	7	5
Male	553	564	560	528	506
18-30	29	13	7	1	1
30-50	487	510	514	487	467
50+	37	41	39	40	38
Mid-level Management Structure (number)					
Female	482	516	496	498	506
18-30	33	34	25	21	11
30-50	428	459	448	453	468
50+	21	23	23	24	27
Male	1,041	1,117	1,066	1,095	1,085
18-30	141	101	66	53	46
30-50	855	963	945	987	963
50+	45	53	55	55	76
New Recruits (number)					
Female	1,437	1,781	118	131	1,521
Male	2,463	2,161	416	235	1,389
Employees Left (number)					
Female	473	535	569	578	399
Male	763	654	789	924	523
Turn Over (%)	4.8%	4.2%	4.6%	5.3%	3.2%
Employees with Disabilities					
Female	56	60	60	57	56
Male	161	175	170	155	150
Number of Disabled Employees in Manager Position	20	24	22	23	26
Workforce Under the Collective Bargaining Agreement (number)	23,015	25,513	25,054	24,307	22,594
Ratio of Female Candidates Applying for a Job (%)	41%	61%	0%	0%	58%
Ratio of Female Candidates in Recruitment Interviews (%)	38%	62%	0%	0%	64%
Shortlisting Rate of Candidates in the New Employment Process (%)	8%	5%	0%	0%	5%
Female	29%	57%	0%	0%	58%
Male	71%	43%	0%	0%	42%
Ratio of Women Promoted During the Year (%)					
Domestic	50%	49%	33%	34%	23%
Abroad	0%	0%	0%	19%	20%
Ratio of Female Employees Promoted to the Management Position for the First Time (%)					
Domestic	50%	50%	40%	17%	37%
Abroad	0%	0%	0%	10%	83%
Ratio of Female Employees in Income Generating Positions (%)	8%	8%	7%	6%	0.7%
Ratio of Female Employees in Engineering Positions (%)	42%	45%	47%	49%	47%

Social Performance	2018	2019	2020	2021	2022
Number of Employees on Maternity/Paternity Leave					
Female	1,063	907	823	628	119
Male	791	811	531	603	177
Number of Employees Returning from Maternity/Paternity Leave					
Female	906	756	677	550	198
Male	792	815	534	598	177
Number of Employees Who Haven't Left Work for the Last 12 Months After Returning from Maternity Leave					
Female	897	739	623	532	197
Male	794	815	517	588	177
Number of Female Employees Benefiting from the Right to Work Part-Time After Childbirth	2	4	0	7	6
Number of Female Employees Benefiting from Partial Employment Right after Childbirth	32	54	61	52	121
Employee Trainings- Participants (number)	186,222	410,210	358,637	378,148	468,596
Ground/Non-flight Personnel	87,412	135,831	153,519	136,023	200,342
Cockpit Crew	17,135	54,930	54,968	49,088	86,973
Cabin Crew	81,675	219,449	150,150	193,037	181,281
Employee Trainings - Total Hours (personxhours)	-	-	-	-	254,242
Ground/Non-flight Personnel	-	-	-	-	158,869
Cockpit Crew	-	-	-	-	6,852
Cabin Crew	-	-	-	-	88,522
Female	-	-	-	-	126,839
Male	-	-	-	-	127,403
Contractor Employee Trainings- Participants (number)	-	-	-	-	5,340
Female	-	-	-	-	544
Male	-	-	-	-	4,796
Contractor Employee Trainings - Total Hours (personxhours)	-	-	-	-	39,586
Female	-	-	-	-	3,657
Male	-	-	-	-	35,929
Accident Frequency Rate (by 1,000,000 Working Hours)	-	-	-	-	15.58
Direct Employment	8.6	12.69	4.57	7.82	14.36
Contractor Employees	-	-	-	-	20.64
Number of Injuries	-	-	-	-	1,371
Direct Employment	-	-	-	-	1,019
Contractor Employees	-	-	-	-	352
Accident Severity Rate (by 1,000,000 Working Hours)	-	-	-	-	116.27
Direct Employment	172	123	37	63	121.09
Contractor Employees	-	-	-	-	96.18
Number of Lost Days	-	-	-	-	10,232.5
Direct Employment	-	-	-	-	8,592.5
Contractor Employees	-	-	-	-	1,640
Absenteeism Rate (%)	-	2.69	1.47	1.97	3.36
Occupational Disease Rate (1.000.000 Çalışma Saati Bazında)	0	0	0	0	0
Direct Employment	0	0	0	0	0
Contractor Employees	0	0	0	0	0
Number of Occupational Diseases	0	0	0	0	0
Direct Employment	0	0	0	0	0
Contractor Employees	0	0	0	0	0
Number of Work Related Fatality	0	0	0	0	0
Direct Employment	0	0	0	0	0
Contractor Employees	0	0	0	0	0

Social Performance	2018	2019	2020	2021	2022
OHS Trainings - Number of Participants					
Direct Employment	-	14,951	20,563	153,579	91,104
Contractor Employees	1,165	95	67	159	6,057
OHS Trainings - Total Hours (personxhours)	-	-	-	106,727	66,003
Direct Employment	-	-	-	-	24,461
Contractor Employees	-	-	-	-	41,542
Number of Field Surveillance Studies (number)	-	426	204	632	460
Number of Physician Activities (number)	157,016	161,992	125,326	117,699	184,219
Number of Disaster Emergency Trainings (number)	20	24	10	19	48
Number of Disaster Emergency Training Participants (person)	273	400	145	215	1,428
Disaster Emergency Training Hours (personxhours)	-	-	-	-	5,097
Number of Disaster Emergency Drills	17	58	8	97	96
Number of Employees Receiving Child Care/Elderly Care Support	1,373	2,660	2,912	2,922	3,000
Ratio of Activity Facilities with Lactation Room (%)	40%	40%	50%	50%	55%
Number of Employees/Managers Receiving Training on Prevention of Harassment, Mobbing, Oppression and Violence					
Managers	100	20	414	122	0
Non-managers	5,879	4,843	21,948	6,085	0
Customer Satisfaction Rate (%)	79%	75%	77%	83%	83%
Number of Employees Received Training on Human Rights Policies and Procedures					
Cockpit Crew	607	390	349	59	0
Cabin Crew	1,130	1,691	543	47	0
Security Personnel	49	19	2	1	0
Other Ground/Support Team	1,558	1,071	396	210	0
Number of Employee Complaint Regarding Discrimination, Harassment, Mobbing, Oppression and Violence	14	48	23	79	63
Female	2	8	6	25	22
Male	2	15	5	33	28
Anonymous	10	25	12	21	13
Number of Business Interruptions Due to Strike (number)	0	0	0	0	0
Number of Non-Working Days Due to Strike (number)	0	0	0	0	0
Flight Safety Trainings					
Training Participants (person)	10,890	12,226	13,595	13,300	13,649
Cockpit Crew	932	1,476	2,620	936	2,175
Cabin Crew	2,634	2,992	2,528	2,432	5,884
Other Employees	7,324	7,758	8,447	9,932	5,590
Training Duration (person*hour)					
Cockpit Crew	533	816	1,321	470	2,719
Cabin Crew	1,601	2,280	1,898	1,502	7,355
Other Employees	14,329	24,048	12,253	20,531	6,988
Flight Security Data					
Number of Aircraft Accidents (number)	-	-	0	0	0
Sanctions for Non-Compliance with Flight Safety Regulations (number)	-	-	0	0	0
Number of Flight Security Reports (number)	2,200	2,063	3,760	5,577	4,380
SAFA Rate (%)	0,215	0.177	0.318	0.054	0.143
Supplier Audit Rate (%)	-	-	-	-	55.8%

GRI Content Index



2023

Statement of use	Türk Hava Yolları Anonim Ortaklığı, has reported in accordance with the GRI Standards for the period 1 January 2022 - 31 December 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	-

GRI Standard / Other Source	Disclosure	Location	Omission		
			Requirement(S) Omitted	Reason	Explanation
GRI 2: General Disclosures 2021	2-1 Organizational details	About the Report (p.2)			
	2-2 Entities included in the organization's sustainability reporting	About the Report (p.2)			
	2-2 Entities included in the organization's sustainability reporting	About the Report (p.2)			
	2-4 Restatements of information	There is no restated information in the report.			
	2-5 External assurance				
	2-6 Activities, value chain and other business relationships	Subsidiaries And Affiliates (p.5); Brands (p.6)			
	2-7 Employees	Employee Demographics (p.88)			
	2-8 Workers who are not employees	Employee Demographics (p.88)			
	2-9 Governance structure and composition	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-10 Nomination and selection of the highest governance body	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-11 Chair of the highest governance body	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-12 Role of the highest governance body in overseeing the management of impacts	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-13 Delegation of responsibility for managing impacts	Sustainability Management Structure (p.23-24)			
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Management Structure (p.23-24)			
	2-15 Conflicts of interest	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-16 Communication of critical concerns	Sustainability Management Structure (p.23-24)			
	2-17 Collective knowledge of the highest governance body	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-18 Evaluation of the performance of the highest governance body	Structure and Working Principles of the Board Of Directors (p.15-16)			

GRI Standard / Other Source	Disclosure	Location	Omission		
			Requirement(S) Omitted	Reason	Explanation
GRI 2: General Disclosures 2021	2-19 Remuneration policies	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-20 Process to determine remuneration	Structure and Working Principles of the Board Of Directors (p.15-16)			
	2-21 Annual total compensation ratio	No disclosure is made due to the principle of confidentiality.			
	2-22 Statement on sustainable development strategy	Sustainability Priorities (p.25); Sustainability Strategy (p.26-27)			
	2-23 Policy commitments	Sustainability Strategy (p.26-27)			
	2-24 Embedding policy commitments	Sustainability Strategy (p.26-27)			
	2-25 Processes to remediate negative impacts	Reporting Abuses (p.20)			
	2-26 Mechanisms for seeking advice and raising concerns	Reporting Abuses (p.20)			
	2-27 Compliance with laws and regulations	Legal Compliance and Fair Competition (p.21)			
	2-28 Membership associations	Corporate Memberships (p.35)			
	2-29 Approach to stakeholder engagement	Stakeholder Engagement (p.32-34)			
	2-30 Collective bargaining agreements	Human and Employee Rights (p.81)			
Material topics					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Sustainability Priorities (p.25)			
	3-2 List of material topics	Sustainability Priorities (p.25)			
Climate Change					
GRI 3: Material Topics 2021	3-3 Management of material topics	Combating the Climate Change (p.37-38)			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	302-2 Energy consumption outside of the organization	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	302-3 Energy intensity	Fuel Efficiency (p.43-45)			
	302-4 Reduction of energy consumption	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	302-5 Reductions in energy requirements of products and services	Fuel Efficiency (p.43-45)			



GRI Standard / Other Source	Disclosure	Location	Omission		
			Requirement(S) Omitted	Reason	Explanation
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water Consumption (p.53)			
	303-2 Management of water discharge related impacts	Water Consumption (p.53)			
	303-3 Water withdrawal	Water Consumption (p.53)			
	303-4 Water discharge	Water Consumption (p.53)			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	305-2 Energy indirect (Scope 2) GHG emissions	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	305-3 Other indirect (Scope 3) GHG emissions	Energy Consumption and Greenhouse Gas Emissions (p.42)			
	305-4 GHG emissions intensity	Fuel Efficiency (p.43-45)			
Waste Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Waste Management (p.57)			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Environmentally Friendly Material Preferences (p.55);			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Waste Management (p.57)			
	306-2 Management of significant waste related impacts	Waste Management (p.57)			
	306-3 Waste generated	Waste Management (p.57)			
	306-4 Waste diverted from disposal	Waste Management (p.57)			
Fleet Modernization and Development					
GRI 3: Material Topics 2021	3-3 Management of material topics	Fleet Modernization (p.60)			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Fleet Modernization (p.60)			
Flight Safety and Security					
GRI 3: Material Topics 2021	3-3 Management of material topics	Flight Safety and Security (p.62-66)			
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Flight Safety and Security (p.64)			
Employee Health and Safety					
GRI 3: Material Topics 2021	3-3 Management of material topics	Employee Health and Safety (p.67-69)			

GRI Standard / Other Source	Disclosure	Location	Omission		
			Requirement(S) Omitted	Reason	Explanation
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Employee Health and Safety (p.67)			
	403-2 Hazard identification, risk assessment, and incident investigation	Employee Health and Safety (p.67)			
	403-5 Worker training on occupational health and safety	Employee Health and Safety (p.68)			
	403-6 Promotion of worker health	Employee Health and Safety (p.67-69)			
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employee Health and Safety (p.67-69)			
	403-8 Workers covered by an occupational health and safety management system	Employee Health and Safety (p.67-69)			
	403-9 Work-related injuries	Performance Indicators (p.89)			
	403-10 Work-related ill health	Performance Indicators (p.89)			
Business Continuity					
GRI 3: Material Topics 2021	3-3 Management of material topics	Business Continuity (p.70)			
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	Business Continuity (p.70)			
Digitalization					
GRI 3: Material Topics 2021	3-3 Management of material topics	Digital Transformation (p.72)			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Digital Transformation (p.72)			
Changes in Customer Expectations and Behaviour					
GRI 3: Material Topics 2021	3-3 Management of material topics	Customer Satisfaction Assessments (p.74)			
Talent Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Fair Employer (p.78-85)			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Performance Indicators (p.88)			
	401-3 Parental leave	Performance Indicators (p.89)			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Fair Employer (p.82, 84-85)			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Structure and Working Principles of the Board Of Directors (p.15-16); Performance Indicators (p.88)			

# GHG Verification Statement

**HEAD OF SURVEILLANCE AND INSPECTION CENTER**  
**GREENHOUSE GAS VERIFICATION STATEMENT**



<b>Certificate Number</b>	SER.006.2023/B00029																																				
<b>Report Number</b>	SER.006.2023/R00020																																				
<b>Date of Verification Statement</b>	24.08.2023																																				
<b>Company Title</b>	Türk Hava Yolları Anonim Ortaklığı																																				
<b>Company Address</b>	Yeşilköy Atatürk Hava Limanı Bakırköy/İstanbul																																				
<b>Purpose of Verification</b>	Verifying the Greenhouse Gas Statement of the organization which is prepared according to TS EN ISO 14064-1:2019 standard for the period 01.01.2022 - 31.12.2022 and verifying Total Greenhouse Gas Emissions which are in accordance with the requirements of the TS EN ISO 14064-3:2019 standard in "Reasonable Assurance Level".																																				
<b>Verification Methodology</b>	Greenhouse Gas Statement Verification is carried out in accordance with requirement of TS EN ISO 14064-3:2019 standard.																																				
<b>Techniques of Verification</b>	Greenhouse gas information system controls and greenhouse gas data / information are evaluated by document review, site visits and recalculation methods and on the basis of the evidence of Greenhouse Gas Statement is verified.																																				
<b>Verification Criteria</b>	TS EN ISO 14064-1:2019																																				
<b>Verification Period</b>	01.01.2022 - 31.12.2022																																				
<b>Base Year</b>	2022																																				
<b>Organizational Boundaries</b>	See the annex of verification statement.																																				
<b>Types of Greenhouse Gases</b>	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC, SF <sub>6</sub>																																				
<b>Verified GHG Emissions and Removals</b>	<table><tr><td>Category 1</td><td>Direct Emissions</td><td>18.170.029,62 tons CO<sub>2</sub>e</td></tr><tr><td>Category 2</td><td>Energy Indirect Emissions (Location based)</td><td>64.219,33 tons CO<sub>2</sub>e</td></tr><tr><td>Category 2</td><td>Energy Indirect Emissions (Market based)</td><td>56.406,69 tons CO<sub>2</sub>e</td></tr><tr><td>Category 3</td><td>Indirect Emissions due to Transportation</td><td>51.778,53 tons CO<sub>2</sub>e</td></tr><tr><td>Category 4</td><td>Indirect Emissions from Products/Services of the Organization</td><td>3.993.555,21 tons CO<sub>2</sub>e</td></tr><tr><td>Category 5</td><td>Indirect Emissions related to use of Products</td><td>703.509,98 tons CO<sub>2</sub>e</td></tr><tr><td>Category 6</td><td>Other Indirect Emissions</td><td>-</td></tr><tr><td></td><td>Emissions due to Biomass Combustion</td><td>32,25 tons CO<sub>2</sub>e</td></tr><tr><td></td><td>GHG Removals</td><td>-</td></tr><tr><td></td><td>Carbon Credits</td><td>2.297 tons CO<sub>2</sub>e</td></tr><tr><td></td><td></td><td>(ETSWAP),</td></tr><tr><td></td><td></td><td>6.671 tons CO<sub>2</sub>e (Deutsche Emissionshandelsstelle)</td></tr></table>	Category 1	Direct Emissions	18.170.029,62 tons CO <sub>2</sub> e	Category 2	Energy Indirect Emissions (Location based)	64.219,33 tons CO <sub>2</sub> e	Category 2	Energy Indirect Emissions (Market based)	56.406,69 tons CO <sub>2</sub> e	Category 3	Indirect Emissions due to Transportation	51.778,53 tons CO <sub>2</sub> e	Category 4	Indirect Emissions from Products/Services of the Organization	3.993.555,21 tons CO <sub>2</sub> e	Category 5	Indirect Emissions related to use of Products	703.509,98 tons CO <sub>2</sub> e	Category 6	Other Indirect Emissions	-		Emissions due to Biomass Combustion	32,25 tons CO <sub>2</sub> e		GHG Removals	-		Carbon Credits	2.297 tons CO <sub>2</sub> e			(ETSWAP),			6.671 tons CO <sub>2</sub> e (Deutsche Emissionshandelsstelle)
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<b>Level of Assurance</b>	Reasonable Assurance Level																																				
<b>Verification Opinion</b>	Verified as Satisfactory																																				

Deputy Director of Environmental Surveillance and Verification



<https://basvuru.tse.org.tr/uye/QRKodDogrulama?code=8BA4AF> You can query this address to check the accuracy and validity of the document.

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15.01.11.FR.010/02.06.2017-7

**HEAD OF SURVEILLANCE AND INSPECTION CENTER**  
**GREENHOUSE GAS VERIFICATION STATEMENT**



### Organizational Boundaries;

<b>Ankara Esenboğa Havalimanı İstasyonu</b>	Ankara Satış Müdürlüğü, Ankara İstasyon Müdürlüğü, Ankara Kargo Müdürlüğü, Anadolujet Başkanlığı
<b>Atatürk Havalimanı İstasyonu</b>	Atatürk Havalimanı II. Bakım Üssü Binası, Atatürk Havalimanı Eski Kargo Binası, Eğitim Başkanlığı Binası, EBI Binası, Eğitim Başkanlığı Ek Bina, Florya İnsan Kaynakları Değerlendirme Merkezi, Florya Uçuş Eğitim Merkezi, Florya Veri Merkezi, Harbiye Satış Müdürlüğü, İkrâm Binası
<b>İstanbul Havalimanı İstasyonu</b>	İstanbul Havalimanı B Bölgesi Enerji Yönetim Binası, İstanbul Havalimanı C Bölgesi Enerji Yönetim Binası, İstanbul Havalimanı De-ciding İstasyon Binası, İstanbul Havalimanı Kargo Hızlı Servis Üssü, İstanbul Havalimanı Mega Kargo, İstanbul Havalimanı Operation Center Binası, İstanbul Havalimanı Uçak İçi Örtüler Deposu, İstanbul Havalimanı ULD Kontrol Merkezi, İstanbul Havalimanı Terminal Binası, Kadıköy Satış Müdürlüğü, K5 Servis Alanı, Levazım Depo Binası, Simülasyon Tesisi, Taksim Satış Ofisi, Teknik Yemekhane Binası, THY Genel Yönetim Binası, THY Teknoloji Binası,
<b>İzmir Adnan Menderes Havalimanı İstasyonu</b>	İzmir Satış Müdürlüğü, İzmir Kargo Müdürlüğü ve İzmir İstasyon Müdürlüğü



<https://basvuru.tse.org.tr/uye/QRKodDogrulama?code=8BA4AF> You can query this address to check the accuracy and validity of the document.

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15.01.11.FR.010/02.06.2017-7

# Reporting Principles

This reporting principles (the “Reporting Principles”) provides information on the data preparation and reporting methodologies of indicators within the scope of the limited assurance in Türk Hava Yolları A.O. (“the Incorporation”, or “Turkish Airlines”) in the Turkish Airlines Sustainability Report 2022 (2022 Sustainability Report).

The indicators include social indicators and environmental indicators. It is the responsibility of the Incorporation’s management to ensure that appropriate procedures are in place to prepare the indicators mentioned above in line with, in all material respects, the principles.

The information included in this guide is for the FY 22 fiscal year ending December 31, 2022 (January 1 - December 31, 2022) and as detailed in the “Key Definitions and Reporting Scope” section comprises only the relevant operations of the Incorporation that are the responsibility of the Incorporation by excluding information about subcontractors.

## General Reporting Principles

In preparing this guidance document, consideration has been given to following principles:

- Information Preparation – to highlight to users of the information the primary principles of relevance and reliability of information; and
- Information Reporting – to highlight the primary principles of comparability / consistency with other data including prior year and understandability / transparency providing clarity to users.

## Key Definitions and Reporting Scope

For the purpose of this report, the Incorporation defines:

Indicator	Scope
Fuel Efficiency (Fuel consumption per 100 Available Seat Km) (Litres/100 ASK)	In the reporting period, it refers to the fuel consumption per km for 100 available seats for all flights of the Incorporation.
Fuel Saving (Ton & GJ)	In the reporting period, it refers to the total amount of fuel saved (Ton& GJ) in all flights of the Incorporation during the reporting period, tracked under 4 main headings (Flight Operation Practices, Technical Maintenance Practices, Flight Planning Practices, Ground Operation Practices)
Accident Frequency Rate (by 1,000,000 Working Hours)	In the reporting period, it refers to the ratio calculated by multiplying the number of accidents tracked within the scope of the social insurance and general health insurance law no. 5510 of the employees directly employed by the Incorporation to the total working hours in the reporting period, by 1,000,000.
Customer Satisfaction Rate (%)	In the reporting period, it refers to the customer satisfaction rate obtained through surveys placed within the survey-supported in-flight entertainment systems on the Incorporation’s flights, excluding cargo flights and shared with the passengers 20 minutes before landing.

## Data Preparation

### Fuel Efficiency

The fuel efficiency indicator is calculated by the following formula.

$$\text{Fuel Efficiency} = \frac{\text{Total Fuel Consumption (liters)}}{\text{Available Seat KM} \times 100}$$

Total Fuel Consumption is calculated as the total fuel (tons) consumed in the flights performed during the reporting period by the aircraft in the fleet of the Incorporation, which is tracked on a ton basis, and converted to liters. (1 ton = 1250 liters)

For cargo aircraft, ACTK (available cargo ton KM) is calculated by multiplying each available ton capacity by the Flight Range KM. For passenger aircraft, ASK (Available Seat KM) is calculated by multiplying each available seat by the Flight Range KM. To calculate the ASK for both passenger and cargo aircraft (ASK2); While ASK data for passenger aircraft is taken directly, ACTK data for cargo aircraft is multiplied by 5 to calculate in the common share. (The assumption that 1 cargo ton capacity corresponds to 5 passenger capacity is considered.)

The number of available seats is obtained from the Incorporation’s “General Flight Analysis Report” on a flight-by-flight basis.

Mileage information for flights is obtained from AODB (Airline Operational Database). The distance between two stations in the database is calculated with the WGS84 (World Geodetic System) method according to the Latitude and Longitude information of the stations.

## Fuel Saving

Fuel saving applications are followed under 4 main titles:

- **Flight Operations Practices:** Auxiliary power unit (APU) usage optimization, engine-out taxi-in, engine-out taxi-out, reduced flap at take-off, reduced flap on landing, idle reverse on landing, monitoring the extra fuel demands, CDA (Continuous Descent Approach)
- **Technical Maintenance Practices:** Monitoring aircraft aerodynamics, APU maintenance costs, lowering spare tires.
- **Flight Planning (Dispatch) Practices:** Effective flight planning system, route optimization, alternate aerodrome selection, extra fuel planning tracking, zero fuel weight tracking, statistical taxi fuel planning, statistical APU fuel planning.
- **Ground Operations Practices:** Aircraft weight reduction, catering weight reduction, potable water loading and monitoring, CG (Center of Gravity) Optimization

Calculations are made according to 16 different fuel saving methods under 4 main applications, aircraft types and the flight rate at which the application is performed.



# Reporting Principles

For applications that provide direct fuel savings, the equation is calculated by multiplying the relevant application rate with the amount of savings per flight, monthly flight cycle and application rate. The amount of savings per application is taken from IATA's Guidance Material and Best Practices for Fuel and Environmental Management document. (Engine-out Taxi-In, Reduced Flap Take-Off etc.)

Formula:

Fuel Saving for the related application = (Savings per flight under the relevant application) \* (Monthly flight cycle) \* (Application rate)

For applications that save fuel compared to the previous period, the equation is calculated by multiplying the difference between the previous period value and the current period value, the weight factor, the number of monthly flights and the monthly average flight time. Weight factor values are calculated as type based using the method in IATA's Guidance Material and Best Practices for Fuel and Environmental Management document. (Alternate Selection, Dispatcher/ops Extra etc.)

Formula:

Fuel Saving for the related application = (The previous period value for the related application – The current period value for the related application) \* (Weight Factor) \* (Monthly flight cycle) \* (Average Monthly Flight Time)

Below formula is used to covert the total fuel savings from ton to GJ;

(Fuel saving in tones) / \* Net Calorific Value (Tj/Gg) (i)

(i) Net Calorific Value is obtained from “2006 IPCC Guidelines for National Greenhouse Gas Inventories” report.

## Accident Frequency Rate

Total Accident number refers to the accidents of directly employed employees within the Incorporation during the reporting period, which are tracked through work accident research forms, work accident information forms and notifications made to the Social Security Institution and recorded on the Ironic Portal platform.

Formula:

Accident Frequency Rate = Number of Accidents \*(1.000.000 / Total Working Hours)

Total working hours is obtained by calculating the number of premium days paid to Social Security Institution for employees subject to 4A and 4C. In this calculation, a working day is taken as 8 hours.

## Customer Satisfaction Rate

It is measured by the question “Overall, how would you rate your travel experience with Turkish Airlines?” in the 16-question passenger satisfaction survey, which is located within the survey-supported in-flight entertainment systems of the aircraft. The questionnaire is evaluated on a 5-point scale. It is calculated by using the Top 2 Box method as the ratio of the passengers who answered the question “Good” and “Very good” to all the passengers who participated in the survey. While calculating the rate, the votes of the passengers who answered "I have no idea" are not taken into account.

Formula:

Customer Satisfaction Rate= [Number of participants who answered the question “Good (4 Points)” and “Very Good (5 Points)” / The total number of passengers who participated in the survey] \*100

## Restatement

The measuring and reporting of sustainability-related data inevitably involves a degree of estimation. Restatements are considered where there is a change in the data of greater than 5 percent at the Incorporation level.

# Limited Assurance Report



## to the Board of Directors of Türk Hava Yolları Anonim Ortaklığı

We have been engaged by the Board of Directors of Türk Hava Yolları Anonim Ortaklığı (the “Company”) to perform a limited assurance engagement in respect of the Selected Sustainability Information (the “Selected Information”) stated in the Türk Hava Yolları 2022 Sustainability Report (the “2022 Sustainability Report”) for the year ended 31 December 2022 and listed below.

### Selected Information

The scope of the Selected Information for the year ended 31 December 2022, which is subject to our limited assurance work, set out in the pages 87 and 89 of the 2022 Sustainability Report with the sign

“✔” is summarized below:

- Fuel Efficiency (Fuel consumption per 100 Available Seat Km) (Litres/100 ASK)
- Fuel Saving (Ton & GJ)
- Accident Frequency Rate (by 1,000,000 Working Hours)
- Customer Satisfaction Rate (%)

Our assurance was with respect to the Selected Information marked with “✔” in the 2022 Sustainability Report, and we have not performed any procedures with respect to earlier periods or any information other than Selected Information marked with “✔” in the 2022 Sustainability Report and, any other elements included in the 2022 Sustainability Report and, therefore, do not express any conclusion thereon.

### Criteria

The criteria used by the Company to prepare the Selected Information is set out in section

Appendix-1: Türk Hava Yolları 2022 Sustainability Report-Reporting Principles (the “Reporting Principles”) on pages 93 and 94 of the 2022 Sustainability Report.

### The Company’s Responsibility

The Company is responsible for the content of the 2022 Sustainability Report and the preparation of the Selected Information in accordance with the Reporting Principles. This responsibility includes the design,

implementation and maintenance of internal control relevant to the preparation of Selected Information that is free from material misstatement, whether due to fraud or error.

### Inherent Limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining such information.

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the measurement criteria and the precision thereof, may change over time. It is important to read the Selected Information in the context of the Reporting Principles.

In particular, the conversion of different energy measures to megawatt-hour (MWh) and energy used to carbon emissions is based upon, inter alia, information and factors generated internally and/or derived by independent third parties as explained in the Reporting Principles. Our assurance work did not include examination of the derivation of those factors and other third-party information.

### Our Independence and Quality Management

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Management 1 and accordingly maintains a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

PwC Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.  
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# Limited Assurance Report



## Our Responsibility

Our responsibility is to form a limited assurance, based on limited assurance procedures, on whether anything has come to our attention that causes us to believe that the Selected Information has not been properly prepared in all material respects in accordance with the Reporting Principles. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement under ISAE 3000 (Revised). Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- made inquiries of the persons responsible for the Selected Information;
- understood the process for collecting and reporting the Selected Information. This included analysing the key processes and controls for managing and reporting the Selected Information;
- evaluated the source data used to prepare the Selected Information and re-performed selected examples of calculation.
- performed limited substantive testing on a selective basis of the preparation and collation of the Selected Information prepared by the Company and
- undertook analytical procedures over the reported data.

## Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Company's Selected Information for the year ended 31 December 2022, is not properly prepared, in all material respects, in accordance with the Reporting Principles.

## Restriction of use

This report, including the conclusion, has been prepared for the Board of Directors of the Türk Hava Yolları Anonim Ortaklığı as a body, to assist the Board of Directors in reporting Türk Hava Yolları Anonim Ortaklığı's performance and activities related to the Selected Information. We permit the disclosure of this report within the 2022 Sustainability Report for the year ended 31 December 2022, to enable the Board of Directors to demonstrate they have discharged their governance responsibilities by commissioning a limited assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors of Türk Hava Yolları Anonim Ortaklığı as a body and Türk Hava Yolları Anonim Ortaklığı for our work or this report save where terms are expressly agreed and with our prior consent in writing.

PwC Bağımsız Denetim ve  
Serbest Muhasebeci Mali Müşavirlik A.Ş.

Baki Erdal, SMMM  
Partner

Istanbul, 10 November 2023



# Contacts

Every feedback we receive from you contributes to our strength...

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Reporting Advisor and Design:



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