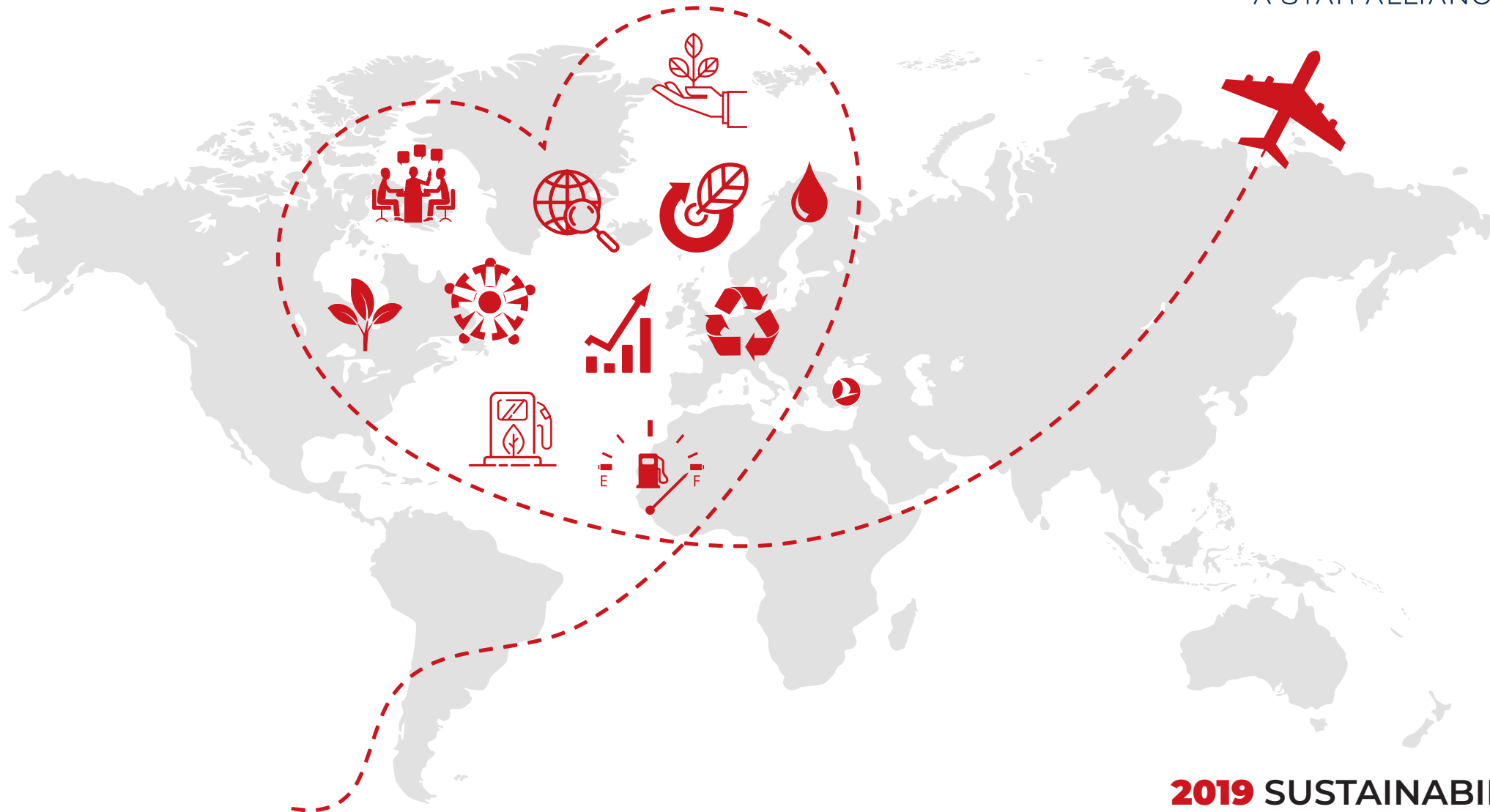


Follow your *heart* 



A STAR ALLIANCE MEMBER 



2019 SUSTAINABILITY REPORT



2019



ABOUT THE REPORT

This is the sixth sustainability

report that presents the sustainability performance of Turkish Airlines for the year of 2019. This report has been prepared in accordance with the GRI Standards: Core option. Where relevant, data from the previous years was also included.

Turkish Airlines Incorporation and its fully owned subsidiaries, Turkish Technic

Inc. and Aydın Çıldır Airport Services are included in the consolidated financial statements however these subsidiaries are not covered by the report. Greenhouse gas emissions for the period of 2018 was verified by a third party organization according to TS EN ISO 14064-3: 2007 standard and the verification statement is presented at the back of the report. External assurance has not been obtained for any other indicator or the report itself.







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MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

As the airline flying to more countries than any other, with a total of 126 countries and 321 destinations served, we not only create economic value but also conduct all of our operations with the overarching goals of driving social prosperity, social contribution, and environmental awareness. Our focus is aimed at positioning the Turkish business community as a key enabler of our country's efforts towards the 17 Sustainable Development Goals set forth by the United Nations.

Dear stakeholders,

As the airline flying to more countries than any other, with a total of 126 countries and 321 destinations served, we not only create economic value but also conduct all of our operations with the overarching goals of driving social prosperity, social contribution, and environmental awareness. Our focus is aimed at positioning the Turkish business community as a key enabler of our country's efforts towards the 17 Sustainable Development Goals set forth by the United Nations. Our sustainable efforts are based on the four fundamental pillars of governance, economy, society and environment, and their respective subcategories.

Guided by our principles of transparency and accountability, we disclose our performance and future plans in these four areas

to our stakeholders through periodical sustainability reports. We see sustainability reporting as an indispensable tool to evaluate our activities including non-financial criteria and to present the value we create with a holistic perspective. For the last five years, we have been listed on the BIST (Borsa Istanbul) Sustainability Index specifically as a result of the external reviews of this publicly disclosed information. This sustainability report, presenting our 2019 results and our future goals, is the sixth of its kind published by our Company.

Our ways of doing business are constantly being revised as we look beyond today's gains and invest in the future, guided by a sustainability strategy built around seizing opportunities while mitigating potential risks that might arise from economic, environmental and social developments.





Our projections are shaped by multiple external factors, including governance and social responsibility, and most importantly, climate and the environment, and we formulate our strategies and chart our course with an eye to benefiting from the business opportunities presented by those.

The aviation sector provides significant economic contributions in many aspects such as tourism, commerce and connectivity. At the same time, it also supports economic growth by driving employment and encouraging innovation. As the airline flying to more countries than any other, we leverage our expansive network to create new economic opportunities and to contribute greatly to the economy, commerce and tourism of Turkey. Furthermore, our Company offers an opportunity to many developing and least-developed countries of the world to build economic and social connections with the rest of the globe. As of 2019, Turkish Airlines served around 1.5 million passengers from 26 least-developed nations, contributing to the growing economic and social links between these countries and the world at large.

Turkish Airlines collaborates with several national and international organizations as part of its sustainability efforts. Our employees serve at the Sustainability Committees of many national and international aviation associations, thus contributing to these efforts of a global scale.

Our Company has adopted the International Air Transport Association's (IATA) short- and long-term

goals for reducing carbon emissions in the fight against climate change, and we continue to work with dedication towards these goals. Accordingly, we have identified our requirements and launched our efforts as part of the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), of which Turkey is a volunteer participant. Our 2020 goals include joining IEnvA, the environmental assessment program of IATA.

We are pressing ahead at full steam to achieve carbon-neutral growth in 2020 and to cut our net carbon emissions to half of the 2005 level by 2050. To accomplish these goals, we are investing in new technologies and equipping our fleet with modern, fuel- and eco-efficient aircraft. Our average fleet age as of the end of 2019 was 8.3, making the Turkish Airlines fleet one of the youngest in the world. At this point, I also would like to stress our comprehensive fuel-saving program and our efforts towards producing bio-fuel from micro-algae, both of which are discussed in detail in the section of this report titled "Combating Climate Change". We also conduct various other projects to promote efficient use of resources such as electricity and natural gas and to reduce paper consumption. As a result of our extensive works to improve fuel efficiency, in 2019 we saved 55,492 tonnes of fuel which prevented 174,800 tonnes of greenhouse gases from being released. At the same time, our flights are today 20 percent more fuel-efficient than they were 12 years ago – the outcome of our efforts to reduce our carbon footprint.

Our Corporate Social Responsibility Program, guided by the United Nations Sustainable Development Goals, represents our voluntary commitment to creating added value for the society, playing an active role in sustainable solutions, and preserving our natural resources and cultural heritage. Driven by our well-established corporate culture and fully aware of our role as a corporate citizen, each year we support a vast variety of social responsibility projects, continuing our steadfast march towards sustainable growth to increase the quality of life in our society and to fulfill our responsibilities to our employees, local communities and other stakeholders.

As a family of more than 65,000 people with its affiliates, we are locked in line with our goals. The key to our achievements is a diverse human resource hailing from various countries and different cultures. Women represent 46 percent of our employees, and it gives us great pride to see the number of female pilots grow with each passing year.

For us, adopting a conscientious approach in using natural resources is a sign of respect for the Earth, the environment, and humanity. And we will continue to work for a better future for younger generations, with our agile and dynamic organization, and a business approach that is based on integrity, transparency, and accountability.

M. İLKER AYCI
Chairman of the Board of Directors and
Executive Committee



02

ABOUT OUR INCORPORATION

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1

The airline that flies to
the highest number of
international destinations
from a single hub

1

The airline that flies
to the most countries
worldwide

The 4th

airline that flies to the
highest number of airports
worldwide





TURKISH AIRLINES AT A GLANCE

Turkish Airlines is the airline with the most restrictions and the most international flights from a single center in the world.

TURKISH
TECHNIC

TURKISH FLIGHT ACADEMY



SunExpress

TURKISH
pet



THE GOURMET ENTERTAINMENT COMPANY



TURKISH GROUND
SERVICES



GOODRICH TURKISH TECHNIC
SERVICE CENTER



TSI AVIATION SEATS



CABIN INTERIOR



Established in 1933, Turkish Airlines is the flag-carrier airline of the Republic of Turkey for 85 years. Headquartered in Istanbul, Turkish Airlines is an Incorporation operating in private sector with its main fields of activity in domestic and international passenger and cargo transportation. Turkish Airlines employs approximately 65 thousand people worldwide, including its subsidiaries.

Turkish Airlines has achieved a steady growth with double-digit rates in the last decade, becoming one of the airlines with the most extensive global network.

Important and historical initiative was accomplished in 2018 for both our Incorporation and global airline sector. Turkish Airlines achieved a high level of growth rate in operational and financial performance. Enjoying an extensive flight network connecting Istanbul to 318 destinations in 126 countries as of the end of 2019, Turkish Airlines has the fourth biggest flight network worldwide. Leveraging on this achievement, Turkish Airlines is the airline that flies to the highest number of countries and international destinations worldwide from a single hub.

Equipped with 350 aircraft as of 2019, Turkish Airlines increased the number of passengers, it carried, to 74.3 million thanks to the impact of tourism.

Turkish Airlines achieved to maintain its strong growth in cargo business, increasing steadily for more than 11 years, this year without any interruption, along with its enhanced level of service quality in cargo operations. Turkish Airlines has been a member of Star Alliance since 2008. It has 16 subsidiaries, five of which are directly-owned and 11 of which are joint ventures. Subsidiaries mainly comprise of the companies operating in the fields of maintenance, catering, ground handling and fuel supply.

TURKISH AIRLINES KEY FIGURES FOR 2019



126
countries



350
aircraft



74.3
million
passengers



1,543,028
tonnes
of cargo



8.3
average
fleet age



174,800
tonnes of CO₂
emissions
avoided



0.55%
fuel
efficiency

"compared to 2018"



46%
female
employee rate



29,491
employees



13,229
million
US dollars
total sales



3,107
million
US dollars
EBITDAR



788
million
US dollars
net profit



OUR STRATEGIC PRIORITIES

We have set our target for 2023 to attain 120 million passengers and to have one of the biggest and most state-of-the-art fleets of the world with more than 500 economically-efficient and environment-friendly aircraft.

1. SUSTAINABLE GROWTH AND PROFITABILITY

We aim to attain 120 million passengers, and to have one of the biggest and most state-of-the-art fleets of the world with more than 500 economically-efficient and environment-friendly aircraft which prioritize safety and comfort of passengers and which are equipped with the state-of-the-art technology, following the delivery of new aircraft by 2023.

Upon the advantages to be brought along by "Istanbul New Airport" which started to operate in 2018, our flight network will

extend, and we will maintain our position of being the airline that flies to the highest number of international destinations worldwide. We aim to carry the strong growth trend, we have achieved now in air cargo transportation, to a higher level upon realization of the cargo investments in Istanbul New Airport, and thereby, to increase the market share we hold in global air cargo transportation.

2. BRAND AWARENESS AND PREFERABILITY

We will constantly continue to maintain our position of being one of the most

Thanks to our initiatives to increase our fuel efficiency and reduce carbon footprint to protect the environment and combat climate change, we now perform 20 percent more efficient flights compared to ten years ago.

preferred airlines with our extensive flight network and high-quality service level we offer to our clients. We maintain our brand investments and promotional activities in many fields, especially sponsorships.

3. CUSTOMER FOCUS

We will continue to determine our strategies considering the sensitivity of our customers in price, time and service quality. Recognition of our service level with international awards increases our motivation level. We aim to increase the satisfaction level of our clients through both operational and technological developments to arise upon commissioning of Istanbul New Airport. We maintain our brand investments and promotional activities in many fields, especially sponsorships.

4. CORPORATE SOCIAL RESPONSIBILITY

We are wholeheartedly committed to achieving our target of providing a contribution to sustainable development by performing all our operations in a sense of responsibility towards the society, economy and environment. Accordingly; we provide support through various activities by reaching many people, especially children, at home and abroad, with the voluntary contributions of our employees.



We aim to extend our activities, we carried out in the fields of humanitarian aid, sports, science-technology and culture as part of our social responsibility approach, to all our destinations, and to increase the voluntary participation by 2025. Thanks to our initiatives to increase our fuel efficiency and reduce carbon footprint to protect the environment and combat climate change, we now perform 20 percent more efficient flights compared to ten years ago. We plan to include the new-generation aircraft, which offer 15 percent higher fuel efficiency, into our fleet, with an aim to reduce the carbon and noise emissions even further by 2023.

5. BUSINESS EXCELLENCE AND EFFICIENCY

We develop ourselves to meet the national and international requirements, and continue to increase our efficiency through enhanced level of investments in information and communication technologies, a younger fleet, and effective process management and projects.

6. INNOVATIVE LIFE

We laid the foundations of many projects to advance in the fields of artificial intelligence, internet of things, virtual reality and augmented reality. We will keep developing projects to enhance the customer satisfaction level, besides enhancement of the internal processes as part of the Digital Innovation activities.



7. CREATING VALUE FOR EMPLOYEES

We attach priority to provide a contribution to development of our employees, who are the essential power lying behind all our achievements, as well as to enable them to work in a motivated and contented manner. We will continue to add value to our employees through the working environment, social facilities, career opportunities and trainings we offer jointly with domestic and international institutions.

8. CREATING VALUE FOR STAKEHOLDERS

We have adopted transparency, fairness, liability and accountability as our principles in all our operations. We carry out initiatives to enable our stakeholders to adopt our brand targets and values. We will continue to improve our good governance principles. We will keep enhancing our cooperation, and increasing the number of projects we realize jointly with our business partners, in line with our vision of adding value to our stakeholders.



OUR VISION

To become an air carrier with;

- ▶ 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 Turkey in the civil air transportation industry.



TURKISH AIRLINES 2019 AWARDS



Five-Star Global Airline (APEX)	Best Corporate Traveler Program (Global Traveler)	Best Airline for Business Travelers (Global Traveler)	Best Airport Staff (Global Traveler)	Best Designed Airline on the Europe (The Design Air)	Global Air Cargo Brand of the Year (Stat Times Awards)	International Air Cargo Marketer of the Year (Stat Times Awards)
Cargo Airline of the Year (ICN Awards)	Cargo Airline of the Year (Air Cargo News Award)	International Air Cargo Winner (Logitrans)	Supported Finance Deal of the Year (Airline Economics)	Transport Finance Deal of the Year (Bonds & Loans Turkey)	Most Valuable Brand of Turkey (Brand Finance)	Third Most Valuable Airline Brand of Europe (Brand Finance)



03

SUSTAINABILITY MANAGEMENT

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**We are strongly committed to contributing
to sustainable development by conducting our
business in a socially, economically and environmentally
responsible manner.**



OUR SUSTAINABILITY APPROACH

Members of the Board of Directors and the Executive Committee have ultimate responsibility for oversight of our economic, environmental and social impacts.

We at Turkish Airlines are strongly committed to contributing to sustainable development by conducting our business in a socially, economically and environmentally responsible manner. At the core of our sustainability approach are our stakeholders. The reasonable expectations and interests of our stakeholders are a key reference point in defining the report content and aspect boundaries as well as in the ongoing development process of our sustainability strategy.

Thus, stakeholder engagement is a crucial aspect of our sustainability practices, which helps us better understand our impacts and in turn continually refine them. As a growing Incorporation, we have a broad and diverse stakeholder base and various channels to engage with them. Please refer to the table on page 20 to get further information

about our stakeholder engagement process which forms the basis in identifying our material aspects. In addition, the process for defining the report content and the material aspects and boundaries are indicated in the below figure.

At Turkish Airlines, members of the Board of Directors and the Executive Committee have ultimate responsibility for oversight of our economic, environmental and social impacts. We are committed to integrating sustainability considerations and principles into our business and operations, and every business unit works collaboratively to achieve our common goals. Each business unit has their own specific targets aligned with our Incorporation goals. Performance reviews are conducted annually and future action plans are identified accordingly.

DEFINING THE REPORT CONTENT AND MATERIAL ASPECTS AND BOUNDARIES





ENGAGING WITH STAKEHOLDERS

At the core of our sustainability approach are our stakeholders. Our success goes in pair with satisfaction of and value creation for our stakeholders.

Our success goes in pair with satisfaction of and value creation for our stakeholders. Our stakeholder base consists of stakeholder groups who are significantly affected by our activities as well as those having potential to affect Turkish Airlines' ability to successfully implement its strategy. We value and listen to our stakeholders and strive to maintain an open and constructive dialogue with them and foster greater collaborations.

Turkish Airlines uses various channels to engage with its internal stakeholders including shareholders/financial partners/investors and employees as well as external stakeholders including government, certification bodies, business partners, customers, suppliers, communities, NGOs and academic institutions. Please refer to the below- given table to see the key material topics and aspect boundaries and stakeholder engagement pathways as well as the frequency of our engagement and matters engaged upon.



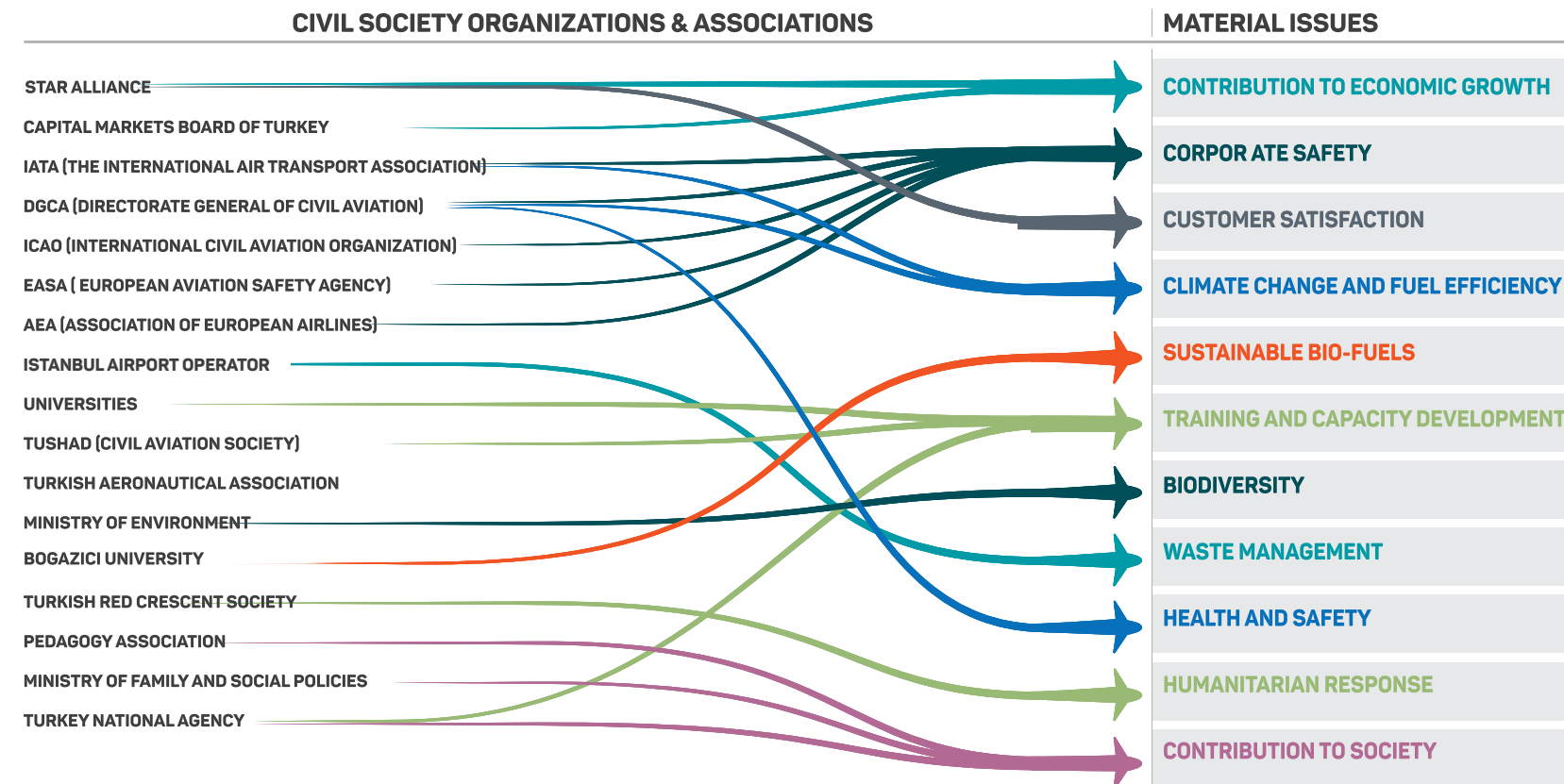


	STAKEHOLDER GROUPS	KEY ENGAGEMENT TOPICS	MAIN ENGAGEMENT PATHWAYS	FREQUENCY	SOME OF THE OUTCOMES OF THE STAKEHOLDER ENGAGEMENT PROCESS
ŞİRKET İÇİ	Shareholders Financial Partners Investors	Minority Rights Operational & Financial Performance Strategy Corporate Governance	E-mail distribution list; "ir@thy.com"	On-going	<ul style="list-style-type: none"> Investor Day events were organized. 273 investors/analysts from 140 incorporations were met. 2,300 information requests were met via e-mail
			Dedicated "ir" website and web application	On-going	
			General Shareholders' Meeting	Annually	
			Investors Meetings	Annually	
			Presentations, Reports, Publications	Quarterly	
	Employees Unions	Business Ethics Cultural Values Employee Satisfaction Freedom of Association and Collective Bargaining Corporate Safety Flight Security Health and Safety & Well-being Non-discrimination and Diversity Performance & Career Development Sustainable Use of Resources	Ethics Line "Ethical Way"	On-going	<ul style="list-style-type: none"> 278 reported cases to the "Ethics Reporting Line" were solved. Personnel Relations Department was established to improve the employee experience. Many projects were implemented in line with the demands of the employees. See pages: 95, 96
			E-mails: flightsafety@thy.com; security@thy.com	On-going	
			"Empathy" Incorporation TV "Empathy Employees Newsletter"	On-going	
			Personal Suggestion System	Monthly	
			Meetings & Events & Forums & Summits	On-going	
ŞİRKET DIŞI	Government Regulators Local Authorities	Social and Economical Development Customer Rights Compliance Financial Performance Corporate Safety Flight Security Forestration Health and Safety Noise Management Waste Management	Audits	Annually	<ul style="list-style-type: none"> 1 million trees have been planted across Anatolia since 2014. 55,492 tons of fuel were saved which resulted in 174,800 tons of greenhouse gas emissions reduction.
			Meetings	Ad hoc meetings upon needed	
			Reports	Annually	
	Certification Bodies	Environmental Management Corporate Safety Flight Security Health and Safety Noise Management Quality Management	Audits	Regularly	<ul style="list-style-type: none"> Compliance with ISO 14001:2015 was assessed, and it was successfully achieved The greenhouse gas report was drawn up and verified in accordance with ISO 14064.
	Customers	Accessibility Customer Satisfaction & Service Quality Customer Rights Corporate Safety Flight Security Innovative Products & Services	Customer Care Call Center	On-going	<ul style="list-style-type: none"> ISO 10002 Customer Satisfaction Certificate was maintained. Satisfaction surveys were conducted on approximately 28,686 passengers on monthly basis, and many projects were realized in line with the requests provided by our passengers in these surveys. Please see page: 84 Many projects on accessibility were realized. Please see pages: 88-89
			Customer Web-based/In-flight Feedback Form	On-going	
			Customer Satisfaction Measuring Devices at the Airports	On-going	
			Customer Satisfaction Online-Surveys	Annually	
			In-flight Safety Handouts and Videos	On-going	
			"Skylife" In-flight Magazine	Monthly	
			Social Media (facebook, twitter, instagram, blog)	On-going	
	Communities	Social and Economic Development Social Responsibility Projects	Meetings with Associations and Charities School and Hospital Visits	Ad hoc meetings as needed	<ul style="list-style-type: none"> Our social responsibility projects are presented in our 2019 annual report on pages 41, 65, 126, 127.
	Non-governmental Organizations (NGO's)	Corporate Social Responsibility Projects	CSR Fairs and Events	Ad hoc meetings as needed	<ul style="list-style-type: none"> In 2019, we helped 139 participants to overcome the fear of flying. Since 2007, we have helped 1,067 participants to overcome the fear of flying. Please see page: 88
	Academic Institutions Universities	Employment & Career Opportunities	Meetings	Regularly	
				Annually	
			Social Media (LinkedIn)	On-going	



RELATED ORGANIZATIONS & ASSOCIATIONS

We work collaboratively with national and international civil society organizations and industry associations regarding our material topics. Some of them are listed below.



DEVELOPMENTS IN COLLABORATIVE WORKS WITH INTERNATIONAL ORGANIZATIONS IN 2019

Turkish Airlines signed the “Zero Waste Declaration” which was drawn by Istanbul Airport Operator in line with Zero Waste Project.

By voluntarily participating in the “Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)” arrangements adopted by ICAO in 2016 for the reduction of carbon emissions, Turkish Airlines has become a party to the CORSIA bill to be implemented by 2021. Accordingly, airlines will record their emission values by 2019 and report them to the relevant authorities. Therefore, in the next year, procedures and mechanisms to record fuel use and emission emissions are expected to be completed under the coordination of IATA.

“United for Wildlife Buckingham Palace Declaration (UFW)”, aiming to prevent illegal wildlife trade and increase the level of awareness in this matter with the support of IATA, was signed by our CEO for and on behalf of our Incorporation. The afore-mentioned declaration aims to prevent the illegal trade of wild animal parts such as ivory, rhino horn and tortoise shell, and to increase the level of awareness in this matter.



CORPORATE SUSTAINABILITY MANAGEMENT



In recent years, the increasing expectations of our investors, customers and associations regarding sustainability management have revealed the need for a more systematic and holistic management of sustainability efforts. In line with this need, in January 2020, Turkish Airlines Senior Management decided to establish a Corporate Sustainability Management Directorate under the Quality Assurance Department,

which directly reports to the General Manager. With the establishment of the Directorate, the sustainability activities carried out for Turkish Airlines units began to be managed in a more holistic and systematic manner.

In the Corporate Sustainability department, a total of 12 employees, who are experts in the three important components of sustainability, economy, social and environmental issues, are employed. It is planned to increase the number of our employees. The Corporate Sustainability Management Directorate takes an active role in all studies, projects and practices carried out within the scope of sustainability. It continues to work in cooperation with all relevant units by ensuring coordination within Turkish Airlines.

Our sustainability studies are carried out under the following headings. The relationship of our work with our Company's business units is detailed in the table below.

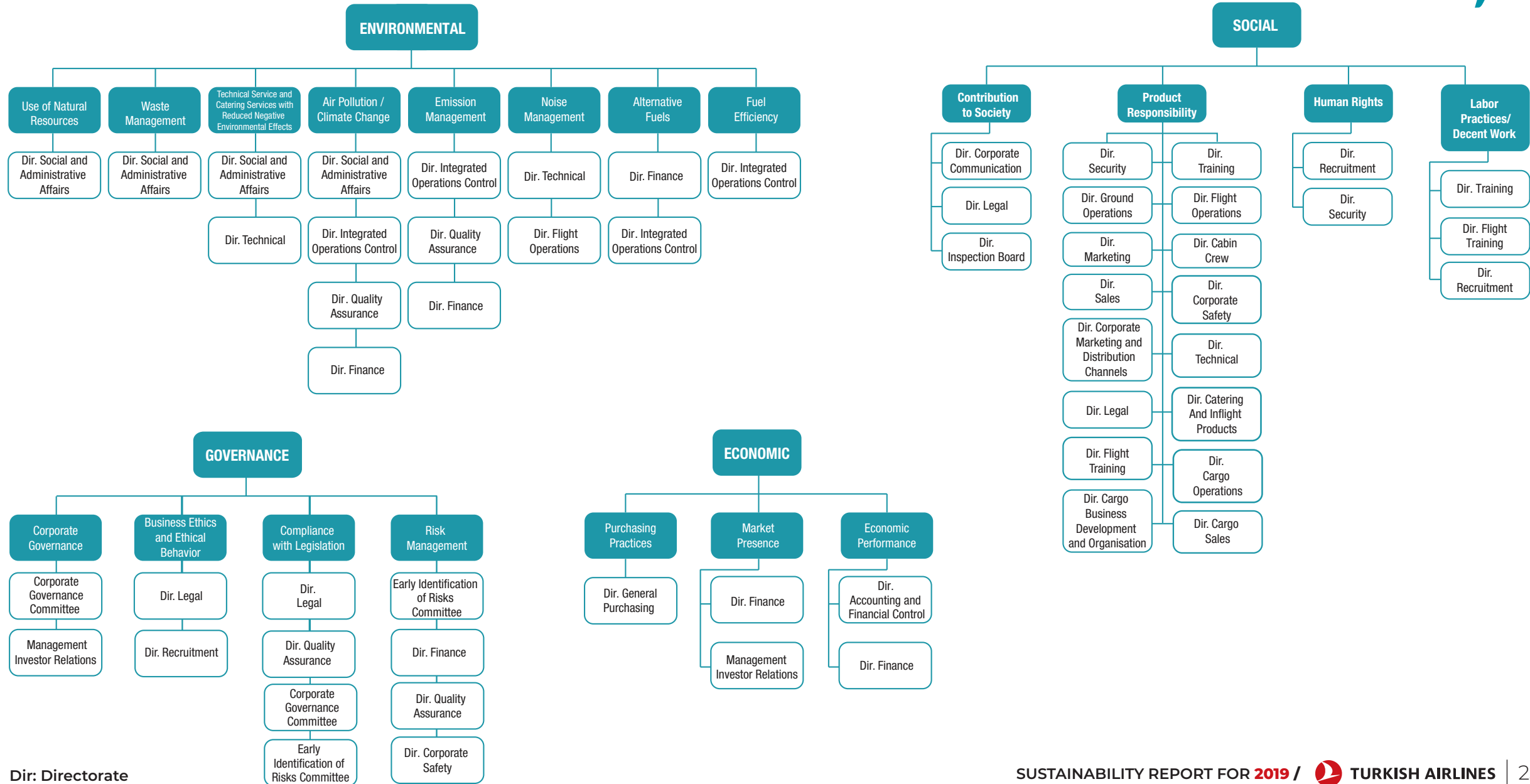
In the social field; Labor practices, decent work, human rights, social contribution / social responsibility, product responsibility,

In the environmental field; Fuel efficiency, alternative fuels (sustainable biofuels), noise management, emission management, air pollution, climate change, technical service and catering services with reduced negative environmental effects (sustainable catering), waste management, use of natural resources,

In the economic field; Purchasing practices, market presence, economic performance,

In the field of management; Corporate governance, business ethics and ethical behavior, compliance with legislation, risk management.

We aim to develop and maintain our sustainability efforts in line with the United Nations Sustainable Development Goals by developing day by day, taking into account the expectations of our stakeholders and related parties, our impacts on the supply chain and the environment, in line with the vision, mission and general strategy of our Incorporation.





MATERIAL ISSUES

Our sustainability agenda comprises of four pillars, each of which includes a number of material aspects, namely Governance, Economy, Environment and Social.

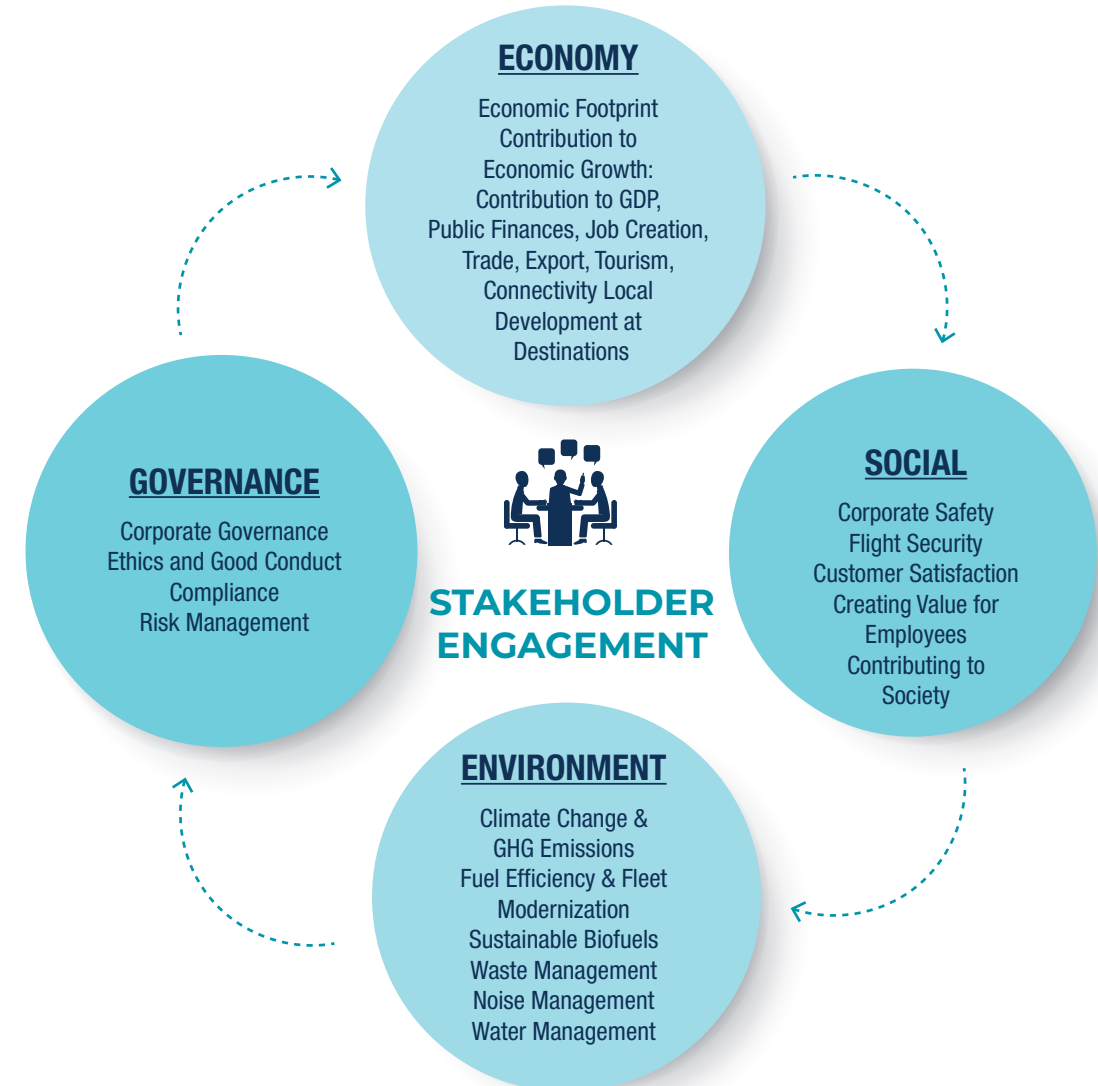
We continue to refine our sustainability strategy over time focusing on the most material issues which have the potential to impact our business and are considered important by our stakeholders. We take into account the stakeholders' concerns, broader social expectations and our influence on the value chain along with the Incorporation's overall mission and strategy while identifying the material issues.

Our sustainability agenda comprises of four pillars, each of which includes a number of material aspects, namely Governance, Economy, Environment and Social. Our most material issues identified are listed in the Sustainability Agenda.

All the issues listed are material within the organization except three aspects, namely contribution to economic growth, contribution to society and local development at destinations which are material outside the organization.













As we have highlighted these aspects as material issues in this report, we will continue to seek our stakeholders' feedback and continue to further deepen our materiality process in the coming years.

OUR SUSTAINABILITY AGENDA
















SUSTAINABLE DEVELOPMENT GOALS (SDG) MAP

Material issues	Relevant SDG	Commitment	Material topic and SDG Relationship	Report section where the material issue is explained
Increasing fuel efficiency and reducing emissions to combat climate change	  	Increasing fuel efficiency and reducing greenhouse gas emissions and NOX emissions	Within the scope of combating global climate change, we achieve resource efficiency and reduce our emissions by increasing the aircraft fuel efficiency, which constitutes 99.8% of our total greenhouse gas emissions. In this direction, we apply a comprehensive fuel policy. We take actions to optimize our operations, and add new generation aircraft with high fuel efficiency and low emission value to our fleet through fleet modernization. In order to reduce the amount of fossil fuel use, we cooperate with universities and conduct sustainable bio-fuel research and development studies. Through the measures and projects we have taken to reduce our emissions, we contribute to SDG 13 Climate Action. Through our investments in clean energy technology we contribute to SDG 7 Affordable and Clean Energy. We contribute to the SDG 9 Industry, Innovation and Infrastructure with our studies supporting R&D and innovation in clean and environmentally sound technologies.	Fuel Efficiency and Reduction of Greenhouse Gas Emissions , Sustainable Bio-fuels , Emissions Data
Waste management		To prevent waste generation, to minimize it when we cannot prevent it, to increase reuse, recycling and energy recovery and to ensure that waste is disposed of in accordance with the Zero Waste Regulation and relevant legislation.	We develop projects that prevent waste generation both in our premises and in the aircraft. We develop new projects for situations that we cannot prevent the waste. Some examples of these projects are as follows: We reduce the consumption of single-use plastic, we ensure the reuse of electronic headphones after sterilization and repair. We continue to expand the scope of the in-flight waste sorting application. Through our works in this field, we contribute to the SDG 12 Responsible Consumption and Production.	Waste Management , In-flight Sustainability Practices
Resource efficiency		Ensuring efficient use of resources	We carry out our activities in accordance with the requirements of TS EN ISO 14001: 2015 Environmental Management System Standard. We monitor our consumption data to increase resource efficiency, and we develop projects to reduce our consumption. We contribute to the SDG 12 Responsible Consumption and Production.	Environmental Management , Resource Efficiency
Customer satisfaction		To increase customer satisfaction	We adopt a customer-oriented approach in all our processes. We implement the International Customer Satisfaction Management System Standard and Quality Management System, and offer proactive solutions. We contribute to the SDG 12 Responsible Consumption and Production with our comprehensive works in this field.	Our Innovative Approach , Customer Satisfaction Measurement and Surveys
Product and service accessibility	 	To make all our products and services are accessible by the passengers with restricted mobility, as well as disabled veteran, elderly, pregnant and disadvantaged passengers.	In order to make all our products and services are accessible by the passengers with restricted mobility, as well as disabled veteran, elderly, pregnant and disadvantaged passengers, we take actions within the scope of the 'Differences Add Value Program'. Among these activities, there are also sign language trainings for our cabin crew in order to communicate better with passengers with hearing impairment. We support SDG 12. Responsible Consumption and Production and SDG 10. Reducing Inequalities with our various initiatives in this field.	Accessibility
Safety	 	To provide a healthy working environment for our employees and to provide the highest possible safety standards to all our customers and to make these conditions sustainable	We established Safety Management System, and we are constantly making improvements beyond the standards set by global authorities and aircraft manufacturers. We continuously monitor and improve our performance with the IATA Operational Safety Audit (IOSA) Program and SAFA audits. Thus, we contribute to SDG 3 Good Health and Well-Being and SDG 12 Responsible Consumption and Production.	Corporate Safety
Flight security	 	To protect our employees and all our customers and to ensure security during the course of all our activities	We established Security Management System to ensure security during the course of all our activities. We contribute to the SDG 3 Good Health and Well-Being and SDG 12 Responsible Consumption and Production with the comprehensive studies we carry out.	Flight Security



Material issues	Relevant SDG	Commitment	Material topic and SDG Relationship	Report section where the material issue is explained
Protect biodiversity		To prevent illegal wildlife trade	We signed the UFW declaration, which is supported by IATA, aiming to prevent the illegal trade of wild animals and to increase awareness on this issue. Thus, we contribute to the prevention of illegal trade of wild animal parts such as ivory, rhino horn and tortoise shell, and we support SDG 15 Life on Land.	Developments in Collaborative Works with International Organizations
Human rights and employee development		Creating decent employment, implementing equal pay for equal work policy, complying with labor rights legislation based on International Labor Organization (ILO) and national legislation	We offer decent working conditions for our employees, we act in accordance with national legislation on freedom of association and collective bargaining rights. We support the career development of our employees, we organize trainings and contribute to their personal and professional development. We contribute to SDG 8 Decent Work and Economic Growth with our policies and initiatives in this field.	Our Employees
Health, safety and well-being		To eliminate the risk of accident, death and injury in the workplace, to take all preventive and protective measures	We offer decent working conditions for our employees, we act in accordance with national legislation on freedom of association and collective bargaining rights. We support the career development of our employees, we organize trainings and contribute to their personal and professional development. We contribute to SDG 8 Decent Work and Economic Growth with our policies and initiative in this field.	Health, Safety and Well-Being
Contributions to economic and social development		Contributing to the economic and social development	We contribute to employment with the direct job opportunity we create, and indirectly support a larger ecosystem through our suppliers. Contributes to public funding of paying taxes, we contribute to Turkey's GDP. Thus, we contribute to SDG 8 Decent Work and Economic Growth.	Contributions to Economic and Social Development, Our Economic Footprint
Diversity and equal opportunity		Provide equal opportunity and not discriminate on the basis of gender	We support the increase in the number of our female pilots as well as our female employees working as cabin crew. We support efforts to improve the gender balance in civil aviation. We support the SDG 5 Gender Equality with our policies and initiatives on this issue.	Diversity and Equal Opportunity
Innovation		Develop innovation capacity and culture	We develop the innovation culture and carry out digital innovation activities. In this context, our R&D projects and patent applications continue. We contribute to the SDG 9. Industry, Innovation and Infrastructure.	Development of Innovation Culture and Promotion of Employee Engagement, Digital Innovation Activities
Humanitarian response within the scope of social responsibility		To support healthy society through our social responsibility initiatives	Within the scope of the agreement we made with the Turkish Red Crescent, we carry aid and medical supplies, support access to health products and services, and support the SDG 3 Good Health and Well-Being.	Civil Society Organizations and Associations, 2019 Annual Report Social Responsibility Section
Supporting disadvantaged groups within the scope of social responsibility	 	Supporting the participation of persons with disabilities in sports activities through social responsibility activities	An agreement was signed with the Federation of Physically Handicapped Persons to support the participation of disabled people in sports activities. We support the goals of SDG 3. Good Health and Well-Being and SDG 10. Reducing Inequalities through our projects.	2019 Annual Report Social Responsibility Section
Encouraging children and young people to science, technology and aviation within the scope of social responsibility	 	Supporting technology, aviation and science and encouraging youth in these fields	Teknofest Aviation, Space and Technology Festival was held with the intense participation of visitors interested in the aviation industry with the sponsorship we provided. We held the Seventh Scientific Ambassadors Summit with the participation of scientists working worldwide. We sponsored the Turkish Airlines Science Expo. We support SDG 4 Quality Education and SDG 9 Industry, Innovation and Infrastructure through various projects we carry out in this field.	2019 Annual Report Social Responsibility Section



CORPORATE GOVERNANCE

Turkish Airlines, Turkey's flag carrier airline, was founded in 1933. Originally a 100% state owned airline, Turkish Airlines initiated the process of privatization in 1990. And it is now 50.88% publicly owned Incorporation while the remaining 49.12%, held by the Republic of Turkey, Prime Ministry, Privatization Administration, was transferred to the Turkey Wealth Fund in 2017. One Class C share of it is held by the Republic of Turkey, Prime Ministry, Privatization Administration.

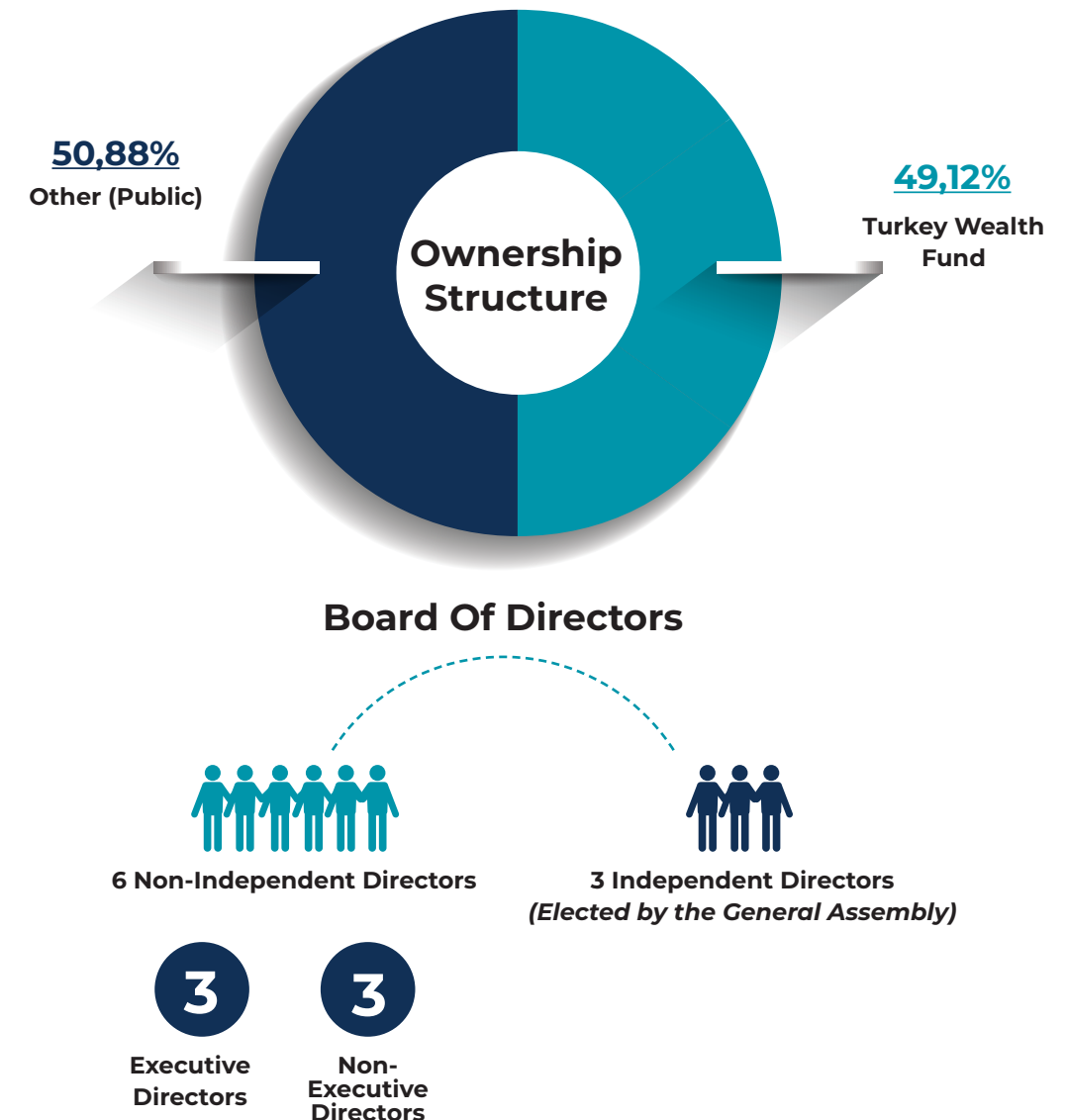
Turkish Airlines is listed in Istanbul Stock Exchange 'Borsa İstanbul' (BIST) under the Ticker Symbol "THYAO", and is bound by the provisions, prescribed under the Turkish Commercial Code (TCC), and the regulations promulgated by the Capital Markets Board (CMB). Adopting transparency, fairness, liability and accountability as its principle in all its operations, Turkish Airlines complies with all mandatory principles among the Corporate Governance Principles determined by the Capital Markets Board, and shows utmost care to comply with the optional principles. Turkish Airlines' Board of Directors is comprised of nine members, three of whom

are independent Board Members also elected by the General Assembly. Three members of the Board of Directors are appointed to the Executive Committee and the majority of the Members of the Board of Directors are non-executive members as per the CMB's Corporate Governance Principles. The term of office for Board members is 2 years. Due to the dynamic nature of the aviation industry, the Chairman of the Board of Directors also assumes the title of the chairman of the Executive Committee in order to create uniformity. But our Chief Executive Officer (CEO), also being the Vice Chairman of the Board and the Executive Committee, assumes separate roles and responsibilities from the Chairman.

Ms. Fatmanur Altun joined as a member to the Board in 2018. We will strive to increase women's representation at our Board in the future.



[Corporate Governance](#)





During 2019, the Board of Directors convened 53 times and adopted 288 resolutions. Among the discussed matters, there are no related party transactions or transactions of important nature, which are not approved by the independent board members and require submission to the General Assembly. There are three committees formed within the structure of the Board, namely Audit Committee, Corporate Governance Committee and Early Identification of Risks Committee, all of which are chaired by the independent Board members. The Committees have been formed under the framework of the provisions, prescribed under the TCC, and the regulations promulgated by the CMB. Committees' tasks and duties and working principles are determined by the Board of Directors. The Board of Directors provides all means and supports to the committees to carry out their tasks. The tasks and duties of the Nomination Committee and Remuneration Committee were assumed by the Corporate Governance Committee in 2019.

Turkish Airlines Inc. Chairperson of the Corporate Governance Committee: Fatmanur Altun

Members: Orhan Birdal, Mithat Gökem Aksoy, Kadir Coşkun (Yatırımcı İlişkileri Müdürü)

The Corporate Governance Committee reports directly to the Board of Directors. It supports and helps the Board of Directors with practices in the following areas: The Incorporation's compliance with internationally approved Corporate Governance Principles, determination of the directors and senior executives, evaluation of wages, awards and performances and career planning, as well as investor relations and public disclosure matters. The Corporate Governance Committee reviews the system and processes, formed and to be formed by the Incorporation, for performance increasing management practices, evaluates them, gives recommendations and oversees the activities of the Investor Relations Department. In 2019, the Corporate Governance Committee convened once and submitted an informative report, in writing, to the Board of Directors.

Turkish Airlines Inc. Chairperson of the Audit Committee: Mehmet Muzaffer Akpınar

Member: Ogün Şanlıer

The Audit Committee directly reports to the Board of Directors. It supports and assists the Board of Directors in the following areas: Compliance of the corporate practices with national and international codes and regulations, improvement of business processes through audits, and coordination of the activities to be carried out to ensure information transparency. The Audit Committee is responsible for taking all precautions necessary for any kind of internal and external audits to be executed in a sufficient and transparent manner, and to carry out the duties assigned to the same under the Capital Markets Board Regulations. The Audit Committee members are selected among the Independent Directors, both of whom have a 5-year experience in the fields of audits/ accounting and finance. Audit committee convenes every 3 months prior to disclosure of the quarterly financial results. In 2019, the Audit Committee submitted six reports, in writing, to the Board of Directors.

Turkish Airlines Inc. Chairperson of the Early Identification of Risks Committee: Ogün Şanlıer

Member: Mehmet Muzaffer Akpınar

In April 2014, Early Identification of Risks Committee was established and authorized by the Board of Directors. Committee is composed of two members, and the Chairperson of the Committee is elected among the independent Directors.

Early Identification of Risks Committee;

a) Works for identification of risks that might endanger the existence, development and continuity of the Incorporation at an early stage, taking necessary actions against any identified risk and management of such risks.

b) Reviews the risk management systems at least once a year.

The Committee prepares all its works in writing, and keeps record of all its activities, and moreover prepares and presents a report that includes a situation analysis and committee's opinions & suggestions to the Board of Directors every two months. In 2019, Early Identification of Risks Committee conveyed 6 times and presented their risk evaluation report to the Board of Directors.





COMMUNICATION WITH SHAREHOLDERS

Investor Relations Department, reporting directly to the Chief Financial Officer (CFO), serves in the fields of ensuring and overseeing of the communication and information exchange by and between the Board of Directors and the capital market regulators and participants by providing accurate, consistent and timely information to analysts investors and our shareholders.

Public Disclosure Policy has been established by the Board of Directors to furnish all our stakeholders including shareholders, investors, analysts, employees and customers with timely, accurate, complete, comprehensive and easily accessible information for enhanced transparency.

During 2019, Investor Relations Department participated in 6 investor conferences and road shows with the aim of sharing the financial, operational and

strategic developments about the Incorporation with investors and analysts, and made 60 teleconferences and organized more than 80 corporate/ individual investor meetings. In all of these conferences and teleconferences, 273 investors/analysts from 140 incorporations and funds were met at the Incorporation headquarters or at the investors' offices.

3 teleconferences were organized during the year in relation to the results obtained from the financial statements. During the fiscal year of 2019, around 2,300 requests, sent to our Incorporation for information purposes, were replied via e-mail. Investor Relations Department presented its report about the activities, it carried out in 2019, and provided detailed information to the Board of Directors.

Aiming to develop the transparent communication, established with the stakeholders, even further, Investor

Relations Department has an Investor Relations Application running on iPad, iPhone and devices operating on Android. The applications enables all stakeholders, as well as the domestic and international investors, to access many information and documents in relation to Turkish Airlines such as the latest developments, material disclosures, operational and financial disclosures, investor presentations, annual reports, etc. at anywhere in 2 different language options on 3 digital platforms.

In terms of shareholders' rights, Turkish Airlines, along with all listed BIST companies, utilizes the e-General Assembly (e-GEM) system which allows shareholders, delegates, intermediary institutions and all stakeholders to attend the General Assembly Meeting online via a video webcast using their own personal electronic signatures, as well as to send their comments and, above all, be informed of all the processes instantly.

Shareholders' General Assembly Meetings of Turkish Airlines

	Fiscal Year of 2017	Fiscal Year of 2018	Fiscal Year of 2019
	04.05.2018	28.06.2019	31.03.2019
One share equals one note	Yes	Yes	Yes
Number of shareholders present, represented, granting power of attorney to chairman or voting by email	1,026,500,492 shareholders representing 699 shares	943,139,813 shareholders representing 504 shares	815,072,841 shareholders representing 379 shares
Attendance Rate	74.38%	68.34%	59.1%



RISK MANAGEMENT AND INTERNAL CONTROL

Senior Vice Presidency (SVP), Inspection Board inspects effectiveness of our operations/activities, corporate governance, risk and control processes, as well as compliance thereof to the internal regulations of our Incorporation, the agreements, pre-determined strategies, policies and targets, and provides its opinions and recommendations therefor.



OUR RISK MANAGEMENT STRATEGY

An effective risk management strategy at our Incorporation is critical in taking under control potential risks inherent in the airline industry, which is prone to fierce competition and to ensuring sustainable growth. Furthermore; the Financial Risk Management strategy was established in order to minimize particularly the fuel prices, interest rates, cash flow, foreign currency fluctuations and counterparty risks and to provide a reasonable level of guarantee within our Incorporation against potential shocks. Accordingly; fuel price risk is tried to be minimized using the Swap- and option-based structures although they differ by the price levels with respect to the hedging transactions for fuel prices.

An effective foreign exchange rate policy, based primarily on natural risk management, is implemented for foreign exchange rates. It is intended to minimize the foreign exchange rate, which might arise even after implementation of natural hedging practices, by means of forward- or option-based costless banded structures. As part of the risk management initiatives for interest rate, the Incorporation performs hedging transactions, ensuring that the loan interest rates remain fixed at a certain rate for a portion of the debt portfolio throughout the loan term, or that they remain fixed between some certain interest levels (bands).

More information on management of risks is available on pages 118-119 and 130-131 of the annual report of Turkish Airlines for 2019.

INTERNAL CONTROL MECHANISM

Our Incorporation has a Senior Vice Presidency (SVP), Inspection Board which inspects, with a systematic and disciplined approach, whether the Incorporation's activities including corporate governance, effectiveness of risk and control processes, improvement of Incorporation services are at the quality level that will provide the highest level of customer satisfaction, compliance with legislation, the Incorporation's internal regulations, agreements, pre-determined strategies, policies and targets, and provides consultancy and assurance on the efficiency and effectiveness of these processes, and also submits opinions and suggestions. In this respect, the SVP, Inspection Board identifies risk mitigating measures, reports and provides counseling service to the Senior Management about these issues including detection of faults, fraud and misconducts.



**We have adopted
ethics and social responsibility,
as well as a transparent
and fair management culture as a
principle in our operations.**



BUSINESS ETHICS

The Turkish tradition has been the foundation of Turkish Airlines' commitment to embracing a socially and ethically responsible approach to its business and adopting a transparent and fair management culture. The Incorporation cultivates open communication channels with all stakeholders which enable the organization to assess all shareholders' and stakeholders' interests and understand different perspectives. This approach helps Turkish Airlines serve as a corporate citizen and operate beyond its financial interests.

OUR BUSINESS ETHICS APPROACH

Our Board of Directors has prepared a "Code of Ethics" and a related handbook, which is also published on our website, within the framework of Corporate Governance Principles. Turkish Airlines defines its 'Code of Ethics' as the fundamental policies, procedures and rules that all executives and employees are obligated to comply with. These rules have been established to ensure that Turkish Airlines' executives and employees show high standards of ethical conduct, that they are aware of the impact of their acts and attitudes on the Incorporation, and that they exhibit highly qualified behaviors.

The Code of Ethics covers various issues such as our principles and values as well as the matters related to compliance, bribery and corruption, anti-competitive behavior, etc. Our employees become familiar with our Code of Ethics during their employment period and are provided with information on the Incorporation's Corporate Ethics Handbook and Corporate Ethics Procedures; and are required to act in line with the generally-accepted principles in business life, and be respectful in their words and deeds with regards to legislation, ethical values, social norms and environment.

DEVELOPMENTS IN 2019

The Ethics Committee Procedure, which sets out the structure, duties, authorities, responsibilities and operating principles of the Ethics Committee that was established in order for assessment of any and all reporting made to the "Ethics Line" by means of telephone, e-mail and web in several issues such as corporate business principles, codes of conduct, discrimination, conflicts of interest, superior-subordinate relationships, problems experienced with colleagues and line managers, etc., as well as of the Sub-Committee reporting to the Ethics Committee, entered into effect in 2017 Turkish Airlines has not encountered any findings of breaches of competition rules nor it has been subject to any sanctions with respect to competition law so far as a result of the inspections/investigations carried out by the domestic and foreign competition authorities. Our Code of Conduct Manual is being revised. Once all related processed have been completed, our Manual, including detailed information on the Codes of Conduct of our Incorporation, will be made available to our employees.

In addition, in 2019, "Ethical Codes" were prepared, which clearly state our Incorporation's brand image and its sensitivity to ethical issues, and contain a roadmap on the vision and mission of our Incorporation. The work will be put into service of our Incorporation personnel as soon as possible.

COMPLIANCE

Turkish Airlines is committed to complying with all national regulations and those related to the aviation



industry, which have been prescribed in our Compliance Policy. We believe that compliance goes beyond just strictly adhering to laws and regulations and includes reflecting the spirit of our Code of Ethics in our decisions and actions.

ETHICS TRAININGS

As a growing Incorporation, it is of high importance for us to conduct this growth process in accordance with the “Competition Law”. We organize trainings for all our employees including the executives and managers to create this awareness. The trainings enable to raise the participants’ awareness on anti-competition issues and provide them with tips and tools on how to identify and deal with these issues. In 2019, awareness raising activities on ethics were carried out via mailing, posting, monthly corporate reports.

An online training module on ethics for all employees has been designed. The training program contains information on what ethical rules are, why they are important and how they benefit both the employee and the employer and what to do if employees are exposed to any ethics violations or witness such an incident. The revision study regarding the content of the online Ethics Rules and Ethics Committee Training was carried out in both Turkish and English. Related sound and animation works are being carried out.

On the other hand, internal Social HR framework, was designed to meet and share with colleagues about the interests and experiences of the employees to contribute to the communication and information exchange within

the Incorporation. A presentation about mobbing was prepared to increase the awareness of the managers and employees. It is planned to be made available to the personnel of our Incorporation as soon as possible.

MISCONDUCT REPORTING

“Ethical Way”, an Ethics Reporting Line, a whistle-blowing system has been established to enable Turkish Airlines’ employees to anonymously report on any breach of our corporate principles or ethical issues including discrimination, bribery, conflict of interest or anti- competition practices. Ethical Way is managed by a completely independent third party Incorporation and is dedicated to Turkish Airlines employees’ questions and/or reporting about ethical concerns. Our Ethics Board, which is composed of four members and a president, assess the applications. Ethics Committee works to ensure the adoption of the Ethical Principles and Values within the Incorporation and that all employees in the working environment exhibit a parallel ethical approach to corporate culture which would serve as a form of corporate identity and behaviour in the long term. The Committee aims to provide guidance to employees to make ethical decisions in the unclear ethical dilemmas and resolve disputes. Ethics Board listens to the respective personnel and receives the opinions of the concerned departments, and thereafter, takes action upon the results received.

In 2019, 278 applications were made to Ethics Reporting Line on various issues. Most of the cases reported were related with ‘act against work peace’ and ‘act against work discipline’. All of these issues were

considered in detail by Turkish Airlines Ethics Board and it was decided to inform the concerned employees and departments to ensure that necessary actions are taken and administrative sanctions were imposed on behaviors contrary to work discipline.

ANTI-BRIBERY AND ANTI-CORRUPTION

We comply with the guidelines of the airline industry and the applicable laws in the countries, where we operate, regarding bribery and corruption issues, and we have gone further by setting higher standards for ourselves in our revised Code of Ethics. We strive to raise awareness among our governance bodies and business partners as well as our employees to prevent risks of any related potential incidences, and have established internal control measures to ensure compliance and monitor these issues across our Incorporation.

In respect of anti-corruption guidelines; the roles of the senior management, SVP, Inspection Board, SVP, Security, Audit Committee, Ethics Board, Discipline Council, Human Resources and every employee of our Incorporation have been established with an integrated approach towards detecting and preventing corruption and misconducts in addition to monitoring and improving anti-corruption systems. SVP, Inspection Board assesses the whole Incorporation including risks related to bribery and corruption.

In 2019, Turkish Airlines has not encountered any findings of breaches of anti-bribery and anti-corruption policy nor it has been subject to any administrative and monetary sanctions with respect to bribery and corruption.



04

ECONOMY

CONNECTIVITY GAINS **36**

OUR CONTRIBUTIONS TO ECONOMIC
AND SOCIAL DEVELOPMENT **39**



**We operate flights to 318 destinations
in 126 countries, increasing the global connectivity
and providing a contribution to economic and social
development.**





CONNECTIVITY GAINS

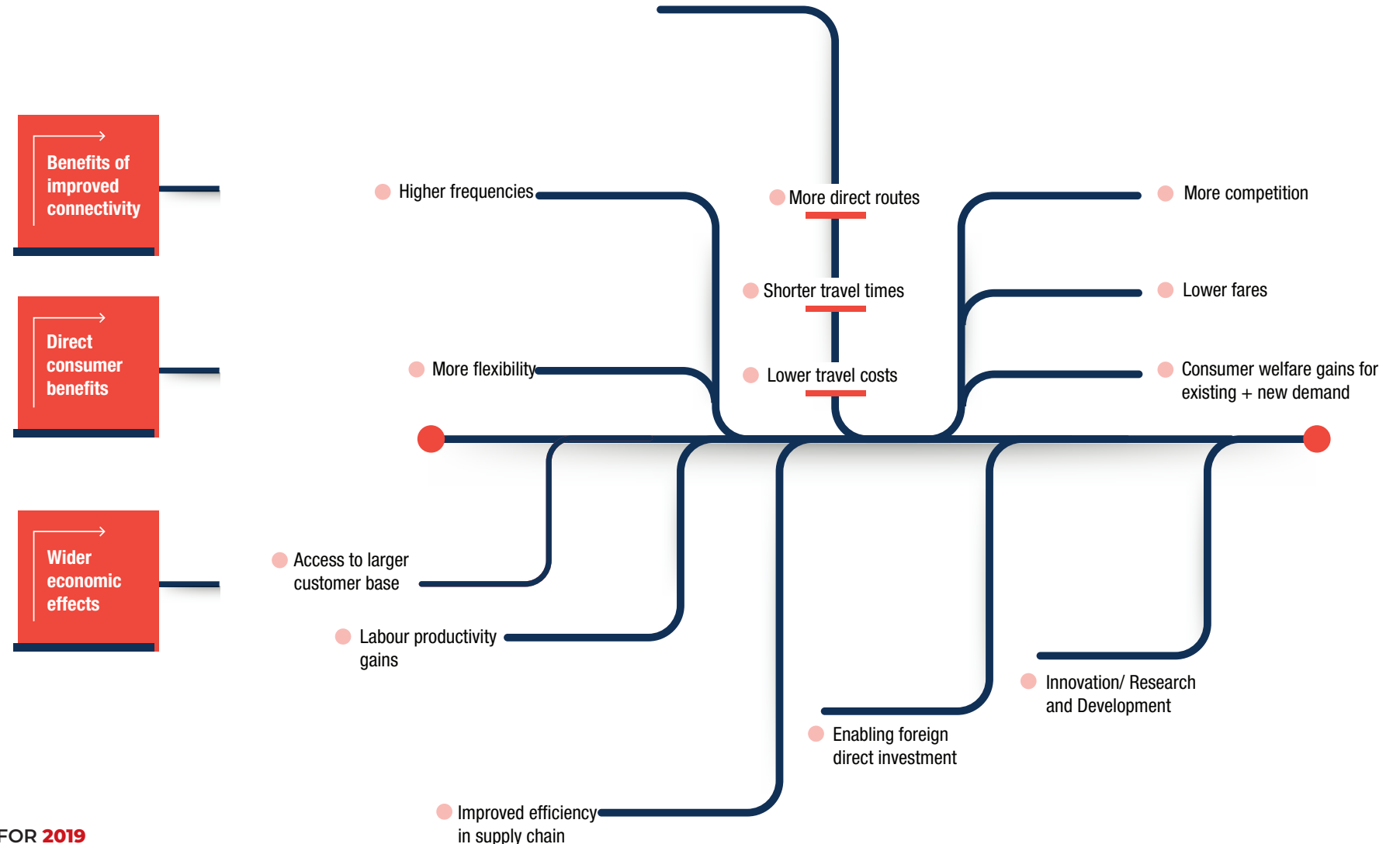
Connectivity can be defined as the scope of access between an individual airport or country and the global air transport network.¹ It is also an indicator of a network's concentration and its ability to transport passengers from their points of origin to their points of arrival seamlessly.²

1 - IATA Report, Aviation Economic Benefits, 2007

2 - Worldwide Air Transport Conference, ICAO 2013

3 - Economic Benefits of European Airspace Modernization, SEO 2016

THE WIDER ECONOMIC IMPACTS OF CONNECTIVITY





Air connectivity brings many advantages to Turkey's economy including⁴:

- ▶ Opening up foreign markets for Turkish exports due to positive correlation between connectivity and exports.⁵
- ▶ Increased foreign direct investments through opening up Turkish factor markets for investors. For example, new route openings lead to increases in the FDI levels.⁶
- ▶ Reducing transport costs, particularly over long distances, and increasing competition as suppliers can provide service to a wider area and potentially reduce average costs, through increased economies of scale;
- ▶ Increasing the flexibility of labor supply, which should enhance allocative efficiency and bring down the natural rate of unemployment. It is estimated that in Europe, 10% increase in air connectivity results in 0.5% increase in in GDP/capita at the national level.⁷
- ▶ Encouraging Turkish enterprises to invest and specialize in areas that play to the economy's strengths.
- ▶ Accelerating the adoption of new business practices, such as just-in-time-inventory management that relies on quick and reliable delivery of essential supplies. (Studies related to air connectivity suggests that increasing connectivity leads to enhanced technology diffusion among countries)
- ▶ Raising productivity and therefore the economy's long-run supply capacity.⁸

4 - IATA Report, Aviation Economic Benefits, 2007

5 - Belenkiy & Riker, 2012, PWC, 2014

6 - According to Bannò Redondi, 2014

7 - InterVISTAS, 2015

8 - Baruffaldi, 2015



Istanbul's High Connectivity Rate



THE AVIATION SECTOR'S SUPPLY CHAIN

Purchases by the aviation sector of domestically produced goods & Services from firms outside the aviation sector

LOCALLY-BASED AIRLINES

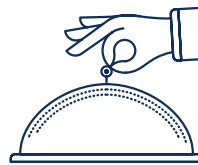
- Domestic
- International passenger
- Freight Services



Aviation Fuel



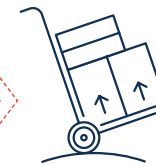
Repair & Maintenance



Catering



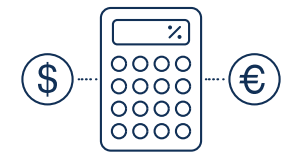
Ticketing & Distribution



Freight Forwarding



Aircraft Financing



Other Finance & Business Services

GROUND-BASED INFRASTRUCTURE

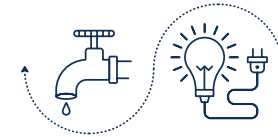
- All on site activities at Airports
- Air Navigation Service Provider (ANSP)
- Regulators



Finance



Construction & Facilities Management



Electricity & Water Supply

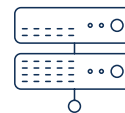
NON-AIRSIDE SUPPLY CHAIN



Food and Drink



Business & Marketing Services



Computing

Source: Economic Benefits from Air Transport in Turkey, Oxford Economics, 2011



OUR CONTRIBUTIONS TO ECONOMIC AND SOCIAL DEVELOPMENT

We provide substantial contributions to Turkey's job creation, public finance, exports, trade and tourism, besides the local economic and social development across our global destinations.

Turkish Airlines is the market leader in Turkey carrying 47% of total passengers. With the addition of 12 new flight destinations and 2 new country in 2019, we, as the airline that flies to the most countries worldwide with 321 destinations, in 318 cities in 126 countries, generate new economic opportunities through our expanding network. We provide substantial contributions to the Turkish economy, trade and tourism. Not only do our main hub Istanbul Airport other hubs such as Sabiha Gokcen and Ankara provide highly attractive business environments, but also we contribute to local economic and social development at our destinations both nationwide and worldwide.

CONTRIBUTION TO GDP OF TURKEY

Experiencing a rapid growth period following the statutory regulations made since 2003 across our country, the aviation industry keeps developing with the increased number of infrastructure and fleet investments, number of connections and ticket fare arrangements. The aviation industry directly contributed 29.2 billion USD to Turkish GDP in 2019 through the outputs of airlines, airports and ground handling agents. This corresponds to 4% of the total GDP of Turkey. Turkish Airlines has generated a revenue of approximately 13 billion USD in 2019, reflecting an annual growth rate of 13% since 2006.

We have made investments over 17 billion USD between 2006-2019, and spent 1.925 million USD for procurement of 24 new aircraft in 2019.

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 other taxes and charges, generated in 2019 by Turkish Airlines with a substantial contribution to Public Finance, corresponds to 1 billion 380 million USD.

CONTRIBUTION TO JOB CREATION

Aviation industry is considered as a major employer in Turkey, and provided job opportunity directly to more than 225 thousand people in 2019 across the country. An average employee, serving in air transportation services, generates a higher gross added value, and is 175% more productive compared to an average employee in Turkey².

Providing job opportunities directly to 35 thousand 275* people in 2018, Turkish Airlines increased this figure to 38 thousand 804* people in 2019, and represented a major portion of the direct jobs, provided by the aviation industry across Turkey in 2019, with its direct job opportunities of approximately 65 thousand.

1- Directorate General of Civil Aviation, estimation, 2019

2- Oxford Economics, Economic Benefits from Air Transportation in Turkey, 2011.

* Figures of Turkish Technic Inc. and Aydin Cildir Havalimani Isletme A.S. are included.



CONTRIBUTION TO TURKEY'S EXPORT

Turkish Airlines contributes to Turkey's export directly as the Turkey's biggest exporter and also indirectly by opening new channels of transport, and therefore increases connectivity. In 2019, 77% of our tickets are sold outside the borders of Turkey, implying a significant service export for our country.

Moreover, Turkish Airlines ranked in the first place in "500 Great Service Exporter" survey which was conducted by Turkish Exporters Assembly this year for the second time, meaning that Turkish Airlines brought the most foreign currency into our country.



CONTRIBUTION TO TOURISM

Over 4.5 billion passengers worldwide boarded on an aircraft in 2019 for various reasons including touristic purposes. Being a major contributor to Turkey's economy and having an increasing number of destinations, Turkish Airlines has a significant footprint the tourism industry. The tourism industry which enlivened in 2017 continued its growth in 2019.

The number of tourists, visiting Turkey in 2019, was reported as 45.1 million with an increase by 14% compared to 2018. 77% of these 45.1 million tourists preferred air transportation instead of the other transportation means.



CONTRIBUTION TO LOCAL DEVELOPMENT AT OUR DESTINATIONS

As of 2019, 47 countries were categorized as the least developed countries in the world by the United Nations, and Turkish Airlines flies to 26 of these countries. Approximately 1.5 million of these passengers, carried in these 26 countries covered under the list of the least developed countries, preferred Turkish Airlines for their travels as of 2019. Offering global connectivity, our Incorporation enables people in the least developed countries to foster their economic and social relationships with the rest of the world.



OUR ECONOMIC FOOTPRINT

LOANS



3.161 million \$
Loans

REVENUE



83.9%
Passenger



12.8%
Cargo



3.3%
Maintenance
and Others



TOTAL
13.229 million \$

TAXES ON TICKETS



→ AIRPORTS
→ GOVERNMENTS

1.380 million \$
(Not included in turnover)

INVESTMENTS



2.402 million \$
Fleet



939 million \$
Others



974 million \$
Financial Lease
Payments

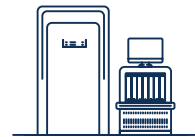
EXPENSES



3.873 million \$
Suppliers (Fuel)



48 million \$
Sponsorships



622 million \$
Airport fees



553 million \$
Air Traffic Control



5.429 million \$
Other Suppliers



52 million \$
Government



2.067 million \$
Employees



TOTAL
12.644 million \$



05

ENVIRONMENT

ENVIRONMENTAL MANAGEMENT 46

RESOURCE EFFICIENCY 53

WASTE MANAGEMENT 55

NOISE MANAGEMENT 57

COMBATING CLIMATE CHANGE 58

FUEL EFFICIENCY AND REDUCTION OF OUR 62

GREENHOUSE GAS EMISSIONS





20%

More Fuel Efficient
Flights Compared to
12 Years Ago



55,492

Tonnes of Fuel Saved
2019



174,800

Tonnes of CO₂ avoided
2019



Total

554,010

Tonnes of Fuel Saved
2008-2019



Total

1,744,969

Tonnes of CO₂ avoided
2008-2019



8.3

Average Fleet Age,
One of the Youngest
Fleets Worldwide
2019



**2018-
2023**

New-Generation
Aircrafts Consuming
15% Less Fuel
92 Airbus
75 Boeing



Bio-Fuels

Related Research
and Development
Investments



7%

Decrease in natural gas
consumption (sm³)
2019



15,229,348

The number of avoided
plastic package
2019



ENVIRONMENTAL PRACTICES AND PERFORMANCE FOR 2019	Achievement	Target for 2020
Environmental Management		
Continuity in compliance with the environmental regulations was achieved, and any non-conformity on environmental matters could not be identified.	100%	Continuity in compliance with the environmental regulations
No environmental emergency, accident or incident occurred.	100%	Non-occurrence of any environmental accident, emergency or incident
TS EN ISO 14001:2015 Environmental Management System (EMS) Certificate was successfully renewed.	100%	Continuation of the Certificate
46 internal audits were conducted under TS EN ISO 14001 and 14064-1 to ensure continuous improvement of the Environmental Management System (EMS), and the actions, required to be taken for the identified findings, were assigned to the concerned departments.	100%	Monitoring of the findings identified in the previous audit, and planning of the new internal audits to improve the EMS performance.
All environmental issues, which are required to be addressed on minimum basis, were addressed completely in Compliance Review Board meetings.	100%	Escalation of environmental issues to the Management Review Meetings, and assessment thereof by the senior management.
Our Incorporation is included in the BIST Sustainability Index.	100%	Maintenance of our listing in the BIST Sustainability Index.
Efficient Use of Resources		
Electrical energy consumption in the Headquarters, and Yenibosna and Technology premises decreased by 0,93% compared to 2018, and the total amount of power consumption was reported as 7,771,326.53 kWh.	100%	Reducing the electricity consumption per capita for buildings ¹ operated by the Facilities Directorate, with a saving of at least 2% from 3,106 kWh / person in 2019 to below 3,043 kWh / person
The natural gas consumption in the Headquarters, and Yenibosna and Technology premises decreased by 4.29% compared to 2018, and the total amount of natural gas consumption was reported as 351,038 sm ³	100%	Reducing the natural gas consumption per m ² for buildings ¹ operated by the Facilities Directorate, with a saving of at least 2% from 11.37 m ³ / m ² in 2019 to below 11.14 m ³ / m ²
Water consumption in the Headquarters, and Yenibosna and Technology premises, was reported as 64.903 m ³ .	100%	Reducing the water consumption per capita for buildings ¹ operated by the Facilities Directorate, with a saving of at least 2% from 16.91 m ³ /person in 2019 to below 16.57 m ³ / person
Revisions to boost the productivity of our air-conditioning plants have been performed with an aim to minimize the power consumption. Coins have been replaced with the more productive alternatives, and LED lamps have been started to be used in lightning.	New target	-
As part of the natural gas consumption saving; the air-ventilation system of the General Management building was revised in a manner to be adjusted on floor basis.	New target	-
The boiler system, available at the General Management building, was equipped with the heat recovery system.	New target	-
Waste Management		
Processes for engaging licensed companies in accordance with the applicable statutory regulations for segregation, temporary storage, recovery and disposal of waste, and keeping and monitoring the records thereof were performed	100%	Maintenance of waste management in accordance with the applicable statutory regulations.
174 tonnes of packaging waste were sent to recycling	Packaging waste which was 258 tonnes in 2018 reduced to 174 tonnes in 2019.	





ENVIRONMENTAL PRACTICES AND PERFORMANCE FOR 2019	Achievement	Target for 2020
1.249 tons of packaging waste were sent to recycling. 153 tonnes of hazardous waste were sent to companies having the waste collection license.	Due to the move to the new Istanbul airport, the goal could not be achieved.	The target unit was changed to kg/person due to increased number of personnel and new facilities opened. Reducing the amount of hazardous waste per person to 4.5 kg / person with a 10% reduction compared to the previous year.
In-flight waste sorting was carried out on 26 domestic and 69 international flights arriving to Istanbul airport and 19 domestic flights and 10 international flights arriving to Sabiha Gökçen airport	100%	
Bio-plastic bags, which are fully conforming to TS EN 13432 standard "Packaging- Requirements for packaging recoverable through composting and biodegradation" and which are of biodegradable nature, were used instead of the plastic packaging bags of the earphones and blankets.	100%	
Wood toys, made from forestry products and certified by the Forest Stewardship Council (FSC), were offered to our child passengers on-board the aircraft instead of the plastic toys.	100%	
All travel and toy sets started to be provided without any external plastic package, resulting in abolishing the use of a total of 15,229,348 bags.	100%	
Combating Climate Change		
Greenhouse gas emission resources were monitored through the form which was filled by 58 stations.	100%	Monitoring of the greenhouse gas resources
Direct and indirect greenhouse gas emissions were calculated in accordance with the standard TS EN ISO 14064-1, and the greenhouse gas report was drawn up.	100%	Continuity in greenhouse gas emission calculations for the existing facilities under the project
Greenhouse gas statement was assured by the independent auditing organization in accordance with TS EN ISO 14064-3	100%	Verification of the emissions for 2020
We joined Sustainable Bio-Jet Fuel initiative in line with our goal of reducing our carbon emissions.	100%	Continuation of the sustainable jet fuel initiative
Thanks to the fuel saving projects, the fuel efficiency was reported as 18.22 kg/100 ATK in 2018, with an improvement by %0.55 percent compared to the previous year.	100%	Decrease of ATK by 5% by 2025
55,492 tonnes of fuel were saved	100%	To save 47,000 tonnes of fuel
174,800 tonnes of CO ₂ emissions were avoided	100%	To avoid 148.050 tonnes of CO ₂ emissions
Online training contents to raise the level of awareness on environment and greenhouse gas were generated. Environmental awareness training was assigned to 1,706 flight crew members, 1,216 cargo personnel and 1,527 ground personnel, and greenhouse gas awareness training was assigned to 3,965 personnel.	100%	Assignment of the respective trainings to the new joiners
The emission tracking plan was submitted to the DGCA under the scope of the CORSIA draft.	100%	Monitoring of the related GHG emissions



ENVIRONMENTAL MANAGEMENT



Turkish Airlines holds TS EN ISO 14001: 2015 Environmental Management System Certificate¹

As Turkish Airlines, in line with our commitment to “considering people and the environment while growing”, as stated in our environmental policy, while expanding our flight network and expanding our fleet, we have primarily aimed to minimize our potential negative environmental impacts and leave a livable world to future generations. With the environmental dimension and environmental impact assessment studies we conduct in line with this purpose, we determine the environmental dimensions and environmental impacts that may arise from all activities, products and services of our Incorporation. We carry out corrective actions to eliminate or minimize these environmental impacts and apply methods for improvement. (See: [Environmental Dimensions](#))

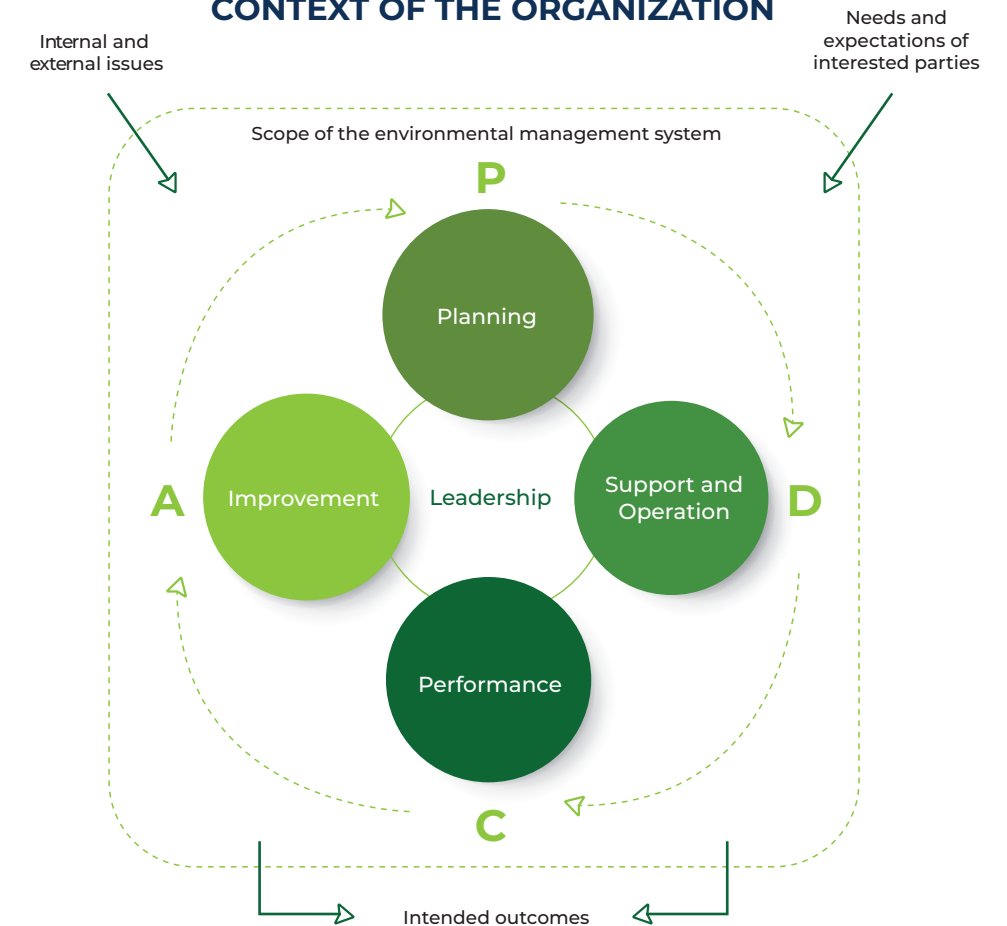
We conduct our activities in accordance with the requirements of all relevant legal regulations and our voluntary commitments. In order to go beyond compliance with legal requirements and to take our environmental management system

one step further every year, we follow global trends and successful sectoral practices and plan for value added initiatives. Our [Environmental Policy](#), which we review regularly, is shared with all relevant parties on our website.

Our activities, products and services continued to be carried out in accordance with the requirements of the TS EN ISO 14001: 2015 Environmental Management System Standard in 2019, and the Environmental Management System Certificate continued to be valid as a result of the audits performed.

Adopting the principle of “continuous improvement”, our Incorporation aims to be included in the IATA Environmental Assessment (IEnvA) Management System Program implemented by The International Air Transport Association (IATA) for airline companies in 2020 in order to strengthen the environmental management system with the requirements specific to the aviation industry.

ISO 14001:2015 PDCA MODEL CONTEXT OF THE ORGANIZATION



¹ - ISO 14001 Environmental Management System Certificate covers design and provision of scheduled and unscheduled domestic passenger and cargo air commercial transportation services, and services offered during international flights, as well as the training services.

As Turkish Airlines, we are determined to tackle climate change, one of the most important environmental problems in the world. In this context, we carry out multi-faceted studies within the Incorporation to eliminate and reduce the factors that may affect climate change. Supporting initiatives related to fuel efficiency, taking measures to reduce natural resource consumption and greenhouse gas emissions are some of our works we carry out for this purpose. In addition to these, the measures taken by international aviation authorities against climate change are also supported by our Incorporation and the requirements are fulfilled.

At Turkish Airlines, all environmental issues are managed by the Quality Assurance Department, which is directly affiliated with the General Manager. Environmental Management Review Meetings are held regularly with the participation of senior management and Vice President Quality Assurance.

Employees of our Incorporation, have been selected by national and international aviation authorities to take part in the implementation of sustainability activities, ensuring and improving sustainability in the Sustainability Committees of the associations we are a member of, and take active roles in these groups.

As one of the leading companies that shape sustainability in the aviation industry, we will continue to systematically carry out our sustainability efforts in 2020.



Our employees actively participate in the Committees below:



IATA
(The International Air Transport Association)
Sustainability
Environmental Advisory
Council



TIACA
(The International Air Cargo Association)
Sustainability Working
Group



Star Alliance
Sustainability Virtual
Expert Community



OUR ENVIRONMENTAL POLICY

The Senior Management of Turkish Airlines hereby declares its Environmental Policy covering the design and presentation of the scheduled and unscheduled passenger and cargo commercial air transportation services in domestic lines, the in-flight services in international lines, and the training services in order to bring its employees, customers, suppliers, affiliates, and all its business partners and shareholders together around a common goal for its future, in line with duties and common values of the Incorporation by considering the national and international laws and regulations as well as the commercial ethics, by focusing on total quality.



ABIDING BY THE RULES

It complies with the aviation regulations along with the national legal requirements, and the other national/international requirements on the environmental issues that it is liable to comply with. It aims to extend beyond compliance with laws by the environmental projects it supports.

MANAGING THE ENVIRONMENTAL ASPECTS

It determines the environmental aspects of all its activities, products, and services, detects the environmental impacts, and develops action plans to decrease such impacts. It applies an improvement-oriented management system 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 and takes measures to decrease the greenhouse gas emissions to decrease and eliminate the factors that may worsen the climate change. It takes measures against noise pollution and wastes. It minimizes wastes by giving priority and support to the use and recovery of recyclable materials within the waste management process.

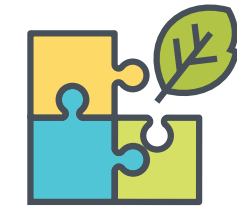


CONSIDERING PEOPLE AND THE ENVIRONMENT WHILE GROWING

It considers the life cycle approach while planning new investments in relation to its operation area, expanding its fleet, and upgrading its technological infrastructure.

BEQUEATHING AN HABITABLE WORLD FOR FUTURE GENERATIONS

It uses the natural resources effectively and efficiently as per the sustainability principle by considering the future generations that are its common assurance with its stakeholders; and places importance on biological diversity.



DEVELOPING ALONG WITH STAKEHOLDERS

It works to increase the environmental awareness of its own employees, and encourages their participations. It shares and spreads good environmental practices by making contact with all its stakeholders. It supports the sustainable products and services throughout the life cycle.

IMPROVING CONSISTENTLY

It measures, monitors, reviews and continuously improves its environmental performance on a regular basis as per its environmental objectives. It ensures participation of stakeholders and all levels of the organization for the improvement of its environmental performance. It shares the information on its environmental performance with its stakeholders. It reviews, updates, and shares its Environmental Policy with the relevant parties periodically.

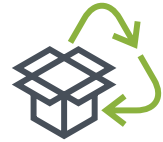




OUR ACTIONS



We carry out voluntary certification processes to enhance and improve continuously the performance of the Environmental Management System and plan to add new ones to these.



We implement effective waste management projects in our cargo operations, office activities and in-flight activities.



We carry out projects to encourage effective and efficient utilization of the resources such as water, power and natural gas, etc., and to decrease the paper consumption.



We implement fuel efficiency practices, ensure consumption of natural resources more efficiently and minimization of greenhouse gas emissions.



We hold trainings, workshops and webinars to increase the level of awareness of our employees.



We identify any and all kinds of potential environmental emergencies, and take measures against such emergencies, and hold drills to get ready for them at all times.



In order to ensure full compliance with laws, national and international requirements, we periodically conduct management evaluations and conduct environmental inspections in the field.



We determine our environmental risks and opportunities and take actions to address them.



2019 DEVELOPMENTS

TS EN ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEM

The Environmental Management System, which has been implemented in our Incorporation since 2013, continues to be carried out in 100% compliance with the requirements of the TS EN ISO 14001: 2015 Environmental Management System Standard.

CORSIA

Management team of Turkish Airlines have united around the goal of reducing the potential negative environmental impacts caused by the aviation industry. In this direction, we started with determining our requirements within the scope of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), implemented by the International Civil Aviation Organization (ICAO), to which our country voluntarily committed to comply. First, we created an Emission Monitoring Plan and submitted it to the General Directorate of Civil Aviation (DGCA). Thus, our CO₂ emissions arising from international flights in 2019 began to be monitored. We will continue to carry out our work in the future in accordance with the requirements of the draft.

GREENHOUSE GAS EMISSION MEASUREMENT AND CERTIFICATION

Greenhouse gas emissions caused by our operations were calculated according to ISO 14064-1 (Calculation of Greenhouse Gas Emissions and Removals at the Establishment Level) and the greenhouse gas statement was prepared. For detailed information on emissions, see [Emission Data](#). Our greenhouse gas statement for 2018 was verified by the independent audit firm in accordance with the TS EN ISO 14064-3 (Greenhouse Gas Calculation and Verification) Standard. See: [Greenhouse Gas Declaration Verification Statement](#). Further information on our greenhouse gas reduction efforts is available in the [Combating Climate Change](#) section of the report.

IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS CAUSED BY OUR OPERATIONS

We, as Turkish Airlines, are engaged in initiatives to determine all environmental aspects and impacts, arising from under activities, and to eliminate such impacts, and if not possible to eliminate, to minimize the same.

All environmental aspects, identified in the fields of operations of our Incorporation within the borders of our country, are included under the [“Substantial Environmental Dimensions Report”](#).

Not any environmental accident or incident occurred during realization of our services, products and operations, and not any non-compliance with the applicable environmental laws was identified in 2019.

TRAININGS

We continued to assign e-learning programs, prepared in 4 modules considering the scope of working areas, in order to increase the level of awareness on environmental issues across Turkish Airlines in 2019. Throughout 2019;

► **“Environmental Awareness Training for Flight Crew Members”**, prepared to increase the level of awareness of our flight crew members in environmental aspects and impacts arising from the flight operations, was completed by 1,706 persons.

► **“Environmental Awareness Training for Ground Personnel”**, prepared to increase the level of awareness in environmental aspects and impacts arising from all other activities by us, was completed by 1,527 persons.



► **“Environmental Awareness Training for Cargo Personnel”** prepared to increase the level of awareness of the employees, serving at the Cargo Directorate in charge of cargo operations, in environmental impacts arising from their working areas was completed by 1,216 persons.

► The e-learning themed **“Awareness on Greenhouse Gases”** was completed by 3,965 persons.

► In addition to online trainings, seminars were held and bulletins and announcements were published within the scope of Zero Waste Project and waste management.

► Moreover, within the scope of the Station Management Systems Workshop Project, workshops were held on the TS EN ISO 14001 Environmental Management System Standard and related practices at 8 stations where we operate.

SUSTAINABILITY EVALUATIONS

We were entitled to be listed under the [BIST Sustainability Index](#), created by an independent evaluation Incorporation based on the performance of the topranking 50 companies, listed in Borsa Istanbul, in the fields of environmental, social and corporate management, in 2019. We aim to maintain our position under the Index with our sustainability performance, we keep developing, in the next period.



As Turkish Airlines, we follow global trends in line with continuous improvement, which is one of the basic principles of management systems, and continue our development process by adding new ones to our existing practices. This year, we decided to add a new one to the ISO 14001 Environmental Management System requirements we have been implementing since 2013. The aviation industry has many specific applications compared to other industries.

We have the opportunity to develop in the aviation industry, where we can address these specific

We aim to be included in the IATA Environmental Assessment (IEnvA) Program, which is the **Environmental Management System of IATA**.

points. We aim to be included in the IATA Environmental Assessment (IEnvA) Program, which is the Environmental Management System of IATA. In this way, we will both closely follow the developments in the aviation sector, be aware of good practices, and identify areas that are open to improvement.

With our environmental sensitivity, we fulfill our responsibilities by participating in projects both nationally and internationally. We fulfill the requirements of the EU-ETS and TS EN ISO 14064-1 (Calculation of Greenhouse Gas Emissions and Removals at the Organizational Level), especially CORSIA. Our efforts continue to contribute positively to the environment in a changing world.

BİLAL TEK
Senior Vice President,
Quality Assurance



2019 ENVIRONMENTAL MANAGEMENT OBJECTIVES AND COMPLIANCE WITH THE GOALS

➤ *Complete 100% of the necessary infrastructure to obtain the Gold certificate within the scope of the Presidency Zero Waste Project in the Head Office, Halkalı Technology and Yenibosna buildings in 2019*

Target Achievement: The draft Zero Waste Regulation was taken as a basis to identify the goal for 2019. According to the currently in effect Zero Waste Regulation, organizations must first apply for the Primary Certificate. Once, the Primary Certificate is obtained, a Gold or Platinum Certificate application can be made. Our 2020 target has been updated in this direction and identified as applying for the Primary Certificate and meeting the necessary conditions for obtaining a Gold or Platinum Certificate.

➤ *To reduce the amount of hazardous waste, which was 100,795 kg in 2018, to 90,715 kg with a 10% decrease in 2019.*

Target Achievement: As a total of 153 tons of hazardous waste was generated in 2019, the target could not be achieved. The reason why the target could not be realized: After moving from Ataturk Airport to Istanbul new airport, the de-icing liquids which were stored in IBC tanks at Ataturk Airport have started to be stored in a special facility at Istanbul Airport without the need for IBC tanks. The amount of hazardous waste increased as all IBC tanks at Ataturk Airport were delivered to licensed companies as waste.

2020-2021 TARGETS

We aim to offer our passengers the option of offsetting their emissions from their flights and to offset the emissions of our employees from duty flights by 2021.

In the upcoming period, we aim to respond to the Carbon Disclosure Project (CDP) Climate Change Program in order to contribute to reducing the effects of climate change and protecting natural resources.





RESOURCE EFFICIENCY

7% reduction in natural gas consumption compared to 2018!

We are aware of our responsibility for sustainable use of natural resources in line with our vision of leaving behind a livable world for future generations. Within this scope, we track consumption amount of water, natural gas, power and paper, and set annual targets to reduce those. We assess our performance, and develop action plans to accomplish the targets we set.

ELECTRICITY GENERATION

We generate electrical energy from natural gas in the trigeneration plant established at our cargo premises. We make use of such energy to meet the electrical energy needs of our cargo and head office premises. Moreover; we transform the cooling water and flue gas heat, arising during the generation process, into productivity by means of the absorption chiller we have at our premises.

2019 DEVELOPMENTS

1. Coins have been replaced with the more productive alternatives, and LED lamps have been continued to be used in lightning.
2. A condenser (economizer) has been installed on the boiler flue in order to minimize the natural gas consumption..
3. Automation controlled air dampers have been continued to be installed on water taps with the aim of minimizing the water consumption. Moreover; the condensate, forming in the air-conditioning plants, has been continued to be used in garden irrigation processes.
4. In order to minimize the paper consumption, most correspondences have been started to be exchanged on the electronic medium thanks to the electronic document management system.





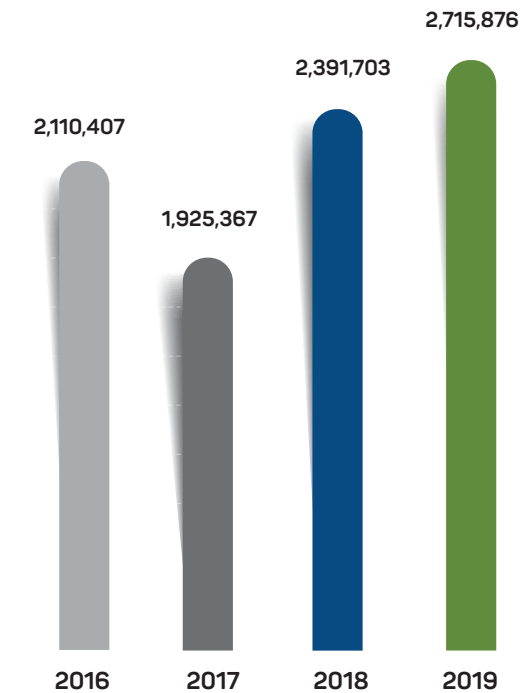
2019 PERFORMANCE

We continued to make use of the electronic documentation management system, resulting in paper consumption of 2,715,876 m² in 2019.

In 2019, natural gas scope 1 consumption at the premises where we have the management control was 4,125,496 sm³ and where we did not have the management control was 13,855 sm³. Natural gas scope 2 consumption where we did not have the management control was 319,969 sm³. Total natural gas consumption was 4,459,320 sm³ with a 7% decrease compared to 2018. More information about the scope of the natural gas consumption is available in the [Appendices](#).

In 2019, electricity scope 2 consumption at the premises where we have the management control was 13,611,743 kWh. Electricity scope 2 consumption at the premises where we did not have the management control was 28,235,742 kWh. Total electricity consumption was 41,847,485 kWh with a 18% increase compared to 2018 due to moving to Istanbul Airport. More information about the scope of the electricity consumption is available in the [Appendices](#).

Paper consumption amount (m²)



Natural gas consumption (sm³)

	Scope 1 Emissions from THY managed sources	Scope 1 Emissions not from THY managed sources	Scope 2 Emissions not from THY managed sources	Total
2018	4,149,367	18,657	621,487	4,789,511
2019	4,125,496	13,855	319,969	4,459,320

Electricity Consumption (kWh)

	Scope 2 Emissions from THY managed sources	Scope 2 Emissions not from THY managed sources	Total
2018	7,072,470	28,453,313	35,525,784
2019	13,611,743	28,235,742	41,847,485



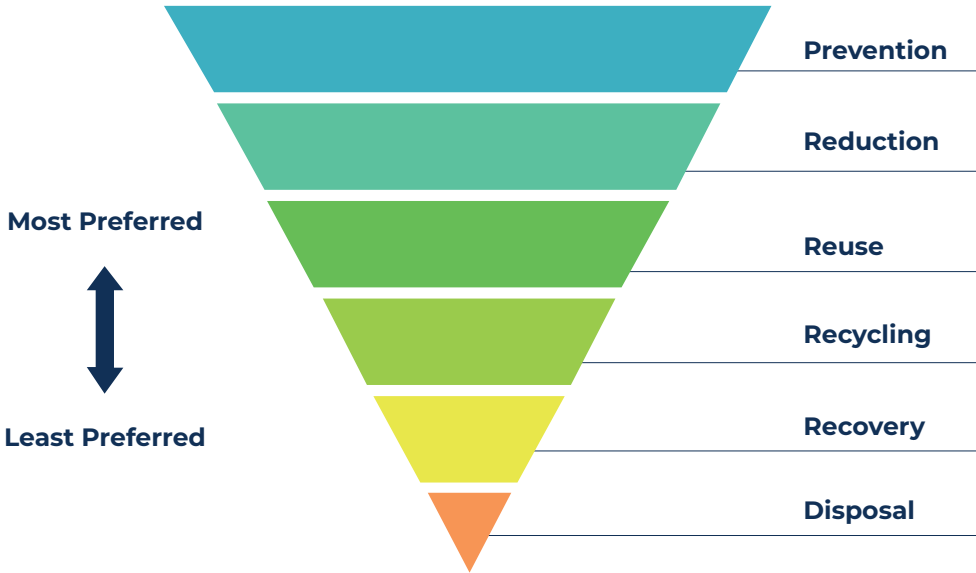
WASTE MANAGEMENT

Waste management practice involves ensuring identification of types and sources of the wastes generated within the organization, collection and separation of the wastes at their own sources, temporary storage, recycling and disposal of the wastes in accordance with the Draft Zero-Waste Regulations and the applicable statutory regulations.

We carry out all our waste management activities under the “Zero-Waste Project” in line with the principles of waste management hierarchy, as mentioned in our Environmental Policy. Accordingly; we give weight to elimination, and if not possible to eliminate, minimization of waste generation. In this way, we enable all our wastes to be put into good use in economic terms by means of recycling and/or recovery. In case of generation of non-recyclable and/ or non-recoverable waste despite all these measures, we send such wastes to disposal facilities by means of licensed firms.

Waste management practice involves ensuring identification of types and sources of the wastes

generated within the organization, collection and separation of the wastes at their own sources, temporary storage, recycling and disposal of the wastes in accordance with the Draft Zero-Waste Regulations and the applicable statutory regulations. Any and all wastes generated are regularly reported to the Ministry of Environment and Urbanization by waste types and waste codes. Any and all kinds of hazardous and non-hazardous wastes, packaging wastes, medical wastes, waste oils and packages released to the market in the previous year are all reported online and in writing to the Provincial Directorates of Environment and Urbanization, if and when so required, in accordance with the regulations of the Ministry of Environment and Urbanization.



We put recycling units in our work areas in order to collect our waste separately at its source. We conduct trainings to increase our employees’ awareness of zero waste and the environment. Furthermore; we ensure online data inputs for all waste types and amounts generated at our locations thanks to the recently-commissioned “Zero-Waste Information System”. Waste Management Supervisor’s Office serves in coordination with the “officials in charge of waste”, designated in all our premises in Istanbul and Turkey, and ensures that all types of waste, including packaging waste, domestic waste, medical waste, hazardous and non-hazardous waste which arise from our operations, are managed in accordance with the applicable regulations.



2019 DEVELOPMENTS

1. In 2019, in-flight segregation practice was initiated at **Sabiha Gokcen Airport in 19 domestic and 10 international flights and 19 domestic and 10 international flights at Istanbul airport.** We aim to implement this practice at our international destinations in 2020.
2. In order to minimize generation of plastic waste which cause greater damages to the nature, bio-plastic bags, which are fully conforming to TS EN 13432 standard **“Packaging- Requirements for packaging recoverable through composting and biodegradation”** and which are of biodegradable nature, started to be used instead of the plastic bags we used to utilize while packaging the earphones and blankets offered to our passengers.
3. In order to minimize generation of plastic waste, wood toys, made from forestry products and certified by the **“Forest Stewardship Council (FSC)”**, started to be offered to our child passengers on-board the aircraft instead of the plastic toys.

4. The travel sets, have been offered **unpacked to eliminate our plastic waste.**
5. The electronic earphones, which are still functional upon use thereof and the ones which are repaired, are recovered following sterilization process. Those that are defective but cannot be repaired are delivered to the licensed recycling company so that iron, plastic and copper raw materials are recovered.

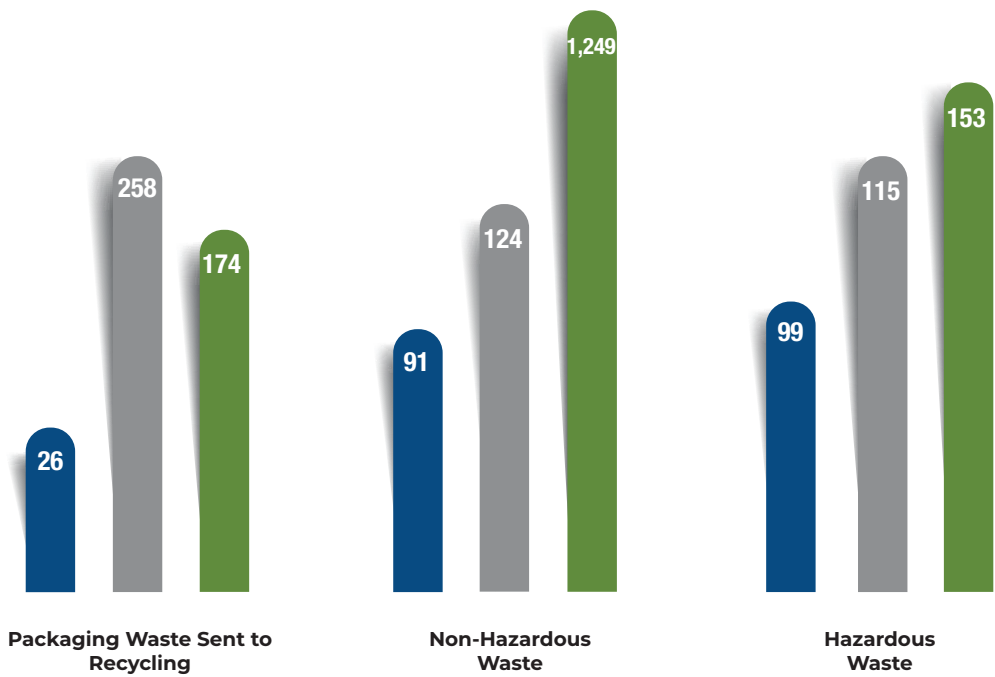


6. Within the scope of Zero Waste Projects carried out by our Training Department, pencils were started to be distributed to trainees instead of pens. In this way, 14,000 ballpoint pens were saved.
7. Approximately 3,000 sheets of A4 paper were saved by ending the practice of hanging the course participant lists on classroom doors and boards.
8. In order to encourage the separation of waste, which is one of the biggest goals of the Zero Waste Project, at its source, **under-table trash cans were removed** in all our Istanbul campuses.
9. **Online trainings** were given to reach all our colleagues and to increase awareness about zero waste.

Some of the 30 kg paper-cardboard packaging, 18.8 kg plastic packaging, 480 kg domestic waste, 470 kg metal packaging wastes generated during the transportation to Istanbul Airport were received by the transportation company for recovery purposes, and some were recycled. Thus, no waste was released to the nature during the transportation phase.



Waste amounts (tonnes) ■ 2017 ■ 2018 ■ 2019



2019 PERFORMANCE

The amount of packaging waste, sent to recycling in 2019 at Istanbul locations, was reported as 174 tonnes while the amount of non-hazardous waste, sent to recycling, was reported as 1,249 tonnes. The total amount of hazardous waste, sent to the companies holding the license to collect hazardous waste, was reported as 153 tonnes.

2020 TARGET

We aim to reduce the amount of hazardous waste by 10%, which was 5 kg / person in the previous year, to 4.5 kg / person. Within the scope of the Presidency Zero Waste Project, we aim to receive the Primary Certification at the General Directorate, Halkalı Technology and Yenibosna buildings and to fulfill the infrastructure requirements as necessary to obtain the Gold Certificate for the future.

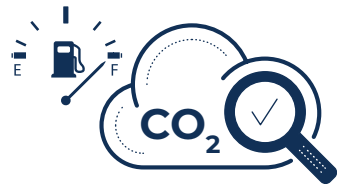


NOISE MANAGEMENT

We, as Turkish Airlines, are committed to minimizing our noise emissions, as specified under our Environmental Policy. We created one of the youngest fleets of the world with an average fleet age of 8.3, taking a big step towards our targets for noise minimization. Moreover, we will reduce our noise emissions to even much lower levels with our new-generation aircrafts ordered and expected to be delivered in 2023. Airworthiness Monitoring Supervisor’s Office carries out the application procedures to obtain the Noise Certificate for each aircraft in accordance with the national and international aviation requirements. This certificate, showing the noise levels of the aircraft, enables to check that whether or not the noise level limits are observed during landing and take-off at airports.



COMBATING CLIMATE CHANGE



Thanks to our fuel saving practices, we saved **55,492 tonnes** of fuel corresponding to **174,800 tonnes** of CO₂ emissions avoided in 2019. Since 2008, **554,010 tonnes** of fuel have been saved and **1,744,969 tonnes** of CO₂ emissions have been avoided.

Greenhouse gas emission is the primary reason of the climate change which is one of the most challenging global problems. According to the Intergovernmental Panel on Climate Change (IPCC), the aviation industry generates approximately 2% of the world's man-made emissions of carbon dioxide (CO₂). However; if no action is taken, this rate might increase further due to the increase of the global air traffic.

We, as Turkish Airlines, are committed to minimizing the carbon emissions, associated with our operations, in line with our intention to leave a livable world to the next generations.

Our activities to combat with the climate change are monitored at the highest level by the CEO. We determine the coordinated activities, which might reduce the greenhouse gas emissions, and develop new action plans in the Greenhouse Gas Committee Meetings.



COMMITMENTS AND TARGETS

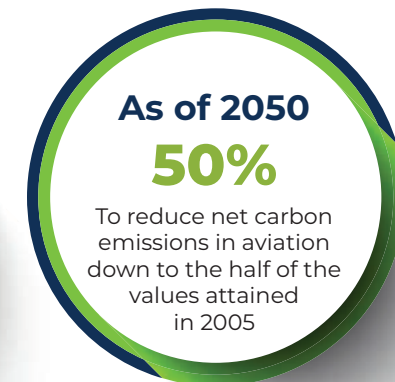
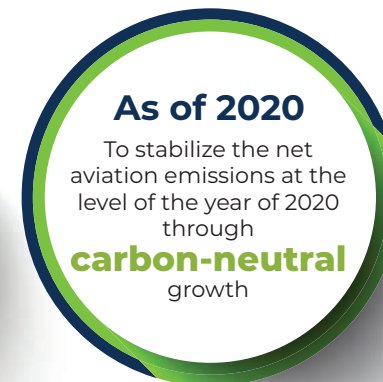
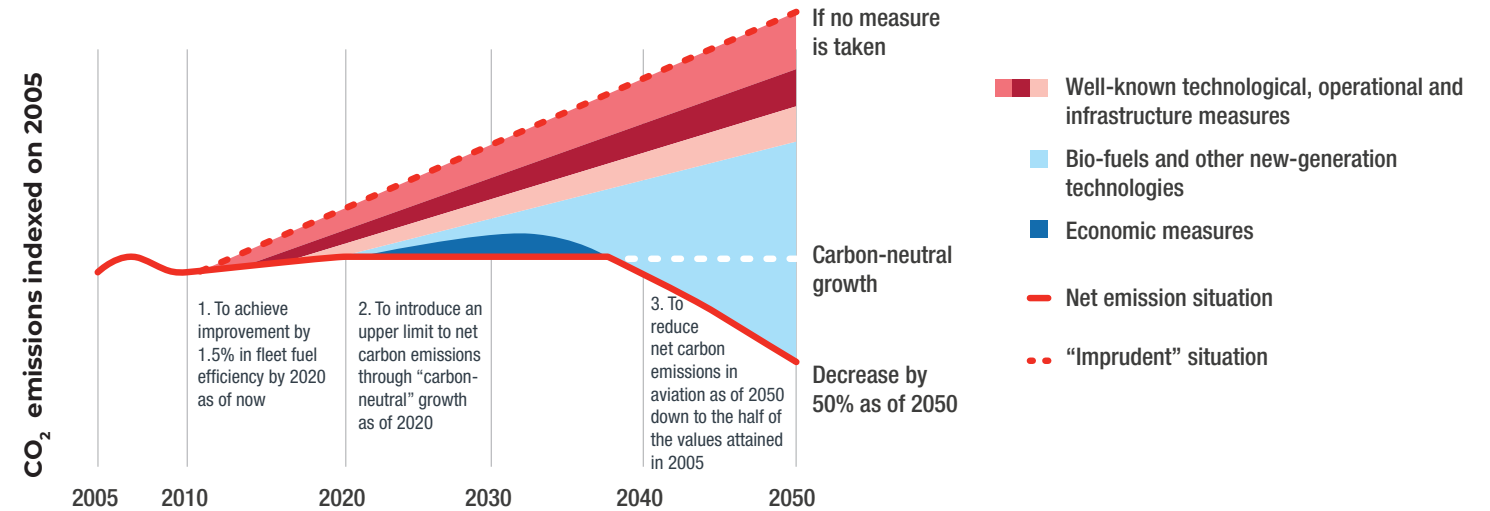
Air transportation is the first industry to have taken global actions and set extensive targets to minimize the CO₂ emissions. In light of our responsible business approach; we, as Turkish Airlines, adopted the below-given targets, determined by the International Air Transport Association (IATA), and work devotedly to provide a contribution to such targets.

European Union decided to restrict the scope of the EU Emission Trade System (EU-ETS) with the flights which take off from and land in within the borders of the European Economic Area in 2016. Accordingly; we monitor and calculate our emission values, falling under the scope of EU-ETS, in accordance with the related requirements and verify our emissions by an authorized independent certification body. We fulfill all necessary notifications within the scope of EU ETS and follow developments closely.

Furthermore; **“Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)”**, restricting the CO₂ emissions in order to attain these challenging targets, was adopted voluntarily by 85 governments including our country. CORSIA is the first proposal encompassing the entire industry on global scale. Its preparation phase started in 2019 and the first pilot phase will be implemented in 2021.

We, as Turkish Airlines, created an extensive fuel efficiency program to provide a contribution to the collective efforts exerted across the entire industry against climate change. Fuel Executive Committee, formed as part of this program, provides information to CEO regularly about the fuel efficiency performance, one of the indicators we follow as part of our combat against climate change.

Short-term and long-term targets of the aviation industry





OUR ACTIONS TO COMBAT WITH CLIMATE CHANGE

We identify our greenhouse gas sources, calculate the emissions in accordance with the internationally accepted ISO 14064-1 Standard, and ensure that they are verified by an independent verification organization

We offset our greenhouse gas emissions, associated with our flights under EU-ETS, with carbon credits provided by the carbon credit agencies.

Greenhouse gas emissions within the scope of the CORSIA Draft published by the International Aviation Authority ICAO (International Civil Aviation Organization), are calculated and verified by an independent verifier body authorized by ICAO. Turkish Airlines has started to fulfill the draft requirements as of 2019.

We perform operational improvements in order to minimize and control our greenhouse gas emissions, increasing our fuel efficiency.

We keep abreast of the technological developments, modernize our fleet, and aim to minimize both the emissions and the noise level by means of the new-generation and environment-friendly aircraft.

We organize trainings for our employees to increase the level of awareness on climate change.

We plant trees in accordance with the protocol we executed with the Directorate of Forestry. We planted a total of 1 million trees.



SUSTAINABLE BIO-FUELS

As Turkish Airlines, we plan to reach the target of halving the carbon dioxide emissions, in 2050 compared to 2005 as set by IATA, of which we are a member. In this direction, our TUBITAK (The Scientific and Technological Research Council of Turkey) Project titled "Microalgae Based Sustainable Bio-Jet Fuel Project (MICRO-JET)", which we applied jointly with Boğaziçi University, was accepted. In 2020, biofuels produced entirely from sustainable sources and tested by Turkish Teknik AS will be blended and used in our flights. Thus, Turkish Airlines will become one of the companies that can produce and use the cleanest type of biofuel accepted by IATA.



2019 DEVELOPMENTS

1. In line with our commitment of reducing our greenhouse gas emissions, the “Greenhouse Gas Committee” gathered to review the emission reduction practices.
2. In order to increase the level of awareness of our employees on climate change, and to decrease our greenhouse gas emissions, 3,965 employees were provided with the online ghg training in 2019 in addition to 25,825 employees who had attended the trainings in the previous years.
3. We made the greenhouse gas inventory of our Incorporation, including the locations in Istanbul and Ankara and Izmir, on voluntary basis in order to increase the transparency, consistency and reliability of our activities. Direct and indirect greenhouse gas emissions for 2018 were calculated in accordance with the standard TS EN ISO 14064-1 Quantification and Reporting of Greenhouse Gas Emissions and Removals. Our greenhouse gas statement was drawn up accordingly.
4. Our greenhouse gas statement for 2018 was verified by the independent auditing organization in accordance with the standard TS EN ISO 14064-3 Greenhouse Gas Validation and Verification. See: [Greenhouse Gas Declaration Verification Statement](#)
5. We continued to make investments in modern and environment-friendly aircraft and increase our fuel efficiency. Further information is available in the sections titled “[Fuel Efficiency and Fleet Modernization](#)” hereunder.



We are seeing the negative effects of climate change more and more in our lives. This problem is so complex that it has the potential to change all dynamics in ecological, geographical, economic and social terms. For this reason, each action plays an important role in preventing possible negative scenarios. As Turkish Airlines, we evaluate the environmental impacts of all our activities with this sense of responsibility. We prioritize elimination of the negative impacts, and if we cannot eliminate them we create action plans to minimize them.

We acknowledge the complexity and urgency of the climate change problem and therefore we aim to tackle it together with our employees at all levels.

We carry out operational improvements and increase our fuel efficiency to reduce our greenhouse gas emissions. Within the scope of EU-ETS, we offset our greenhouse gas emissions from our flights with carbon credits. In the coming years, we will start to offset our emissions under CORSIA. By adding a new initiative every year, we are determined to play a role in combating climate change on a global scale and leave a good legacy to future generations.

DENİZ DAŞTAN
Corporate Sustainability Manager



FUEL EFFICIENCY AND REDUCTION OF OUR GREENHOUSE GAS EMISSIONS

We have developed an extensive fuel saving policy.

We continuously measure and monitor our fuel efficiency.

As part of the Fuel Efficiency Program, Fuel Executive Committee, consisting of the key departments, was formed in order to review the respective action plans through regular meetings.

We are committed to act in a manner to achieve the short-term and long-term targets, set by the International Air Transport Association (IATA). The main reason of the emissions in aviation industry is the aircraft fuel consumption. Accordingly, our fuel saving policy constitutes the basis of our combat against climate change and our strategy to reduce the greenhouse gas emissions. We aim to increase our fuel efficiency, and to reduce both costs and emissions. Every one kg fuel saved prevents approximately 3.15 kg carbon dioxide (CO₂) emission. For this purpose, we have undertaken wide range of initiatives to increase our fuel efficiency and reduce our carbon footprint.



LESS FUEL, LESS CARBON DIOXIDE (CO₂) EMISSIONS!

Every one kg fuel saved prevents 3.15 kg carbon dioxide (CO₂) emission.





TURKISH AIRLINES FUEL POLICY IS BASED ON THREE PILLARS

The Fuel Efficiency Policy of Turkish Airlines is based on three pillars:

1. Optimization of the Operations
2. Investments in New Technology
3. Improvement of the Infrastructure

WE OPTIMIZE OUR OPERATIONS

FUEL SAVING PRACTICES

- ▶ Flight Operations Practices (reduction of auxiliary power unit - APU, engine out taxi, efficient take off, climb, descent profiles, short cuts, etc.)
- ▶ Technical Maintenance Practices (engine wash, aircraft weight reduction, aircraft modifications such as winglet/sharklet, etc.)
- ▶ Dispatch Practices (4D Flight Planning System, route optimization, tankering, etc)
- ▶ Ground Operation Practices (Center of Gravity (CG) optimization, monitoring potable water uplift, weight reduction of cabin interior, etc.)

WE INVEST IN NEW TECHNOLOGY

- ▶ FLEET MODERNIZATION
- ▶ RESEARCH IN BIOFUELS
- ▶ MODERN 4-D FLIGHT PLANNING SYSTEMS
- ▶ FUEL MANAGEMENT & MONITORING SOFTWARE

WE IMPROVE OUR INFRASTRUCTURE

ATC OPERATIONS (SEPARATION, USE OF AIRSPACE MORE EFFECTIVELY)

- ▶ SESAR Project
- ▶ Military Airspace
- ▶ Route Optimization

AERODROME INFRASTRUCTURE

- ▶ New Parking Areas / Taxiways
- ▶ Assessment of Service Providers' Equipment



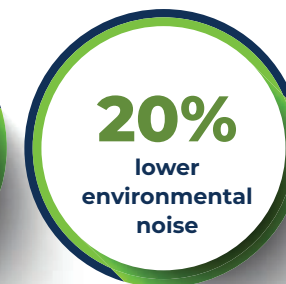
WE CONTINUE INVESTING IN NEW TECHNOLOGIES

We include the new-generation aircraft- offering 15% more fuel efficiency and lower emission values to our fleet

FLEET MODERNIZATION

2019 DEVELOPMENTS

- ▶ Consisting of **350** aircraft with an average fleet age of **8.3**, our fleet is one of the youngest fleets across Europe.
- ▶ Our fleet encompasses **230** narrow-body and **97** wide-body aircraft, besides **23** freighters. The composition of our fleet is given on the table right.
- ▶ We have removed 4 A340 aircraft, which yield low fuel efficiency values due to its old age, out of our fleet in line with our fleet modernization strategy.
- ▶ With the inclusion of A321 NEO and B737 MAX in our fleet, 15% fuel saving has been achieved in 2019.
- ▶ In 2019, new generation B787-9 type wide body aircraft joined our fleet. 787 Dreamliner passenger aircraft are aircraft that mostly use composite materials in the production and their body is completely composite. Thanks to this feature, the interior environment with high humidity provides higher comfort to the passengers.
- ▶ Our Incorporation aims to keep the environmental impacts, to arise in both passenger and cargo transportation, at the lowest level. In line with this commitment; upon inclusion of the Boeing 777F type aircraft into the fleet of Turkish Cargo since 2018, we have achieved;



2023 TARGET

In line with our target of having the youngest and most modern fleet of Europe, we ordered 75 Boeing (B737-8 MAX and B737-9 MAX) and 92 Airbus (A321 NEO) new-generation aircraft, equipped with 15% higher fuel efficiency rate, in 2013. Additionally; in 2018 we placed orders for 25 final and five optional Airbus A350-900 aircraft, 25 final and five optional Boeing 787-9 aircraft which are all planned to receive between 2019-2023, as well as three B777 freighters, planned to receive between 2019-2020, for the fleet of Turkish Cargo.

These new aircraft, to be included in our fleet by 2023, will provide a contribution to our targets of reducing carbon emissions, decreasing the level of noise, and improving the air quality.

It is expected that the fuel consumptions per seat of the new-generation wide-body aircraft, ordered in late 2018 in addition to the narrow-body aircraft and to be received completely by the end of 2025, will be 13% lower on average basis than the existing wide-body fleet. Thus, all these newly-purchased wide-body aircraft will bring an enhanced efficiency level.





WE CONTINUE TO OPTIMIZE OUR OPERATIONS

Amounts saved due to the optimization of our operations

	Fuel saved (tonnes)	Greenhouse gas emissions avoided (equivalent to CO ₂ tonnes)
Flight operations practices	41,566	130,932
Flight planning practices	12,958	40,818
Ground operations practices	180	568
Aircraft technical maintenance	788	2,482
Total	55,492	174,800

We have initiated and implemented successfully more than 100 operational optimization projects since 2008 in order to reduce our carbon footprint. Some of these projects include: Optimization of auxiliary power units, commissioning of the newly-optimized flight planning system, optimization of the routes and aircraft speed, practices to reduce the aircraft weight (fly away kits, magazines, containers, drinking water, catering equipment), and the aircraft modifications such as winglet and sharklet. Thanks to these fuel saving practices, we saved 55,492 tonnes of fuel corresponding to 174,800 tonnes of CO₂ emissions avoided in 2019.



Thanks to the optimization of the flight operations, dispatch practices, ground operations and aircraft technical maintenance, we saved **55,492 tonnes** of fuel corresponding to **174,800 tonnes** of CO₂ emissions avoided in 2019.

INFRASTRUCTURE IMPROVEMENT

We endeavor to improve the air traffic management system in close collaboration with both domestic and international air navigation service providers. Besides a team which is always busy with researches on the most appropriate flight routes, we formed a committee, including many department, to be assigned in the SESAR (Single European Sky Atm Research) project. Among the other infrastructure projects we carried out to increase the operational efficiency, there are many airport improvement activities such as construction of new parking areas, utilization of the air space better through the improved approach procedure.



Measurable fuel savings based solely on pilotage practices in 2019 was over **40 thousand tonnes**, which is one of the highest fuel savings items in recent years.

As part of the “**Fuel Saving Project**” we have been carrying out with great efforts as the entire Incorporation since 2008, we attained a highly substantial progress in our fuel efficiency in the previous year, with an increase on year-on-year basis.

We have achieved a total increase of approximately 20% in our efficiency rate until now. As I have mentioned, the contributions of all our departments in the substantial fields such as flight planning, technics, cabin ground operations, catering and information technologies, etc. especially pilot techniques are of great value. Measurability is so critical in our activities that it's not possible for us to manage any process that we cannot measure. I would like to underline here that all investments, our Incorporation has made in technology so far, have carried our capability to monitor and measure each phase of our flights to a higher degree along with the fuel management information system software (FMIS) we started to employ in 2017.

Thanks to the FMIS, we have increased payload capacity upon route optimization and this is exactly where our operational efficiency starts. Again thanks to the system; we started to provide feedback to our captains, and we observe that we have attained a considerable development of 10-20% in the pilotage practices since the date when we first started. Measurable fuel savings based solely on pilotage practices in 2019 was over **40 thousand tonnes**, which is one of the highest fuel savings items in recent years.

REŞAT GÜNDÜZ
Operational Fuel Manager





SOME FUEL SAVING PRACTICES OF TURKISH AIRLINES

Reduction of Aircraft Weight, Reduces Fuel Consumption and Carbon Emissions **1 Kg Fuel Saved = 3.15 Kg CO₂ Emissions Avoided**

Fuel Saving Practices	Fuel saved (tonnes)	Carbon emissions avoided (tonnes of CO ₂)
Single-engine taxi	6,228	19,619
Electronic Flight Bag (EFB)	847	2,669
Route optimization	1,370	4,316

ELECTRONIC FLIGHT BAG (EFB)

With the implementation of EFB in all our aircraft, a total of 847 tonnes of fuel was saved and 2,669 tonnes of carbon emissions was avoided.

PILOTAGE

Some of our main practices are singleengine taxiing, take-off and landing with lower flaps, idle reverse (lower engine thrust deceleration), NADP2 lower flap retraction altitude.

ADVANCED FUEL MANAGEMENT SYSTEM (FMIS)

Our new fuel management system was commissioned at the end of 2016. This new system enables us especially to calculate the costs of ATC operations (airborne instructions, deviations from the flight plan, etc.), and to assess the alternatives along with such cost items calculated. It also allows us to monitor closely all important factors such as any and all kinds of deviations, altitude and speed changes performed in the flight plan and the actual flight route, etc. which affect the fuel consumption, and to take actions in a very short time in all potential areas.



EFFECTIVE FLIGHT PLANNING

All flight routes and altitudes are optimized by means of the 4-D flight planning system, resulting in decrease in the emissions arising during flights.

PBN PROCEDURES

The PBN (Performance Based Navigation) applications developed in more than 10 domestic aerodromes lead to shorter flight periods and substantial amounts of fuel saved.

ROUTE OPTIMIZATION

Shorter planned flight periods in some sectors increased the capacity supply and resulted in carriage of payload instead of fuel, providing a substantial contribution to enhanced operational efficiency.

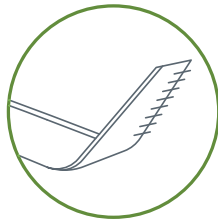
3,000 LIGHT NETS and 2,000 LIGHT PALLETS

increased fuel efficiency and reduced CO₂ emissions



SHARKLETS

increased fuel efficiency by **2-3%** and reduced CO₂ emissions



Issue of **SKYLIFE** with lesser paper use decreased both aircraft weight and CO₂ emissions



Use of **I-PADs** instead of paper inside the cabin decreased both aircraft weight and CO₂ emissions



Steel brakes were replaced with **CARBON BRAKES** which resulted in CO₂ emissions reductions



2,614 baggage containers were replaced with **COMPOSITE CONTAINERS** which resulted in CO₂ emissions reductions



Investment in **R&D projects** in relation to sustainable **BIO-FUELS**





PERFORMANCE AND TARGETS

We calculated our greenhouse gas emissions in accordance with ISO 14064 Greenhouse Gas Calculation and Reporting Standard, and prepared our greenhouse gas report accordingly. Our greenhouse gas statement was verified by an independent organization. The greenhouse gas verification statement for 2018, including our direct and indirect energy emissions, is available at the end of the report. The verification process on our emissions for 2019 is still ongoing. Although the verification process is still ongoing, we forecast that our greenhouse gas emission arising from jet fuel consumption for 2019 corresponds to 17.8 million tonnes. Fuel consumption and the respective greenhouse gas emission values are provided in the “Fuel and Greenhouse Gas Emissions Table” by years. Further information about emissions is provided in the [Emissions Data](#) section.

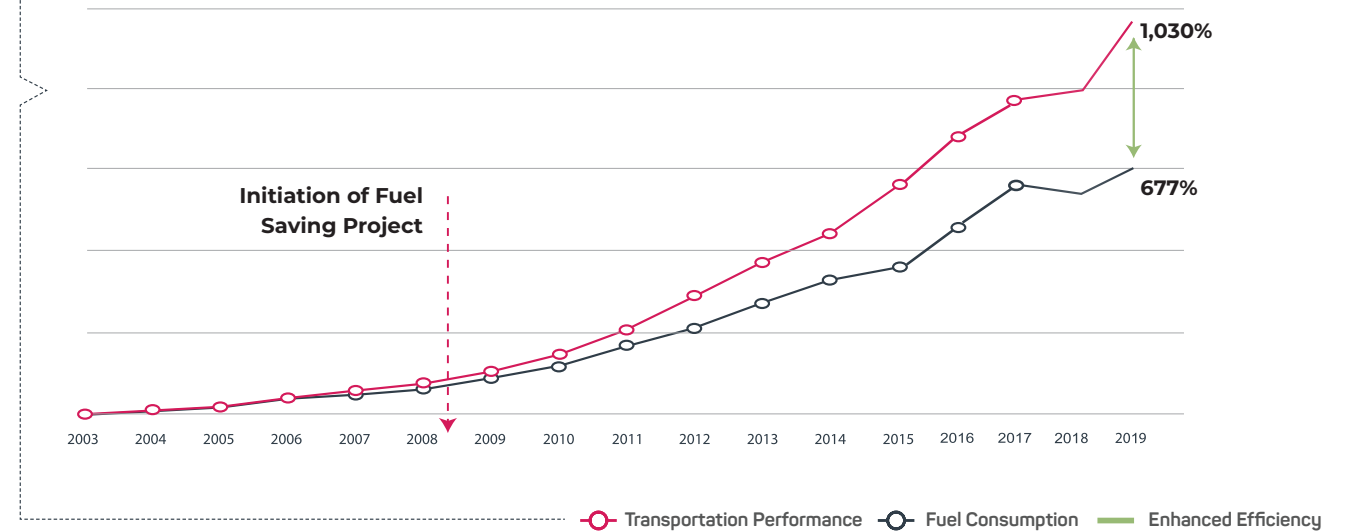
The transportation performance of Turkish Airlines between 2003-2019, and the corresponding fuel consumption values are shown in the below-given chart. If we consider 2008 as the “baseline”, it can be seen that the transportation performance increased by 1030 percent, and that the corresponding fuel consumption value increased by 677 percent as of 2019. In other words; the fuel amount consumed for unit transportation operations is gradually decreasing thanks to the fuel efficiency projects we have been carrying out successfully since 2008. Gradual increase in the difference between the transportation performance and the fuel consumption, as shown on the chart, year by year clearly shows our enhanced efficiency performance.

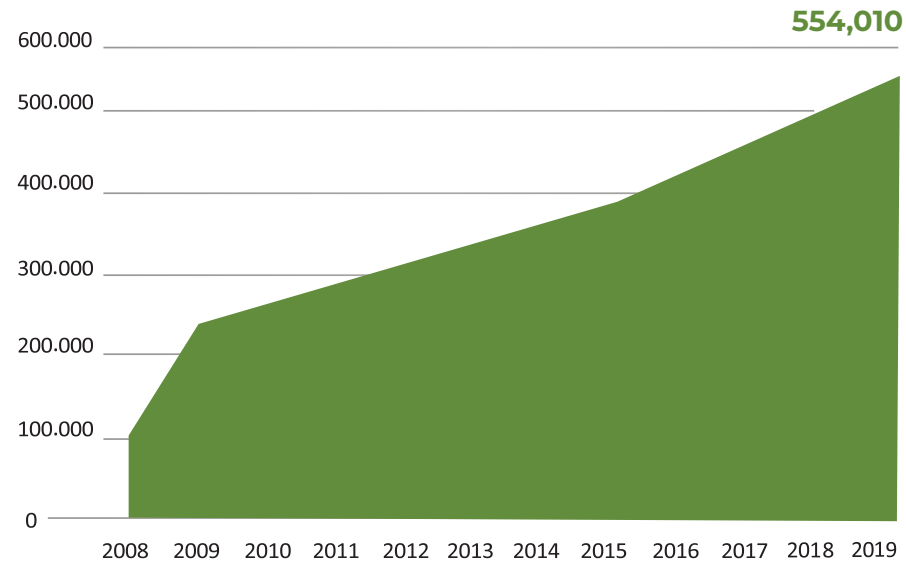
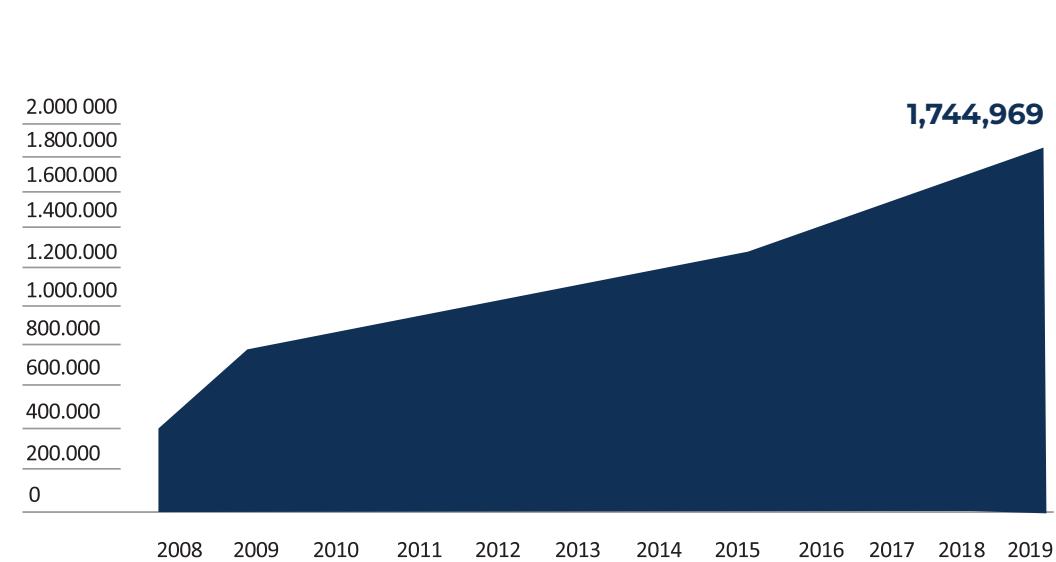
Thanks to our extensive fuel saving policy, our fuel efficiency increased by 0.55 percent compared to 2018, and by 20 percent compared to 2008. Our fuel efficiency for 2019 was reported as 18.06 kg/ATK (Available tonkilometers).

Fuel consumption and greenhouse gas emission values

	2017	2018	2019
Fuel consumption (million tonnes)	4.9	5.3	5.6
Greenhouse gas emissions (million tonnes of CO₂ e)	15.5	17	17.8

Fuel efficiency performance of Turkish Airlines



**Total fuel saving quantity by years (tonnes)****Total greenhouse gas emissions avoided (tonnes of CO₂)****OUR TARGETS FOR FUTURE**

As Turkish Airlines, we aim to reduce the fuel amount, consumed per ton-km, by 5% until 2025 by normalizing the ATK (available ton-km) weight and range. In line with this target, we aim to avoid 148,050 tonnes of CO₂ emissions in 2020.

We keep minimizing our carbon footprint thanks to various fuel saving projects we realized successfully on annual basis. We saved 55,492 tonnes of fuel in 2019, corresponding to 174,800 tonnes of CO₂ emissions avoided. Since 2008 we have saved 554,010 tonnes of fuel, 1,744,969 tonnes of CO₂ emissions have been avoided. The fuel saving amounts and greenhouse gas emissions avoided are shown by years on the charts above.

Fuel and greenhouse gas saving amounts

	2016	2017	2018	2019
Fuel Saved (tons)	44,248	46,757	29,608	55,492
Greenhouse Gas Emissions Avoided (tons)	139,382	147,283	93,267	174,800
Fuel Efficiency (kg/ATK)*	18.57	18.20	18.17	18.06

*: Available ton-kilometers



06

SOCIAL

CORPORATE SAFETY **74**

FLIGHT SAFETY **78**

OUR CUSTOMERS **83**

OUR EMPLOYEES **91**



**Our business management approach
is based on the principle of ensuring a long-term value
and satisfaction for all our stakeholders including our
customers, employees and society.**





CORPORATE SAFETY

[Safety Policy](#)

We work for your safety to make sure you have a comfortable flight experience.

Safety covers any and all activities carried out to identify all potential risks with respect to flight operations, and to minimize such risks to acceptable levels. A safe operation is possible when all operational activities are carried out at the acceptable risk level where all known risk factors are revealed and managed.

We have established the Safety Management System for creation of the overall structure, which is in compliance with all safety requirements, and monitoring of such structure systematically and improvement thereof continuously in order to keep all safety risks within acceptable limits.

Aiming to attain the highest level of standards at all times in its operations, Turkish Airlines considers safety as an essential priority constituting the basis of all its operations. Accordingly, we endeavor to improve the Safety Management System, we have been employing since 2006, continuously. As stated in our Safety Policy, Turkish Airlines implements continuous improvements to develop and improve operational conditions to go beyond the global standards of the authorities and manufacturers that define the baseline.

The existing Safety Management System has been structured beyond the traditional standards in a manner to cover all organizational tiers, operational environment and interactions. Safety programs exclusive for Flight, Cabin, Maintenance, Ground and Cargo operations are implemented in order to handle all risks in a prudential and farsighted approach in order to ensure the systematical sustainability. The day-to-day administration of SMS is ensured by the SVP, Corporate Safety, but the final responsibility rests with the CEO. In line with our safety policies and goals, we hold periodic meetings, starting with the General Manager, with the participation of our relevant managers from all management levels in order to evaluate the safety performance and continuously improve our Safety Management System. During the Safety Review Board, Safety Action Group and Safety Representatives meetings, we periodically examine the effectiveness and risk of safety-related studies. We review the adequacy of the measures and ensure that our employees and suppliers contribute to the improvement of our Safety Management System.



FATIGUE RISK MANAGEMENT SYSTEM

We operate the Fatigue Risk Management System, which we have established in accordance with National and International Civil Aviation authority standards and legal requirements in order to measure, prevent and manage the risks caused by fatigue in Turkish Airlines flight operations.

Fatigue Risk Management System is comprised of all flight operations of the cockpit and cabin crew members and the processes detailed in the fleet and operation structure are supported by the bio-mathematical model and operational experiences created by international scientific research.





We operate the Fatigue Risk Management System processes dynamically and on real-time basis, starting from the stage of creating the monthly flight schedules of the team members, to cover the day flight operations. We train flight crews and all relevant stakeholder unit employees, and encourage our flight crews to report fatigue in order to make risks caused by fatigue are noticeable or predictable.

SAFETY MANAGEMENT SYSTEM REQUIREMENTS

Turkish Airlines Safety Management System, is positioned beyond the requirements and considers compliance with the highest standards and rules in the industry as a fundamental function. The IATA Operational Safety Audit (IOSA) program, which sets the most comprehensive operational safety standards of the aviation industry, is a globally accepted program that audits whether airline companies are performing their activities in a healthy and safe manner. We actively participate in the working groups of IATA and many similar national and international organizations.

Working groups we are involved in are listed below:

- ▶ IATA Operational Safety Audit (IOSA) Program
- ▶ International Civil Aviation Organization (ICAO)
- ▶ European Safety Agency (EASA)
- ▶ Civil Aviation General Directorate
- ▶ Star Alliance

SAFETY CULTURE

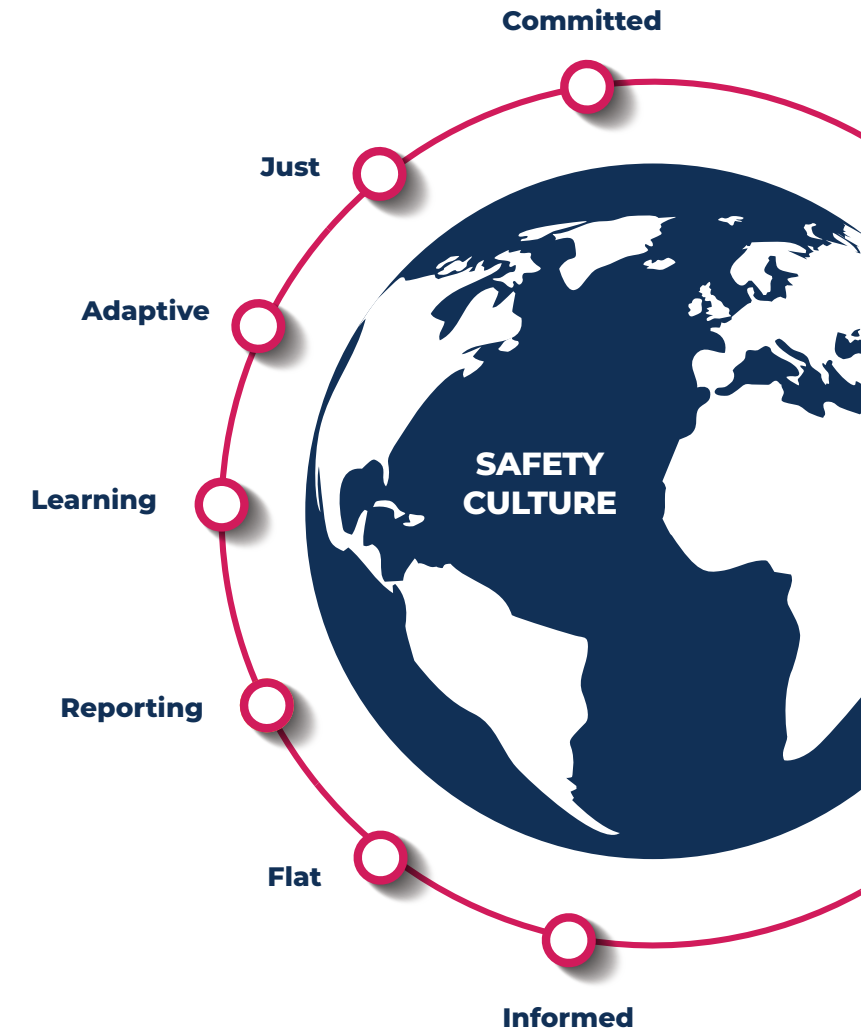
Turkish Airlines fosters a “Flat, Fair, Flexible, Committed, Informed, Learning and Reporting” safety culture. Especially the “horizontally organized” feature is promoted in administrative processes and flight operations in order to improve the safety culture which is one of the main components of our corporate values. .

SAFETY TRAININGS

Trainings in compliance with the international regulations are held, and international researches are supported as a responsible stakeholder across our Incorporation in order to raise the level of awareness on safety continuously. We aim to develop the safety culture of our Incorporation, besides information and competencies, as required, during the trainings, provided in line with the roles and responsibilities of employees, in order for effective running of the Safety Management System. Further information on trainings is available under the section “[Aviation Academy](#)”.

SAFETY MANAGEMENT SYSTEM AUDITS

Our Incorporation is in active interaction with a high number of Civil Aviation Authorities due to its extensive operational network, so it is subjected to the audits conducted either by such authorities or the Directorate General of Civil Aviation. We consider all these audits as an opportunity and feedback mechanism to make our operations much safer. We completed the IOSA audit successfully in 2019. We aim to keep our success during the audit to be repeated in 2021.





Besides the audits and internal controls, operational observations are performed within the organization of our Incorporation. Line Operations Safety Audits (LOSA) have been implemented since 2010 in order to obtain information about any and all failures and potential threats which would be difficult to identify otherwise.

Based on the foregoing; each aircraft fleets available at Turkish Airlines are subjected to audits biannually, and the identifications are used to improve the operational procedures, trainings and safety communication. We operated LOSA flights by means of Airbus 330 fleet in 2019 and shared our findings with relevant units.

FLIGHT DATA MONITORING SYSTEM

Data of every flight are analyzed through the Flight Data Analysis System (FDAS) to assure that all flights are operated safely in compliance with the standard procedures, and that aircraft's airworthiness is not affected. We make use the results and evaluations obtained from the analysis of flight data in monitoring safety performance, incident investigations and risk analysis studies.

The flight data monitoring system works in coordination with the flight operation safety unit in line with the expectations of the industry. With the continuous exchange of information, we match the information received from flight data with the reports received from flight crews, thus making it possible to cover the risks in the field at the highest possible level. While learning what is happening from the flight data, we also contribute to the safety culture by learning how it is

from the team reports, we work for a more predictive safety standard with the richness of the statistical data we have, and by analyzing the data, we can make useful recommendations to Flight Training and Flight Operations units.

SAFETY ASSESSMENT OF FOREIGN AIRCRAFT PROGRAM (SAFA)

Safety Assessment of Foreign Aircraft (SAFA) is a safety audit program run by European Aviation Safety Agency (EASA). The purpose of the SAFA audit is to evaluate the general condition of the cockpit, cabin, cargo compartments and aircraft in terms of safety, before and after the flight, and by controlling the flight crew, aircraft documents and the technical condition of the aircraft within the framework of national and international regulations and all rules that may have direct or indirect effect on safety. To ensure that all kinds of factors that may adversely affect flight safety are identified and resolved and airworthiness. The SAFA rate obtained as a result of the audits carried out among the members of the SAFA program is determined by evaluating the number of registrations audited and the safety status as a result of the audits the airline has undergone in the last 12 months.

In 2019, we achieved 0.177 SAFA rating as a result of SAFA audits conducted by 41 different Authorities at 58 locations. This rating is quite a successful result, as compared to the other EASA countries with a SAFA average of 0.43, and indicates the importance of safety for our Incorporation.

2019 DEVELOPMENTS

We successfully carried out the process of moving from Atatürk Airport to Istanbul Airport within a period of 45 hours, the largest moving plan in aviation history. Thanks to our change management efforts, we determined all the risks and measures with a proactive approach before moving. We instantly followed the measures taken during the moving process and successfully completed the transportation. We continue our efforts to identify and solve possible problems during the first year of the operation. We follow-up of the notifications originating from the airport as a routine agenda item in each unit and we constantly monitor the operation at the airport with a safety perspective.

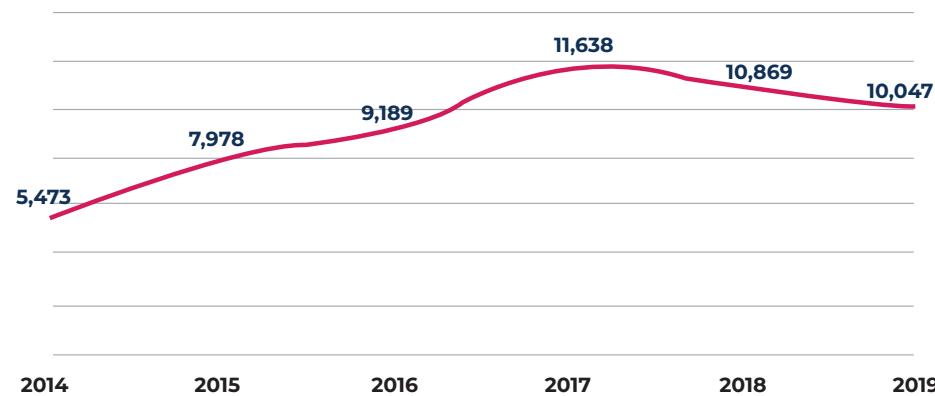
Thanks to the office we opened at Istanbul Airport after the move, we became more accessible to our flight crews as the security unit.

As part of the change management efforts, we completed the work to include the Boeing 787 aircraft in the fleet. We are continuing the same work for the Airbus A350 aircraft. We continue to work on the performance analysis of our pilots through coordinated communication between flight data and flight operation in order to create needs-oriented training and personal development programs.

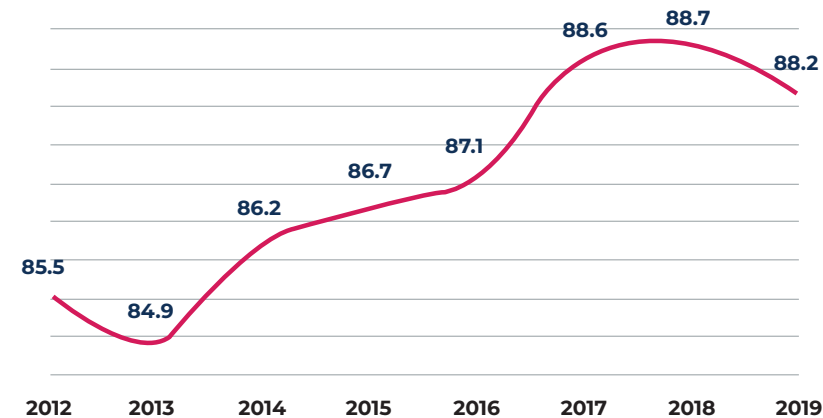




Safety Reports in Place



(GSI) Safety Performance



GSI: Generalized Safety Index

PERFORMANCE FOR 2019

Turkish Airlines always follows its safety targets, efficiency of its safety policy and compliance with this policy considering its knowledge, operational competency and philosophy. The Incorporation employs a centrally-managed, non-punitive and well-functioning safety reporting system. Development of our reporting system can be seen on the chart showing the monthly reporting order.

In addition to the reporting system, various means of communication such as “Direct Message to CEO”, “flightsafety@thy.com” are also available to foster communication on safety. Moreover; employees can reach their managers in safety issues under the concept of “open door”.

Thanks to safety performance indicators, safety, despite its abstract nature, has become measurable as a tangible asset, which is one of the fundamental attributes of the service presented. A very large set of Safety Performance Indicators (SPIs) are improved continuously, and Generalized Safety Index (GSI), derived from the SPIs, is monitored at each level as one of the core business indicators.



FLIGHT SECURITY

Our security procedures and practices aim to ensure the protection of our customers, employees and assets including facilities and aircraft and sustainability of the operations.

Our security procedures and practices aim to ensure the protection of our customers, employees and assets including facilities and aircraft and sustainability of the operations. Turkish Airlines Security Directorate ensures security during the course of all its activities. These activities include sustainability of passenger transportation, cargo transportation according to national and international security regulations and standards while preventing acts of unlawful interference.

As a proactive measure, SVP Security conducts security assessment of the airports, hotels for accommodation and city offices at the destinations before the commencement of the operations and informs the related departments and personnel about the security vulnerabilities in order for them to take necessary

precautions. Our Directorate has made the Security Information System, it has established in order to inform the concerned departments and personnel to take any and all measures required to be taken in all security vulnerabilities which have been identified during the security inspections conducted at the airports of the respective destinations, stay-over hotels in stay-over stations, and all provincial offices before initiation of our operations as a prudential measure, available to all executives of Turkish Airlines.

Our Security Policy ensures the operational security, management of security related activities, determination of the security responsibilities, identification of the security vulnerabilities/risks, providing the highest level of communication, promoting a corporate security

culture and providing necessary resources for ensuring security.

Turkish Airlines Security Management System (SeMS) is managed by the SVP, Security which reports directly to the CEO. Aviation Security Management is responsible for the management of the security of the passengers, the aircraft and the cargo in accordance with the national and international security requirements; while Risk Assessment and Investigation Management identify the risks and examine the security incidents. Additionally, Facilities Security Management protects the buildings, vehicles, employees from any threats that might arise against Turkish Airlines.

As the security operation is subject to strict regulations by the International Civil Aviation Organization (ICAO), European Civil Aviation Conference (ECAC), European Union and the Directorate General of Civil Aviation, it is important for Turkish Airlines that SVP, Security constantly monitors national and international regulations for compliance purposes.

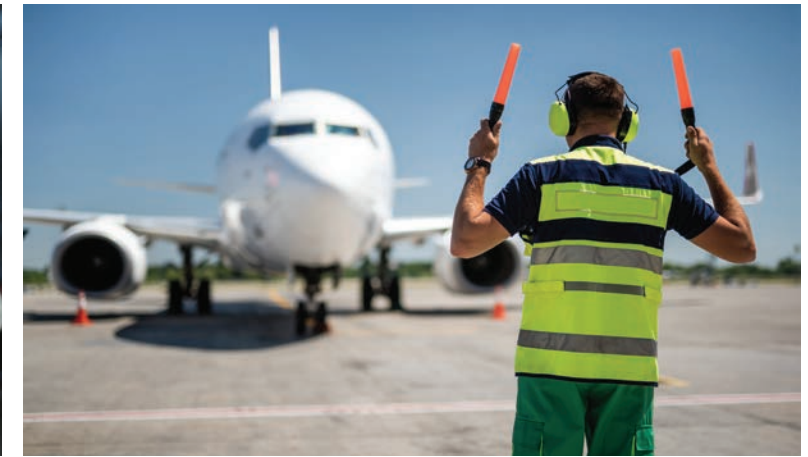
The Directorate of Security ensures continuity in the security chain by preparing Turkish Airlines' Security Program in accordance with the legislation prepared by national and international civil aviation authorities and including civil aviation security requirements, and distribute it to all stations where operations are carried



out and to all service providers from these stations. In addition, by examining whether the service provider companies that will receive services at foreign stations have Security Training Programs in accordance with international security requirements and Turkish Airlines Security Program, they are provided with security trainings in case of deficiency and work to increase the quality of the service received.

The Security Directorate makes surveys and informative announcements to increase the security awareness of our employees when needed and ensures that training is prepared when necessary. At Turkish Airlines Security Department, communications are executed in a secure manner, including non-punitive reporting procedures to encourage the reporting of any inadvertent human error.

To ensure the exchange of relevant operational information throughout all functions of the Incorporation, including senior managers, operational managers, front line personnel, cockpit and cabin crew, SVP, Security has established a communication system, which enables the flow of information from the top management to the staff step by step according to the job title levels. To promote communication, SVP, Security ensures that the flow of information is provided through “security@thy.com” for all suggestions, requests and reporting.





OUR SECURITY POLICY



TO ENSURE OPERATIONAL SECURITY

Turkish Airlines develops and implements processes to prevent acts of unlawful interference that may occur on the ground or during flights and establishes security objectives and security performance standards. While implementing these processes, Turkish Airlines provides a periodic policy review to ensure continuing relevance to organizational needs and to the requirements of security performance standards.



TO PROVIDE THE HIGHEST LEVEL OF COMMUNICATION

Turkish Airlines promotes a just culture where the flow of information and communication is carried out objectively between senior management and the employees in order to support all activities. Communication should be executed in a secure manner, including non-punitive reporting procedures to encourage the reporting of any inadvertent human error.



TO ESTABLISH AND PROMOTE A CORPORATE SECURITY CULTURE

Turkish Airlines ensures that all necessary arrangements are made to establish and improve a "Corporate Security Culture". It promotes activities to increase security awareness and to make security an integral part of the corporate management system.



MANAGEMENT OF SECURITY-RELATED ACTIVITIES

Turkish Airlines ensures a clear statement of the organization's security objectives and the measures taken in order to conform to security regulations. It executes its corporate security management system to provide security to all its activities with constant improvement.



TO PROVIDE NECESSARY RESOURCES FOR SECURITY

Turkish Airlines ensures the provision of the resources necessary for the successful implementation of the security policy.



TO DETERMINE SECURITY RESPONSIBILITIES

Turkish Airlines determines the responsibilities of its employees regarding security-related issues and ensures a commitment to security from senior management as a fundamental priority throughout the organization.



TO IDENTIFY SECURITY VULNERABILITIES AND RISKS

Turkish Airlines provides assistance to all its employees to identify and prevent vulnerabilities and risks that may occur as a result of the interaction between people, machines, the environment and duties.





In line with our innovative, high quality and sustainable product and service offering approach, we continue to realize many innovative projects such as premium cabin services, inflight entertainment systems, enhanced cabin comfort, sustainable catering concept and inflight sustainable practices.



OUR INNOVATIVE APPROACH



[Quality Policy and Customer Satisfaction Policy](#)

Satisfaction of our customers and their trust in our brand are the backbone of the growth and success of Turkish Airlines.

As Turkish Airlines, we make the whole world more accessible for our passengers by flying to many international destinations. We aim to enhance the customer satisfaction with increased and intensified bonds we establish with our customers, the essential factor for our existence. We adopt a customer-oriented approach in all our operations in order to gain the trust and loyalty of our customers, and to develop long-term relations with them.

We realize many innovative projects across all our departments with an aim to enhance the customer satisfaction. We make substantial investments in our products and services through many innovations such as award-winning catering concept, CIP passenger lounges, premium cabin services, in-flight entertainment systems, enhanced cabin comfort, cabin and customer services trainings offered for employees realized to become a five-star airline. Satisfaction of our customers and their trust in our brand is the backbone of our growth and success and the core value of our Incorporation.

Customer satisfaction is an important factor in our Corporate Policy and Quality Policy, as well as our Customer Satisfaction Policy, and the other corporate policies of us.

ISO 9001 Quality Management System, as well as TSE ISO 10002 International Customer Satisfaction Management System Standard Certificate we obtained in 2015, contributes to the achievement of customer satisfaction.

OFFERING PROACTIVE SOLUTIONS

All irregularities in the cabin have been recorded by cabin chiefs, and reported to the Customer Relations Management. This enables us to provide proactive solutions to eliminate these irregularities before they turn into passenger complaints. We addressed 30,882 irregularities experienced in the cabin in 2019.



DIALOGUE WITH OUR PASSENGERS

We always seek to respond immediately to our passengers’ wishes in line with our approach to high-quality and sustainable products and services. We have reached 10 million followers on Facebook just through the contents prepared exclusively for social media posts.

FEEDBACK MANAGEMENT PROCESS

All kinds of feedback that we receive from our passengers remain as a source of great strength for us to achieve this target. We are committed to enabling our customers to reach us at all stages of their experience. All kinds of feedback, requests, suggestions and complaints, received by our Incorporation, are reviewed comprehensively, and assessed upon obtaining information from the other concerned departments, if and when so required, by the Customer Relations Management. Turnaround time to customers’ complaints, set as seven days to enhance the customer satisfaction, was reported as 5.8 in 2019.

Feedback channels

- ▶ Feedback form available on our website
- ▶ Telephone numbers 444 0 849 / +90 850 333 0 849
- ▶ Our Facebook, Twitter and Instagram accounts
- ▶ Feedback form available on our in-flight entertainment systems
- ▶ Cabin interior communication form or Skylife communication form which may be obtained from cabin crew members during travels
- ▶ Customer Relations Management and all sales offices of Turkish Airlines



693,870
[Linkedin](#)



10,648,848
[Facebook](#)



3,546,232
[Twitter](#)



406,915
[YouTube](#)



1,686,179
[Instagram](#)



CUSTOMER SATISFACTION MEASUREMENT AND SURVEYS

We conduct customer satisfaction surveys for all products and services provided by Turkish Airlines at the points of contact with our customers.

According to the results of this survey, our customer satisfaction rate is 75 percent in 2019. We, as a member of the Star Alliance, send online customer satisfaction surveys to our passengers who are Miles & Smiles members. This survey enables us to obtain general opinions based on experiences such as re-purchase intention, recommendation, etc., and also to monitor the satisfaction level at the points of direct contact with our customers regarding check-in, boarding, departure punctuality, lounge, cabin crew, food & beverages, in-flight entertainment and cabin environment, in comparison with our competitors.

We conduct the Airs@t comparative customer satisfaction survey, enabling us to see and monitor our regional position continuously among our competitors, in cooperation with IATA, and report its results 4 times a year.

Mystery Passenger activities, covering the points of contact with customers for domestic and international flights, are carried out in order to increase the service quality of our Company. As part of these activities; the points of contact with customers are assessed in terms of service quality and compliance with procedures.

We also measure the satisfaction levels of our customers by means of the customer satisfaction surveys included in the in-flight entertainment system available on board some aircraft.

In 2019, the satisfaction survey was conducted to an average number of 28,686 passengers and the customer complaint survey was applied to 17,149 passengers on monthly basis.





SUSTAINABLE CATERING SERVICE

Turkish Airlines, the flag carrier airline of Turkey, improves the quality of its catering service in parallel with its continuous growth trend. Our innovative solutions not only improve the quality of our catering service, but also help us take a step forward in sustainable catering service practices. We procure 85 percent of our foods from the domestic suppliers, supporting promotion of our local products, and shorten the period of arrival of raw materials at our Incorporation, resulting in fuel saving and reduced CO₂ emissions.

All meals, offered on board the aircraft, are always prepared using fresh and the highest-quality foods. We never use any frozen or canned food or any additive, providing a contribution for us to reduce the unfavorable impacts of processed foods on environment, and to offer high-quality products.

All our foods are prepared by the expert food engineers at high hygiene standards **as per ISO 22000 Food**

Safety Management System, and we prefer the products of ISO 22000 certificated suppliers in raw material supply. All suppliers are evaluated in detail under the **“Supplier Risk Evaluation Procedure”**, and thereby, we ensure that accurate suppliers are preferred.

Food safety checks are performed in coordination of our Procurement Department and Hygiene & Quality Assurance Departments from acceptance of raw materials until arrival of finished products. We take pains to ensure that domestic raw materials are used during creation of our menus. We plan our menus considering the foregoing matter. Healthy and natural alternatives from the Turkish, Mediterranean and World cuisine are included in these menus.

In line with our daily food capacity of 240 thousand just for flights originating from Turkey, and to offer a sustainable catering service; all our organic, paper and packaging wastes, arising in our production and distribution areas, are sent to recycling companies,

contracted by the Directorate General of State Airports Authority, in order for waste recycling process. The waste separation rate of in-flight wastes carried out by these licenced companies is 8%. Moreover; we send all waste oils to the waste oil treatment facility, contracted and licensed by the Ministry of Environment and Urbanization, in order to convert waste oils into bio-diesel.

Upon introduction of our new flight concept in 2013, all our tools and equipment have been replaced with light-weight ones of superior design, and thereby, we have decreased the total weight of the catering supplies, providing a contribution for reducing our carbon emissions, and increasing our fuel efficiency.

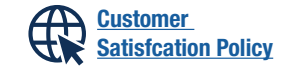
We don't use any frozen or canned food, thereby, reduce our **CO₂ footprint.**

We procure **85% of our food** from domestic suppliers.

ISO 22000 Food Safety certificate-holder suppliers are preferred.



CUSTOMER INFORMATION AND RIGHTS



In 2019, the luggage operation was seamlessly adapted to the new airport systems at Istanbul Airport.

As Turkish Airlines, we comply with regulations related to passenger rights including EU and US regulations and inform our customers about their rights via various channels such as our website and brochures. In order to increase our customers' satisfaction, we inform our passengers during all phases of their flights. Also, our employees can access instant information on air passenger rights via the e-learning platform prepared by the Turkish Airlines Aviation Academy.

Our Customer Relations department fulfills the role of coordination and communication with DGCA, the authority responsible for protection of passengers' rights in Turkey. The department follows the instructions promulgated in relation to passengers' rights, and ensures that they are announced across the Incorporation.

Furthermore, it investigates and replies to the feedback, sent from customers to DGCA and then informs DGCA.

CUSTOMERS PRIVACY

Due to the nature of our operations, we daily handle personal data of our customers. We recognize that the confidentiality of personal information is of utmost importance, and therefore we guarantee that we will comply with Turkish Airlines' Privacy Policy and guidelines in the matter. For more details about our Privacy Policy Statement please check our website.

BAGGAGE SERVICE

In 2019, the rate of passengers and luggage not being able to travel together, baggage irregularity rate was 5.0 per thousand passengers. Improvements continue to be made to further decrease this rate and increase customer satisfaction. In 2019, the luggage operation was seamlessly adapted to the new airport systems at Istanbul Airport.

To continue the success achieved in 2019 we made improvements in processes such as tracking of transfer luggage by loading them in the same containers, tracking the luggage by loading the short link luggage separately, detecting and checking the unloaded luggage. We are continuing to expand the use of the Baggage Reconciliation System, the main source of baggage operations, at all stations we serve, and thus to track baggage at all points.



ACCESSIBILITY

HELPING OUR PASSENGERS OVERCOME THEIR FEAR OF FLYING / AVIOPHOBIA

For the first time in Turkey, Turkish Airlines Aviation Academy initiated a customized program intended for overcoming the fear of flying. The program is dedicated to helping those who fear flying to overcome this problem. As part of the program, pilots and technical trainers instruct attendees about flights, aircraft structures and atmospheric situations. This is followed by a virtual flight in a cabin simulator which aims to soothe away feelings of fear and anxiety by simulating normal and severe turbulence. To complete the training, participants actually fly together with the team.

In 2019 we helped 139 people to overcome their fear of flying. Since the Program's launch in 2007, the number of people who attended the training have reached to 1,067.



SERVICES FOR OUR PASSENGERS WITH REDUCED MOBILITY

Our passengers can request via our call center, ticket sales offices or website before the flight to have a companion, transportation and wheelchair services up to aircraft/ terminal building free of charge during landing and take-off. In order to better serve our customers, our special sign language trainings continued in 2019. Since the Program's launch, the number of cabin crew members attended the trainings have reached to 646.



FARKLILIKLAR
değer katar
DÜNYA BAHAR RÜYASI
KESFET | TURKISH
AIRLINES

Turkish Airlines conducts all its internal and external process improvement, sustainable development management and corporate social responsibility projects under the scope of the program “Differences Add Value”, with an aim to make all its products and services accessible by the passengers with restricted mobility, as well as disabled veteran, elderly, pregnant and disadvantaged passengers. Accordingly our projects completed in 2019 are as follows.

DIFFERENCES ADD VALUE PROJECTS COMPLETED IN 2019

ISTANBUL AIRPORT STRETCHER PASSENGER WAITING AREA

We work with a private company for the stretcher passengers wait area at the airport before their travels. Our stretcher passengers are waiting for their flight in a spacious and sterile area under the supervision of a doctor.



BAGGAGE PRIORITY SERVICE FOR DISABLED PASSENGERS REGISTERED TO MILES & SMILES DATABASE

To facilitate the travels of our disabled passengers, priority is given to their luggage during the check-in process. Thus, a “Priority” label is attached and their luggage is delivered with priority at the destination.



ISTANBUL AIRPORT SEATING AREAS WITH DISABLED AND RESTRICTED PASSENGER

At the Assistant Call Points at the entrances of Istanbul Airport, a seating area has been placed at all entrance gates of the airport so that the passengers with reduced mobility and disabled passengers can sit while waiting for the arrival of carrier personnel.



TRANSLATION OF SAFETY VIDEO IN SIGN LANGUAGE

The in-flight safety film was translated into sign language with animations for our hearing-impaired passengers.





**We offer all
our employees a
unique
career opportunity in
the aviation industry,
and support the
development
of all our employees.**



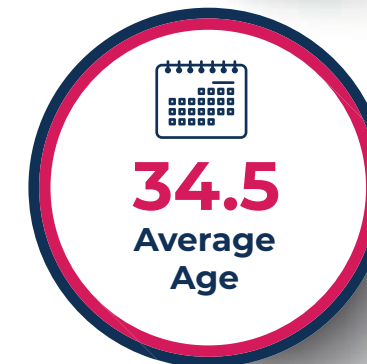
OUR EMPLOYEES ARE OUR GREATEST ASSET

We aim to provide all of our employees, residing in different parts of the world, with a transparent working environment that supports creativity and team spirit, is conducive to personal development, an environment where the corporate targets are internalized at every level and ideas can be exchanged freely.

As Turkish Airlines, our employees are our greatest asset, and the driving force behind all our achievements. We have transformed the dynamism of our young cadre, consisting of 65,373 personnel including the subsidiaries, into an international success story. As of 2019, we, as Turkish Airlines, are a big family with 29,491 employees consisting of 5,839 cockpit personnel, 12,247 cabin personnel, and 11,405 ground personnel. The average age of our employees is 34.5, and 54 percent of our employees consists of men, and the remaining 46 percent of them consists of female employees. Further information on the profile of Turkish Airlines' employees is accessible under the title "[Performance Tables](#)" available in the section "Annexes" of this report. We aim to provide all of our employees, residing in different parts of the world, with a transparent working environment that supports creativity and team spirit, is conducive to personal development, an environment

where the corporate targets are internalized at every level and ideas can be exchanged freely.

Our Human Resources Policy is to ensure the employment of qualified personnel who abide by the professional and ethical rules and are able to perform their duties effectively and efficiently in line with the strategic plans and targets of our Incorporation, as well as maintaining the sustainability of such personnel's qualifications. In this context, the human resources planning, setting the job descriptions, ensuring the creation of the corporate culture and awareness, personnel employment, performance management, training and development, personnel processes, social and economic rights, ensuring the personnel satisfaction, working order, disciplinary and rewarding processes are covered by our Human Resources Policy.





CAREER DEVELOPMENT

Thanks to our comprehensive scope of activity and multicultural structure, we provide our employees with a unique career opportunity in the aviation industry and support the development of all our employees.

Thanks to our comprehensive scope of activity and multicultural structure, we provide our employees with a unique career opportunity in the aviation industry and support the development of all our employees. Further information on the training and development opportunities, we offer, is provided in the [Training](#) section of the report.

We provide our pilots with long-term career opportunities. We are encouraged by the corporate loyalty and effective teamwork which are two of the most prominent characteristic features of our Incorporation. We participated in a total of 30 events including 18 events with the leading universities of our country, 8 Regional Career Fairs held jointly with the Human Resources Office of the Presidency, and 4 international career events aiming to promote the career opportunities and employment processes at Turkish Airlines, and reach the international well-qualified human resources directly.

Thanks to AIRSTARTER Program that we created for undergraduate students starting their working life, students are offered the opportunity to shape their careers. With a part-time study period of 12 months in total and two



semesters, students find the opportunity to put their knowledge into practice. We offer full-time employment opportunities to students who have successfully completed the process after various assessment stages.

OUR ASSESSMENT PRACTICES

In our evaluation processes, we work with academicians and experts in the assessment and evaluation system. We conduct our evaluations on the “Turkish Airlines Online Exam Platform”, unique to our Incorporation. With our exam system, which reduces our external dependency and allows us to evaluate with more valid and reliable content based on position, we can perform evaluation practices with our candidates or employees all over the world.

In 2019, the “**Turkish Airlines Competency Handbook**” was created in line with our approach to disseminate the competency perspective throughout our Incorporation and to take competencies as a basis in all our human resources evaluations.

We initiated the “Competence Development Program”, based on competencies and supported by coaching sessions for development areas for the managers working at Cargo Directorate.



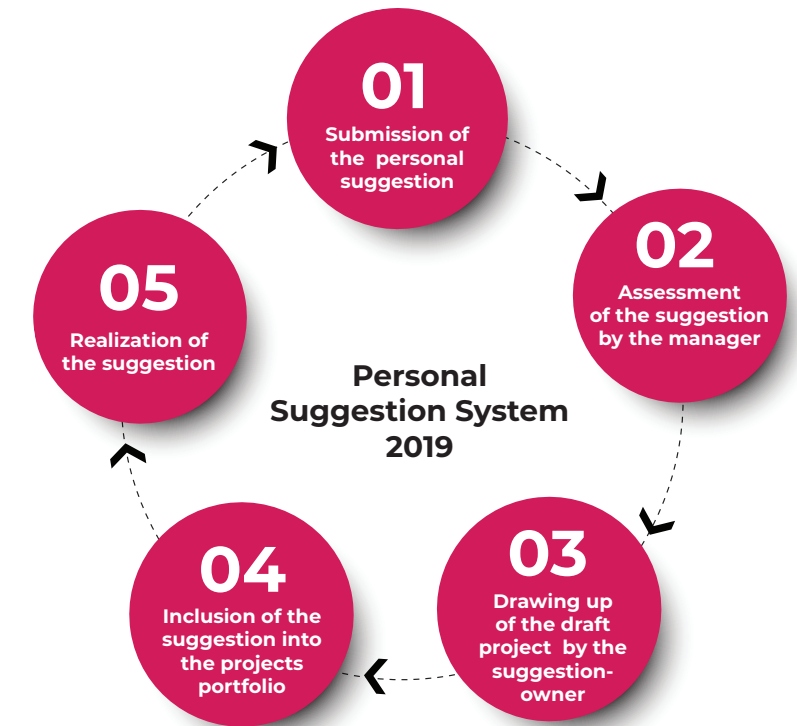
DEVELOPMENT OF INNOVATION CULTURE AND PROMOTION OF EMPLOYEE ENGAGEMENT

Aiming to process all internal and external sources and turn them into output, our Corporate Innovation System consists of many complementary activities. **“Idea Management”**, one of the most important components of our Corporate Innovation System, has been commissioned to activate the creative potential of our employees, the greatest asset of our Incorporation, and to increase their participation to innovation activities. Having a transparent sharing and rewarding structure, the idea management system enables all our employees to submit their valuable opinions and provides them with the opportunity to develop and realize projects and in return, to be rewarded for their efforts. Taking the interdepartmental coordination to the top level, this platform keeps serving for the purpose of utilizing all available opportunities and resolving all problems. Thanks to the idea management system; we create awareness on innovation, promote the innovation culture and raise innovation ambassadors. By the end of 2019, 4,316 colleagues shared 21,955 suggestions and upon realization of 441 of such suggestions, Turkish Airlines yielded a financial gain of more than 77 million USD.

We organize many trainings and workshops in order to increase the productivity of our employees and their awareness of technologies that will shape the future. Interviews with relevant experts, our “AirCircle” program, design thinking trainings can be shown as examples of these trainings.

External innovation activities are another source of innovation for Turkish Airlines. Accordingly, we carry out many projects jointly with national and international start-ups, advanced entrepreneur networks, universities, technology transfer offices and leading institutions and companies. In 2019, we collaborated with important actors in the field such as Keiretsu Forum and Draper University. In addition, we engaged our customers in our innovation processes by crowdsourcing-based idea competitions and the Innovation Survey, which we put into use in in-flight entertainment systems. We included 19,854 feedback from our customers into our internal evaluation processes. Moreover, our **Invest on Board platform**, which supports not only our Incorporation but also the entire entrepreneurship ecosystem and brings together promising entrepreneurs and potential investors, continues to grow day by day.

Our innovative projects on sustainability reflect our responsibility towards nature and future generations. For instance, our catering plates were redesigned with ecological materials in 2019, and our zero-waste concept projects became widespread throughout our Incorporation and in our operations. Another example is our work to produce biofuels from microalgae. Further information about the bio-fuel project coordinated by our unit can be found in the Fuel Efficiency and Greenhouse Gas Reduction section of the report.



Personal Suggestion System 2019





DIGITAL INNOVATION ACTIVITIES IN 2019



- > We conducted R&D studies and pilot projects in emerging technology areas such as **artificial intelligence, augmented / virtual reality, internet of things and blockchain.**
- > With the Turkish Airlines Chatbot, Boti, our passengers were provided with the opportunity to inquire about flights, view flight prices, inquire about flight status, check-in assistant, mobile boarding pass, airport maps and campaign inquiries via WhatsApp.

- > We participated as a Gumus (Silver) stakeholder at the Big Bang 2019 event, Turkey's most influential entrepreneurial activity, traditionally held every year by ITU Cekirdek.
- > Within the scope of Teknofest Istanbul, we organized Travel Datathon 2019, where teams of data scientists developed projects for 2 cases to be solved with more than 90 million data sets provided by Turkish Airlines, using technologies such as machine learning and artificial intelligence, at Ataturk Airport between September 20-22.
- > We continued to support the work carried out at the **IATA AIR Think Tank**, which sets standards that will shape the future of airline retail and works together to develop new initiatives in this field.
- > We partnered with **Voyager HQ**, a New York-based startup program to support the entrepreneurial ecosystem, discover early-stage tech startups and develop projects on new business models.
- > Aiming to optimize the direction finding experience of our passengers at airports, we presented **interactive terminal maps** of 3 airports, namely Istanbul Airport, Sabiha Gökçen Airport and Adnan Menderes Airport, to the service of our passengers in the Turkish Airlines Mobile Application.

- > As part of our open innovation strategy, we made it possible for our APIs, which we provided through the **Turkish Airlines Developer Portal**, to be used in the projects of software developers and technology initiatives.
- > **With Invest on Board, we supported 68 startups** in finding new investments by posting investor presentation videos on in-flight entertainment screens (IFE) and on the www.investonboard.com website.
- > We regularly published a newsletter in order to increase digital transformation awareness within the partnership.
- > We started to use **RPA** (Robotic Process Automation) technology in our business processes in order to increase our employee productivity.
- > We developed **49 R&D** projects and applied for **10 patents.**
- > Within the scope of European Union Projects, we made **3 EU project applications** under the categories of information security, technologies that increase customer experience and cargo technologies.



ENGAGEMENT AND SATISFACTION

We care about our employees' satisfaction as much as our passengers' satisfaction.

We care about our employees' satisfaction as much as our passengers' satisfaction. SVP, Social and Administrative Affairs handles the service processes that directly affect many of our employees and is primarily responsible for creating quality awareness and presenting it to the service of our employees on a sustainable basis. While progressing toward the objective of being the best in the world, we pay utmost attention to the processes such as transportation, nutrition, office ergonomics and life quality that would maximize the motivation of our employees.

SOCIAL BENEFITS

Turkish Airlines provides its employees with important social benefits. Examples of these social benefits are as follows: A wide ranging of service network, private health insurance, private health insurance discounts provided to the employees' families, allowances for birth, nursing, death and marriage, kindergarten or kindergarten allowance for the female employees with dependent children, free or discount domestic/ international flight opportunities, visa facilities, contract accommodation opportunities all around the world





IMPROVING THE EMPLOYEE EXPERIENCE

ACTIONS TAKEN UPON EMPLOYEE SATISFACTION SURVEY

We are constantly working to improve the employee experience and increase the motivation of our employees. At the Employee Engagement Executive Board meetings held periodically under the chairmanship of the General Manager, issues affecting the employee are resolved by consultation at the senior management level. Our on-boarding and promotional interviews with our employees help us identify our improvement areas. We implement new generation HR practices by evaluating the feedback we receive from our employees and the issues raised by the unit representatives. Our employee support channels ensure that our HR practices are announced to our employees quickly.

Our Incorporation's Appreciation and Appreciation Platform enables our colleagues to interact with each other. Through the mobile application we have put into use, our employees can instantly share their business priorities and development plans with their managers. In addition, they can follow brand deals, surprise gifts, activity announcements for clubs and information. With this application, we aim to improve cooperation within the organization and increase the visibility of talents.



Badges were presented to our colleagues who have completed a certain period of service at Turkish Airlines.

We organized events to strengthen the communication between our employees and executives.

Food and beverage vending machines were placed to improve the physical working environments of our employees.

We partnered with various brands offering discounted prices for our employees.

Sweepstakes were organized to increase employee motivation.

The second phase of employee feedback system was activated.

Welcome kits were designed to make the first working day experiences of our newly employed colleagues special.

Employee Support Lines were established in order to respond faster to the questions and problems of our colleagues.

Activities for our employees were organized during the airport transfer process.



DIVERSITY AND EQUAL OPPORTUNITY

The number of female employees corresponds to 46% of the total number of employees, which hit 13,577, as of 2019.

46% female
employees

64 countries 530
foreign pilots

3,942
new employees

The basis of our success is our human resource from diverse cultures and various countries. We appreciate our diverse employee profile as a great source of creativity and innovation. Our Incorporation always advocates equal opportunity among our people and we never discriminate any employees on the basis of race, color, gender, nationality, religion, disability, age, family status etc.

The number of our cockpit crews, who made significant contributions to the success story of Turkish Airlines, exceeded 5,000, including 530 foreign pilots from 64 countries. Thus, we offer a truly cosmopolitan working environment in our cockpits. At Turkish Airlines, the number of female employees corresponds to 46% of the total number of employees, which hit 13,577 as of 2019. We are pleased to see that our female pilot numbers are increasing year by year, as well as the predominance

of our female employees in cabin crew duties. Aiming to improve career opportunities for our female employees, we initiated practices such as maternity leave and nursery assistance payment for each child up to primary school age for all working women. We are committed to integrating people with disabilities and their talents in employment. In 2019, the number of disabled employees is 235 of which 24 are supervisors and managers.

In 2019, 3,942 people were employed at Turkish Airlines. Growth and quality-based human resources policies have an important place in our 2023 vision. For this reason, we are already making our personnel planning for the period until 2023. The diverse employee profile of Turkish Airlines can be seen in the [“Employee profile by age and gender”](#) under the “Performance Tables” in the “Annexes” section of the report.





IMPROVING THE GENDER BALANCE IN THE AVIATION SECTOR

“Successful women who set an example with their aviation careers are emphasized in the promotional channels of Turkish Airlines and they are offered the opportunity to share their experiences in various channels. Competency-based employee evaluation processes are in place at Turkish Airlines.”

NURSIBEL AYDIN
Turkish Airlines Assessment Center Manager

The Directorate General of Civil Aviation issued an instruction and established a commission to improve gender balance in the Turkish civil aviation sector. This commission, which includes Turkish Airlines, aims to monitor and improve the gender balance in civil aviation. In addition, one of the objectives of the Commission is to raise awareness among female students before the university selection and to increase the number of effective women in the decision-making process in aviation management.

The members of the DGCA Gender Balance Improvement Commission started their work to present the current situation regarding gender balance in aviation, to conduct communication activities, and to develop projects in cooperation with relevant stakeholders from academia and industry.

FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

We, as Turkish Airlines, comply with national regulations about freedom of association and rights of collective bargaining. Furthermore, the agreement with the Union and Turkish Airlines internal procedures describes the general rules and principles of employment and type and duration of the employment contracts. Collective bargaining agreement has been in place at our Incorporation for 50 years, and it has been continuously refined to improve the rights of employees and executed smoothly in a manner to minimize any possible conflicts through dedicated efforts of the parties so far. We will strive to do so in the future.





TRAINING

As Turkish Airlines, we not only aim to enhance the fulfillment and performance of our employees but also work to develop their technical competencies and customer-oriented soft skills. To that end, we provide many opportunities for employee training and development.

TURKISH AIRLINES AVIATION ACADEMY

Turkish Airlines Aviation Academy provides training services to its trainees in classroom and / or online environment with its 83 instructors, as well as 120 personnel, whose expertise can be recruited when needed. Aviation Academy operates at a closed area of 5,400 m² with a total area of 8,700 m².

The Academy has been accredited and certified by many national/ international authorities, and offers training and consultancy services to airline and cargo operators, travel agencies, universities, airport operators and other companies and individuals in civil aviation

industry with a wide range of training programs ranging from passenger services to ground operations, professional and personal development and occupational language training. Turkish Airlines Aviation Academy, which has been accredited as a Regional Training Partner and Approved Training Academy of IATA since 2011, continues to provide IATA-approved training courses for participants across the world. Turkish Airlines Aviation Academy trainings are run under three categories; namely: Corporate Solutions, Organizational Development and Language Skills. The frequency of trainings varies based on the Company's needs and on the nature of the requirements in terms of authority

compliance, initial training, recurrent training or seminar.

Our Academy in partnership with 3 state universities in Istanbul, organizes various master's programs for our employees at the Academy Campus, and invites the managers in our organization as guest speakers to share their experiences with our employees.

Turkish Airlines aims to promote aviation among children in the 8-12 age group with the **"Aviation Program for Children"** designed as a social responsibility project. During the one-day program, children learn the principles of flight in an experimental environment and experience flying in simulators. Same Programs are also organized for children staying in Child Protection Institutions in Istanbul.

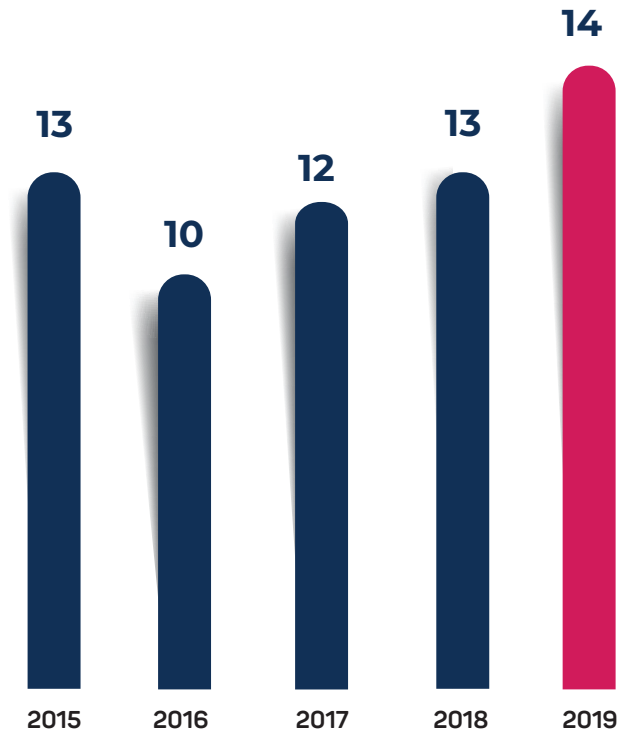
For the first time in Turkey, Turkish Airlines Aviation Academy initiated a customized program, Overcoming Fear of Flight Program, dedicated to helping those who fear flying. During the 2 days Program, we provide trainings with our psychologists, flight crews and technical personnel to our passenger candidates who cannot fly due to the fear of flying. Further information is provided in the **"Accessibility"** section of the report.



OUR NATIONAL AND INTERNATIONAL ACCREDITATIONS AND PARTNERSHIPS



Training hours per personnel



In 2019, the Academy conducted 3,024 in-class trainings for a total number of 44,784 trainees. 724,434 participants took e-learning courses. Training hours per personnel was 14 in 2019. Further data regarding the trainings is provided in the “Figures 2019” graphic.



FLIGHT TRAINING CENTER



We carry out the training activities for more than 45,000 flight crew members in accordance with the international standards.

As Flight Training Center, we conduct training activities for cockpit crew members, cabin crew members, dispatchers and load masters as well as more than 45,000 flight crew members of our Incorporation in accordance with the international standards, and serve to develop competencies of the flight crew members. The center having been accredited by domestic and international authorities, provides training services for national and international customers and aims to be one of the biggest training centers across Europe, the Middle East and Africa. Besides, the activities carried out with institutions and organizations provide valuable contributions to extend civil aviation knowledge on both national and international basis. Driven by the vision of attaining the highest performance standards in aviation safety and security, the Flight Training Center has been audited and accredited by the Turkish Civil Aviation authority and many international civil aviation authorities.

Equipped with 24 Full Flight Simulators (FFS), 7 Flight Training Devices (FTD), 5 CST, 2 CEET, 6 DT, 1 RFFT station, the Flight Training Center provides various trainings including cockpit trainings, ground trainings, flight trainings, SAFA trainings, ground courses and practical trainings for cabin crews, trainings for candidate pilots, and trainings for dispatchers and loadmasters.

All trainings for flight crew members aim at increasing knowledge, skills and competencies in communication, assuming responsibility, leadership, team building, problem solving and making sound judgments. We update our training program on regular basis to increase the quality of our trainings and ensure that the employees are equipped with all technical skills required to provide service for safe operation all around the world. We also seek to raise environmental awareness by providing fuel efficiency trainings.





We conduct seminars about operational applications of fuel efficiency to protect environment.

PROJECTS REALIZED

In 2019, with the commissioning of 4 wide body simulators and 1 narrow body simulator, in total of 14 simulators are available at Sedat Şekerci Campus. With the commissioning of the ordered devices, the number of operational FFFs will reach 15 in this campus and 10 simulators in Florya campus, and there will be 25 simulators in total.

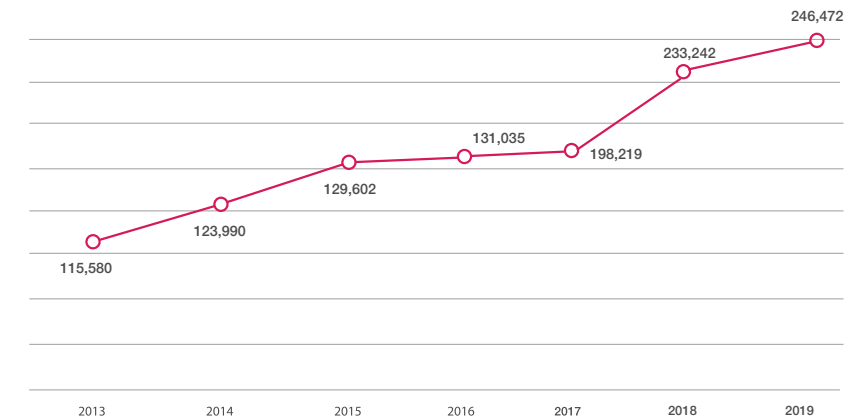
The MINT Education Management System platform was commissioned to enable to work simultaneously and in coordination with relevant units and achieve resource efficiency.

In the new Flight Training Center, completed in 2017 with a capacity of 18 simulators and 45 classrooms and a mock-up area, 9 simulators were put into service, 2 desktop simulation training classrooms were commissioned and 3 new cabin service training vehicles were activated in 2019. 3 Flight Navigation Procedures Training Devices (FNPT) have been transferred to our pilot training school TAFA.

Within the scope of the new "Flight Training Center Project", 5 additional domestic simulators were ordered from Havelsan A.S. As part of such ongoing projects, Havelsan will also deliver 6 FTDs, besides the foregoing. Thus, the number of EASA-approved Full Flight Simulators (FFS) will be 24.

2013-2019 PERFORMANCE

Training Hours for Cockpit Crew Members



Traning Hours For Cabin Crew Members





HEALTH, SAFETY AND WELL-BEING



Occupational Health and Safety Policy

Turkish Airlines holds the internationally recognized Occupational Health and Safety Management System Certificate (OHSAS 18001).

Health, safety and well-being of our employees, customers, business partners and contractors and those who may be impacted by our activities are our top priority in every field we operate. Our commitment to Occupational Health and Safety (OH&S) goes well beyond compliance with statutory OH&S requirements and integrated into our company culture. We are committed to the goal of eliminating and reducing the risk of injury and taking all preventive and protective measures to ensure a safe and healthy work environment.

Turkish Airlines has a detailed Occupational Health and Safety Management System Handbook, carried out by the Recruitment Department, as well as [Occupational Health and Safety Policy](#). Our Health Directorate, which consists of occupational physicians, nurses, occupational health and safety experts, works to ensure that we can reach the highest standards in the field of occupational health and safety and maintain these standards.

Turkish Airlines' CEO is the accountable executive designated for the existing occupational health

and safety management. In addition, our employees are encouraged to actively participate in health and safety related activities through our Occupational Health and Safety Boards, which also include employee representatives. Management Review Board (YGGK) meetings are held twice a year with the participation of the General Manager and relevant managers to discuss occupational health and safety issues at our Incorporation.

We systematically collect, monitor and review health and safety data through online reporting systems and have established various mechanisms to achieve continuous improvement in our performance. Thus, all incidents including the near misses are reported; the root causes of the incidents are examined and investigated, and corrective and preventive actions are implemented. We strive to ensure the continuity of compliance with occupational health and safety related legal regulations and standards and to continuously improve ourselves.

Turkish Airlines holds the internationally recognized Occupational Health and Safety Management System Certificate (OHSAS 18001).

We established a regulations-compliant health and safety management system where risks are analyzed, precautions are taken and accidents are minimized, controls are ensured through inspections, company targets are set, and employees are given sub-targets. We strive to achieve continuous improvement and ongoing compliance with the regulations and standards.

In addition, by the end of 2019, we started working on transition to ISO 45001 Standard instead of OHSAS 18001 Occupational Health and Safety Standard. We organized trainings and seminars for our employees regarding the new standard and conducted Current Situation Analysis studies in the relevant units. After the analysis, our units started to take actions to comply with ISO 45001. After the completion of the actions, an ISO 45001 Certification Audit will be carried out by an independent certification body in 2021.

TRAINING

As Turkish Airlines, we support the improvement of occupational health and safety culture by raising the awareness of our employees about occupational health and safety. For this purpose, we provide our employees with necessary information about occupational health and safety through regular trainings. Some of the training topics are: Legal rights and responsibilities of employees, general principles of work culture, chemical, physical and ergonomic risk factors, safe use of work equipment, use of personal protective equipment, causes and prevention of



work accidents, emergency response plans, evacuation and rescue.

In this context; including cockpit, cabin and ground personnel, OHS basic classroom training was given to 3,753 personnel, OHS online basic training was given to 11,198 personnel, search-rescue-evacuation teams training was given to 184 personnel and firefighting training was given to 148 personnel.

OCCUPATIONAL HEALTH AND SAFETY PRACTICES

As Turkish Airlines, we care about the physical health and well-being of our employees as well as their mental health. We are committed to provide all kinds of support to ensure that our personnel, who work in critical positions, are both physically and mentally ready for the task. In 2019, in order to prepare our employees for emergencies and to improve the emergency response skills of the emergency teams; A total of 58 emergency drills were held, 16 in Istanbul, 19 in domestic stations, 13 in Istanbul and domestic stations. A total of 426 field surveillance studies were carried out at our Istanbul campuses. Within the scope of measurement control and test studies, 4,009 items of measurements were made. A total of 161,992 physician activities were carried out, including the routine periodic checks of our current employees and examinations of the newly recruited personnel.

PROMOTING HEALTHY LIFESTYLES

We encourage our employees to make healthy choices through various activities.

2019 injury weight rate:
12.69

2020 Target: Decrease
the **injury weight**
rate to below 11.42



Through our health program, we promote practices such as healthy diet, substance abuse awareness and a smoke-free environment. Weight management and an active lifestyle are keys to prevent obesity which is associated with numerous chronic diseases. We offer nutrition counseling service to help our employees make healthy nutrition choices, exercise and manage their weight. We promote a smoke-free environment and our employees can participate in a tobacco cessation program to help them become smoke-free.

PERFORMANCE

We are dedicated to achieving the goal of reducing injury rate on a continuous basis. As a first step, the reporting system has been improved to identify even the smallest type of injuries. In 2019, the injury weight rate has been 12.69 which is calculated as number of lost days *1,000,000/working time. Main types of injuries experienced at work within our organization are minor cuts, musculoskeletal system injuries and falls.

TARGETS

All our employees have been provided with training about the recent OH&S regulations. OHSAS 18001 Occupational Health and Safety Management System Standard training will continue for our new employees to the Turkish Airlines family. We aim to reduce the accident frequency rate, which was determined as 12.69 in 2019, to below 11.42 by the end of 2020.



07

ANNEXES

PERFORMANCE TABLES **107**

GREENHOUSE GAS VERIFICATION **111**

GRI CONTENT INDEX **112**



PERFORMANCE TABLES

GRI 102-8: Employee profile by age groups and gender

Year	Employee Category	Age Group			Gender		TOTAL
		0-29	30-49	50+	Female	Male	
2016	Cockpit personnel	678	2,866	924	121	4,347	4,468
	Cabin personnel	4,990	4,930	2	7,072	2,850	9,922
	Other personnel	2,468	6,844	422	4,280	5,454	9,734
	Total	8,136	14,640	1,348	11,473	12,651	24,124
2017	Cockpit personnel	684	2,905	920	153	4,356	4,509
	Cabin personnel	4,285	5,433	3	6,819	2,902	9,721
	Other personnel	2,324	7,112	409	4,396	5,449	9,845
	Total	7,293	15,450	1,332	11,368	12,707	24,075
2018	Cockpit personnel	945	3,312	956	241	4,972	5,213
	Cabin personnel	4,416	6,093	4	7,160	3,353	10,513
	Other personnel	2,783	7,775	455	4,929	6,084	11,013
	Total	8,144	17,180	1,415	12,330	14,409	26,739
2019	Cockpit personnel	977	3,828	1,034	297	5,542	5,839
	Cabin personnel	5,116	7,127	4	8,243	4,004	12,247
	Other personnel	2,547	8,324	534	5,037	6,368	11,405
	Total	8,640	19,279	1,572	13,577	15,914	29,491

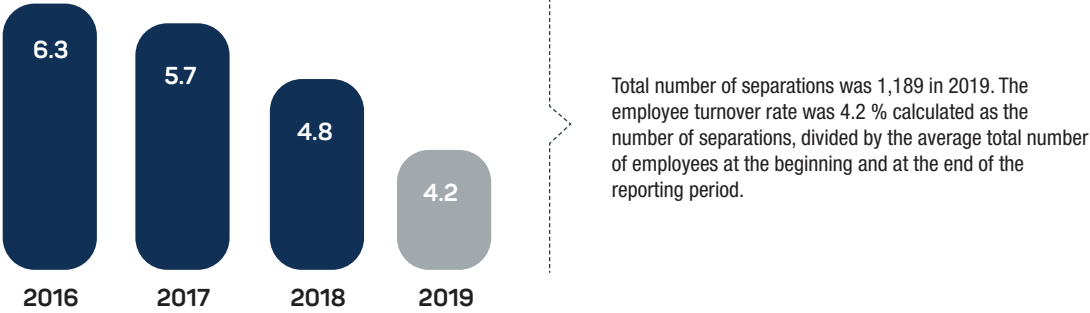
GRI 405-1: Breakdown of management profile by age group and gender

Year	Age Group			Gender		TOTAL
	0-29	30-49	50+	Female	Male	
2016	13	513	47	52	521	573
2017	14	518	46	50	528	578
2018	14	543	50	54	553	607
2019	6	565	54	61	564	625

GRI 401-1: Breakdown of new employee hires by age group, gender and geographic region

		2016	2017	2018	2019
Total		3,486	1331	3900	3942
Age Group	Below 30	2,583	940	2,860	3,145
	30-49	871	377	987	743
	50+	32	14	53	54
Gender	Male	1,655	895	2,463	2,161
	Female	1,831	436	1,437	1,781
Geographic Region	Africa	54	20	50	55
	America	87	18	36	27
	Asia	44	28	35	34
	Europe	210	65	190	138
	Middle East	85	20	58	47
	Far East	39	19	28	27
Turkey		2,967	1,161	3,503	3,614

GRI 401-1: The employee turnover rate (%)





Emission Data

2018 Emissions

As Turkish Airlines, we developed our GHG inventory based on calculation in line with ISO 14064-1 Standard. We adopted the operational control approach in setting our organizational boundary.

Greenhouse gas emission and reduction calculations were made taking into account direct greenhouse gas emissions (Scope 1) and energy indirect greenhouse gas emissions (Scope 2). Other indirect greenhouse gas emissions (Scope 3) are not included in the calculations.

The greenhouse gas emissions of 2018 declared on the right were verified by the independent audit firm in accordance with the TS EN ISO 14064-3 Greenhouse Gas Calculation and Verification Standard. See: [Greenhouse Gas Declaration Verification Statement](#).

	CO ₂ e (t/annual)	CH ₄ (t/annual)	CH ₄ (tCO ₂ e)	N ₂ O (t/annual)	N ₂ O (tCO ₂ e)	Total (tCO ₂ e)
Scope 1*	12,580	0.86	24	0.46	121	12,724
Scope 1**	16,874,363	118.00	3,304	472.01	125,083	16,992,133
Total Scope 1	16,886,943	118.87	3,328	472.47	125,203	17,004,857
Scope 2	23,682	0.34	10	472.66	50	23,742
Scope 1 and Scope 2 Total	16,910,625	119.21	3,338	945.12	125,254	17,028,599

* Emissions from aircraft fuel consumption are not included.

** Emissions from aircraft fuel consumption.

Greenhouse gas emissions from natural gas used to generate electricity through trigeneration in 2018

Location	Natural gas consumption (sm ³ /annual)	Electricity generated (kWh)	Total CO ₂ e (t/annual)***
Cargo Trigeneration	3,304,601	12,661,640	6,423

*** Scope 1 emissions are included.

The share of greenhouse gas emissions of aviation fuel consumption in total greenhouse gas emissions in 2018

	Total (tCO ₂ e)	Percentage
GHG emissions from aircraft fuel consumption	16,992,133	99.79%
Total GHG emissions	17,028,599	



2019 Emissions

The verification process for 2019 emissions continues, and the projected emissions are stated below.

	CO ₂ e (t/annual)	CH ₄ (t/annual)	CH ₄ (tCO ₂ e)	N ₂ O (t/annual)	N ₂ O (tCO ₂ e)	Total (tCO ₂ e)
Scope 1*	11,537	0.79	22	0.16	44	11,603
Scope 1**	17,687,868	123.69	3,463	494.77	131,113	17,808,397
Total Scope 1	17,699,405	124.48	3,485	494.93	131,157	17,820,000
Scope 2	46,406	0.70	20	495.37	116	46,541
Scope 1 and Scope 2 Total	17,745,811	125.18	3,505	990.30	131,272	17,866,541

* Emissions from aircraft fuel consumption are not included.

** Emissions from aircraft fuel consumption.

Greenhouse gas emissions from natural gas used to generate electricity through trigeneration in 2019

Location	Natural gas consumption (sm ³ /annual)	Electricity generated (kWh)	Total CO ₂ e (t/annual)***
Cargo Trigeneneration	3,149,208	12,148,260	6,121

*** Scope 1 emissions are included.

The share of greenhouse gas emissions of aviation fuel consumption in total greenhouse gas emissions in 2019

	Total (tCO ₂ e)	Percentage
GHG emissions from aircraft fuel consumption	17,808,397	99.67%
Total GHG emissions	17,866,541	

Total greenhouse gas emissions by years

	2017	2018	2019
Scope 1 and scope 2 total (tCO ₂ e)	15,581,530	17,028,599	17,866,541

The verification process for 2019 emissions continues, and the projected emissions are stated.



Scope of the natural gas and electricity data

Scope 1 Natural gas consumption data of the facilities under the control of Turkish Airlines are:

İstanbul: Datacenter, General Management Building, Levazım Warehouse, Halkalı Technology Building, Catering Presidency, Kadıköy, Cargo, Cargo trigeneration, Yenibosna GİSAD, Sedat Sekerci Campus (New SIM), Flight Training Presidency, Satellite Cargo Building*, Crew Terminal*

Scope 1 Natural gas consumption data of the facilities not under the control of Turkish Airlines are:

Ankara: Ankara Cargo Management

Scope 2 Natural gas data of the facilities not under the control of Turkish Airlines are:

İstanbul: Central Kitchen Building, Hangars, Inflight Warehouse Building, Catering and In-flight Products Directorate Building, Florya Habom Building (Accounting and Financial Control Directorate), Apron Operations Building, EBI, Training Directorate, IFS, CFB and ULD Buildings *, Harbiye Sales Department, Taksim Sales Chief, Kadıköy Sales Department.

Ankara: Ankara Station Management, Regional Flight Head, Ankara Sales Management

İzmir: İzmir Sales Management, İzmir Station Management, İzmir Cargo Management

Scope 2 Electricity consumption data of the facilities under the control of Turkish Airlines are:

İstanbul: General Management Building, Supply Warehouse, Halkalı Technology Building, Cargo AHL and Cargo IHL Buildings Sedat Sekerci Campus, Yenibosna GİSAD Building.

Scope 2 Electricity consumption data of the facilities not under the control of Turkish Airlines are:

İstanbul: AHL Terminal Offices, Central Kitchen Building, Hangars, Inflight Storage Building, Catering and In-flight Products Directorate Building, Florya Habom Building (Accounting and Financial Control Directorate), Apron Operations Building, EBI, Education Directorate, CFB, ULD, ASG and IFS Buildings *, Harbiye Sales Office, Taksim Sales Department, Kadıköy Sales Office, İkitelli Archive Building.

Ankara: Ankara Station Management, Regional Flight Directorate. Ankara Cargo Management, Ankara Sales Management

İzmir: İzmir Station Directorate, İzmir Cargo Management, İzmir Sales Management

*Turkish Airlines moved to Istanbul New Airport in 2019.
The data of this new facility is included in the total consumption amount.*



GREENHOUSE GAS VERIFICATION STATEMENT

TSE
TÜRK STANDARTLARI ENSTİTÜSÜ

HEAD OF SURVEILLANCE AND INSPECTION CENTER
GREENHOUSE GAS VERIFICATION STATEMENT

Certificate Number SER.006.2019/B00056
Report Number SER.006.2019/R00053
Date of Verification Statement 18.12.2019
Company Title TÜRK HAVA YOLLARI ANONİM ORTAKLIĞI
Company Address THY A.O. - Yeşilköy Atatürk Hava Limanı Bakırköy/İSTANBUL

Purpose of Verification Verifying the Greenhouse Gas Assertion of the organization which is prepared according to TS EN ISO 14064-1:2007 standard for the period 01.01.2018-31.12.2018 and verifying Total Greenhouse Gas Emissions which are in accordance with the requirements of the TS EN ISO 14064-3:2007 standard in Reasonable assurance level.

Verification Methodology Greenhouse Gas Statement Verification is carried out in accordance with requirement of TS EN ISO 14064-3:2007 standard.

Techniques of Verification 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 Assertion is verified.

Verification Criteria TS EN ISO 14064-1:2007
Verification Period 01.01.2018 - 31.12.2018
Base Year 2017

Organizational Boundaries See appendix of the Greenhouse Gas Declaration Verification Statement.

Type(s) of Greenhouse Gases CO₂, CH₄, N₂O, HFC, HC, HCFC, SF₆, Novec 1230, CFC

Verified GHG Emissions and Removals

Total Emissions	17,028,599.378 tonnes CO ₂ equivalent
Direct Emissions	17,004,857.465 tonnes CO ₂ equivalent
Energy Indirect Emissions	23,741.913 tonnes CO ₂ equivalent
Other Indirect Emissions	*
Emissions due to Biomass Combustion	*
GHG Removals	Not quantified by the organization.

Level of Assurance Reasonable assurance level

Mehmet ERGÜN
Director of Environmental Surveillance and Verification

 <https://basvuru.tse.org.tr/uyeQRKodDogrulama?code=530459> You can query this address to check the accuracy and validity of the document.

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TSE
TÜRK STANDARTLARI ENSTİTÜSÜ


HEAD OF SURVEILLANCE AND INSPECTION CENTER
GREENHOUSE GAS VERIFICATION STATEMENT

Organizational Boundaries

THY A.O. - GENEL YÖNETİM BİNASI YEŞİLKÖY MAH.
HAVAALANI CADDESİ NO:3/1 BAKIRKÖY/İSTANBUL

THY A.O. - ADNAN MENDERES HAVALIMANI 35423
GAZİEMİR/İZMİR

THY A.O. - ANKARA ESENBOĞA HAVALIMANI,
AKYURT/ANKARA

 <https://basvuru.tse.org.tr/uyeQRKodDogrulama?code=530459> You can query this address to check the accuracy and validity of the document.

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DISCLAIMER

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Industry, market and competitive data and certain industry forecasts used in this report were obtained from internal research, market research, publicly available information and industry publications and other market commentaries. Industry publications generally state that the information contained therein has been obtained from sources believed to be reliable at the relevant time, but that the accuracy and completeness of such information is not guaranteed. Similarly, internal research, market research, industry publications and other publicly available information, while believed to be reliable, have not been independently verified, and Turkish Airlines does not make any representation as to the completeness or accuracy of such information.



GRI CONTENT INDEX

This report has been prepared in accordance with the GRI Standards: Core option. The table below provides a reference for GRI content in the report. For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. The service was performed on the English version of the report.



Disclosure numbers	GRI Standard	Page numbers	Direct answers and/or links
GRI 101: Foundation 2016			
GRI 102: General Disclosures 2016			
102-1	Name of the organization	112	Turkish Airlines Inc.
102-2	Activities, brands, products, and services	10, 11	
102-3	Location of the headquarters	112	General Management Building, Atatürk Airport Yeşilköy 34149 İstanbul Türkiye
102-4	Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report	8, 9, 10, 11	
102-5	Ownership and legal form	27	
102-6	Markets served	8-11, 112	2019 Annual Report, page 18-34
102-7	Scale of the organization	8-11, 112	2019 Annual Report, page 18-34, 50-53
102-8	Information on employees and the other workers	8-11, 91	
102-9	Supply chain	38	
102-10	Significant changes to the organization and its supply chain	65	
102-11	Precautionary approach	27, 28, 30, 46-48	
102-12	External initiatives	21, 47	
102-13	Membership of associations	21, 47	
Strategy			
102-14	Statement from senior decision maker	6, 7	



Disclosure numbers	GRI Standard	Page numbers	Direct answers and/or links
Ethics and Integrity			
102-16	Values, principles, standards, and norms of behaviour	12-14, 32, 33	2019 Annual Report page 39-41
Governance			
102-18	Governance structure	23-29	2019 Annual Report page 36-38, 120-138
Stakeholder Engagement			
102-40	List of stakeholder groups	19, 20, 21	
102-41	Collective bargaining agreements	98	
102-42	Identifying and selecting stakeholders	18, 19	
102-43	Approach to stakeholder engagement	19, 20, 21	
102-44	Key topics and concerns raised	20, 21	
Reporting			
102-45	Entities included in the consolidated financial statements	3	
102-46	Defining report content and topic boundaries	18-26	
102-47	List of material topics	22-26	
102-48	Restatements of information	108, 113	2019 GHG emission is restated.
102-49	Changes in reporting	27, 110, 113	We moved to Istanbul Airport.
102-50	Reporting period	113	1 January 2019-31 December 2019
102-51	Date of the most recent report	113	1 January 2018-31 December 2018
102-52	Reporting cycle	113	Annual
102-53	Contact point for questions regarding the report	3	
102-54	Claims of reporting in accordance with the GRI Standards	3	
102-55	GRI content index	112	
102-56	External assurance	3, 111	



TOPIC SPECIFIC STANDARDS

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Economic Performance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 36-41	
	103-2	The management approach and its components	22-24, 36-41	
	103-3	Evaluation of the management approach	22-24, 36-41	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	11, 39, 41, 113	2019 Annual Report, page 18-34, 150-244
	201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	27-30	
Indirect Economic Impacts				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 36-41	
	103-2	The management approach and its components	22-24, 36-41	
	103-3	Evaluation of the management approach	22-24, 36-41	
GRI 203: Indirect Economic Impacts 2016	203-1	Development and impact of infrastructure investments and services supported	36-41	
	203-2	Significant indirect economic impacts, including the extent of impacts	36-41	
Anti-corruption				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22, 23, 32, 33	
	103-2	The management approach and its components	22, 23, 32, 33	
	103-3	Evaluation of the management approach	22, 23, 32, 33	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	32, 33	
	205-2	Communication and training on anti-corruption policies and procedures	32, 33	
	205-3	Confirmed incidents of corruption and actions taken	32, 33	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	28, 29	2019 Annual Report, page 126, 127
	103-2	The management approach and its components	28, 29	2019 Annual Report, page 126, 127
	103-3	Evaluation of the management approach	28, 29	2019 Annual Report, page 126, 127
GRI 206: Anti-competitive behavior 2016	206-1	Number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	28, 29	
GRI 300: ENVIRONMENTAL STANDARDS				
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 46-71	
	103-2	The management approach and its components	22-24, 46-71	
	103-3	Evaluation of the management approach	22-24, 46-71	



GRI 302: Energy 2016	302-1	Energy consumption within the organization	44, 53, 54, 70, 110	
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	302-3	Reduction of energy consumption	44, 45, 53, 54, 58-71	
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	103-2	The management approach and its components	22-24, 44-49	
	103-3	Evaluation of the management approach	22-24, 44-49	
GRI 303: Water 2016	303-1	Total water withdrawal by source	44	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 44-71	
	103-2	The management approach and its components	22-24, 44-71	
	103-3	Evaluation of the management approach	22-24, 44-71	
GRI 305: Emissions 2016	305-1	Direct Greenhouse gas (GHG) emissions (scope 1)	70, 108-111	
	305-2	Indirect Greenhouse gas (GHG) emissions (scope 2)	108-111	
	305-5	Reduction of GHG emissions	66-71	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	108-111	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-25, 55-57, 78, 79	
	103-2	The management approach and its components	22-25, 55-57, 78, 79	
	103-3	Evaluation of the management approach	22-25, 55-57, 78, 79	
GRI 306: Effluents and Waste 2016	306-2	Waste by type and disposal method	44, 45, 55-57, 78, 79	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	44-58	
	103-2	The management approach and its components	44-58	
	103-3	Evaluation of the management approach	44-58	
GRI 307: Environmental Compliance 2016	307-1	Monetary value of significant fines and total numbers of non-monetary sanctions for non-compliance with environmental laws and regulations	44, 50	
GRI 400: SOCIAL STANDARDS				
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 91-98	
	103-2	The management approach and its components	22-24, 91-98	
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GRI 401: Employment 2016	401-1	Total number and rates of new employee hires and employee turnover by age group, gender and region	107	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	95	
Labor/Management Relations				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-24, 91-98	
	103-2	The management approach and its components	22-24, 91-98	
	103-3	Evaluation of the management approach	22-24, 91-98	
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes, including whether these are specified in collective bargaining agreements	116	A period of 8 weeks is allocated for preparation and planning before the collective bargaining agreement
Occupational Health and Safety				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	22-26, 104, 105	
	103-2	The management approach and its components	22-26, 104, 105	
	103-3	Evaluation of the management approach	22-26, 104, 105	
GRI 403: Occupational Health and Safety 2016	403-1	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	116	OH&S Committee operates at managerial level within the Company.
	403-2	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	104, 105	
	403-4	Health and safety topics covered in formal agreements with trade unions	116	H&S topics are covered in formal agreements with trade unions
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	99-103	
	103-2	The management approach and its components	99-103	
	103-3	Evaluation of the management approach	99-103	
GRI 404: Training and Education 2016	404-1	Average hours of training per year employee by gender, and by employee category	101	
	404-2	Programs for skills management and lifelong learning that support continued employability of employees and assist them in managing career endings	92, 99-103	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	97	
	103-2	The management approach and its components	97	
	103-3	Evaluation of the management approach	97	



GRI 405: Diversity and Equal Opportunity 2016	405-1	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	97	
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GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	32, 33	
	103-2	The management approach and its components	32, 33	
	103-3	Evaluation of the management approach	32, 33	
GRI 406: Non-discrimination 2016	406-1	Total number of incidents of discrimination and corrective actions taken	32, 33	
Freedom of Association and Collective Bargaining				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	98	
	103-2	The management approach and its components	98	
	103-3	Evaluation of the management approach	98	
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	98	
Local Communities				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	20-23, 40	
	103-2	The management approach and its components	20-23, 40	
	103-3	Evaluation of the management approach	20-23, 40	
GRI 413: Local Communities 2016	413-1	"Operations with implemented local community engagement, impact assessments, and development	20, 40, 88	2019 Annual Report 41, 65, 126, 127
Customer Privacy				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	87	
	103-2	The management approach and its components	87	
	103-3	Evaluation of the management approach	87	
GRI 418: Customer Privacy 2016	418-1	Number of substantiated-complaints regarding breaches of customer privacy and losses of customer data	87	
Socio-economic Compliance				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	32, 33	2019 Annual Report 122-149
	103-2	The management approach and its components	32, 33	2019 Annual Report 122-149
	103-3	Evaluation of the management approach	32, 33	2019 Annual Report 122-149
GRI 419: Socio-economic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	32, 33	2019 Annual Report 122-149



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