

2019

Corporate Social
Responsibility Report
China Southern Airlines Co., Ltd

2019 Corporate Social Responsibility Report

视觉设计图

中国南方航空股份有限公司



2019
社会责任报告
中国南方航空股份有限公司

About This Report



This is the 13th annual Social Responsibility report of China Southern Company Limited since 2007. Based on the principles of objectivity, transparency and standardization, the report systematically discloses the philosophy, policies and progress of China Southern in fulfilling its social responsibility.

Name Description

For convenience of expression, all references to "China southern" "the Company" or "we", herein refer to China Southern Company Limited, or "China Southern Group". The reference to "XIAMEN AIR" refers to "Xiamen Airlines Company Limited". All subsidiaries are in the form of "region + the name of the branch". "Civil Aviation Administration of China" also uses "CAAC"

Basis

This Report has been prepared in accordance with the following: *Guidelines Concerning State-Owned Enterprises' Fulfilling Social Responsibilities* published by the State-Owned Assets Supervision and Administration Commission (SASAC); *Environmental, Social and Governance Reporting Guide* published by the Hong Kong Stock Exchange (HK-ESG);

Guidelines on Preparation of Corporate Social Responsibility Report and Notice on Further Improving Disclosure of Poverty Alleviation Work of Listed Companies published by the Shanghai Stock Exchange;

GRI Sustainability Reporting Guidelines (GRI Standards) issued by Global Reporting Initiative (GRI) and The national standard GB/T 36001-2015: *Guideline on the Compilation of Corporate Social Responsibility Report*.

Reporting Period

The reporting period is January 1, 2019 to December 31, 2019. In order to enhance the comparability of the reports, certain elements of this report may be traced back to previous years. This report is released at the same time as the Annual Report. The previous Annual Report was released in March 2019.

Scope

The indicators disclosed in this report is mainly sourced from China Southern, and some indicators are extended to China Southern Group. The data disclosure scope has been specified in detail in the report.

Source of Data

Financial data used in this report were extracted from audited annual reports of China Southern, and other data were sourced from public data of government departments or official corporate documents and statistics. Unless otherwise stated, all financial data in this report are expressed in Renminbi (RMB).

Reliability Assurance

The Board of Directors and all directors of the Company hereby guarantee that this report contains no false records, misleading statements, or major omissions, and accept liabilities for the truthfulness, accuracy and completeness of this report.

Access to the Report

This report is published in both printed and electronic formats, and can be obtained through---
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No.68 Qixin Road, Baiyun District, Guangzhou
China Southern Airlines's official Website: www.csair.com
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Letter from the Chairman



Year 2019 marked the 70th Anniversary of the founding of the People's Republic of China, the 70th Anniversary of the founding of New China Civil Aviation and the 70th anniversary of the "two airlines uprising" ... all in all a crucial year for securing a decisive victory in building a moderately prosperous society in all respects. Year 2020 is likewise bound to see even greater aviation milestones. Known as the world's "new seven wonders" - Beijing Daxing International Airport (BDIA) - the largest commercial airport in the world, is officially open for full flight operations. General Secretary Xi Jinping delivered a

distinct and positive message in the strongest possible terms at the Opening Ceremony of Beijing Daxing International Airport, saying, "Chinese people can definitely make it and China can definitely make it!"

As one of the three major mainstay state-owned aviation enterprises, during Year 2019, China Southern Airlines passionately responded to an appeal by the state and unswervingly stationed itself within Beijing Daxing International Airport. It is expected that by the end of March 2021, China Southern and its holding subsidiaries will manage upwards of 43% of the traffic volume at BDIA and become

the airport's largest main base air carrier which in turn will swiftly propel Beijing Daxing International Airport to become the world's leading First Class international aviation hub. During the past year, we have put forth our utmost efforts in the construction of the Guangdong-Hong Kong-Macau Greater Bay Area. To date, China Southern has become the first large state-owned enterprise group to successfully achieve equity diversification through the central and local cooperation mode of operations. Our airline will continuously expand the "Road to Guangzhou" and promote the coordinated development of the triad of Guangzhou, Shenzhen and Zhuhai international airports and make meaningful contributions to the construction of the world-class Bay Area. During this past year, China Southern has withdrawn from SkyTeam and are moving forward in a new direction with impetus on expanded international cooperation with our vibrant airline partners. Going through the dual political tests of the Central Inspection and Supervision Group of the CPC Central Committee and thematic education, we have steadily improved our main operating performance. The total turnover of transport and passenger transport reached 32.625 billion tons/km and 152 million person-times respectively, both hitting record highs. In Brand Finance Magazine's 2019 list of the world's 50 most valuable airline brands, China Southern Airlines was ranked sixth with a brand value of more than \$4.46 billion (USD), the highest among all Chinese airlines.

Flight Safety is Forever Job No.1.

Security is always the lifeline of development, the highest politics, the greatest benefit and the best service. We have fully implemented General Secretary Xi Jinping's important instructions, carried out 26 key measures adopted by the Civil Aviation Administration of China (CAAC) as well as 34 measures adopted by China Southern while innovating the "red paper" + "blue paper" system. Throughout the year, more than 2.951 million hours of safe transportation were completed and the cumulative safety flight reached 26.386 million hours. Our flight safety performance continues to lead all airlines in China and throughout the international community.

Move Customers with Love.

Of paramount importance is the travel experience of our customers as we strive to serve each and every traveler with warmth and true affection. We have put forward the service orientation of "affinity and refinement" and carried out special actions to improve customer service quality by focusing on key issues of passenger concern such as our connecting hub services at Baiyun International Airport Guangzhou as well as flight delay and luggage service. Simply said ... we are operating our airline more efficiently and with less complaints than ever before! The flight normality rate of China Southern was 83.32%, ranked first among the three major domestic airlines ... as China Southern Airlines was awarded the Best Chinese Airline of the Year 2019 by Business Travel Magazine and recipient of the prestigious Golden Phoenix Award.

Protect the Earth. Climate change is a global challenge. China Southern

is tackling climate change as its unshakable responsibility and has taken green development as one of its core principles. Through technological optimization, management improvement and big data analysis, we continue to improve jet fuel use and reduce greenhouse gas emissions. For example ... the "aviation fuel e-cloud" real-time big data sharing platform independently developed by China Southern, is expected to help reduce aviation fuel waste by approximately 1,500 tons per annum. China Southern senior managers were invited by the International Air Transport Association (IATA) to participate in the formulation of global aviation fuel data standards and present Chinese solutions for the formulation of global aviation data standards. China Southern is a global leader in the use of bio-jet oil for intercontinental flight and promoted the world's first 10,000 ton carbon quota swap trade between the European Union and Guangdong Province. The annual ton/km fuel consumption of China Southern Airlines decreased a significant 3.95% year on year.

Sharing the Fruits of Development.

Our staff and senior managers are one of China Southern's most precious resources. This year, with the goal of "ranks can go up and down, income can increase or decrease, employees can move in and out", we carried out much needed reform of the compensation system to stimulate the vitality of employees and collectively share in the benefits of reform and development. We established a unified training program and top-level design of training to help cadres and employees grow and develop themselves. China Southern cares for the work/life balance of all employees

and provide mutual aid assistance to special groups such as sick employees and underprivileged families.

Give Back to the Society.

The success of China Southern Airlines comes from our support of all sectors of society and it is our important responsibility to give back with equal passion. Last year, in accordance with the national requirement of "winning the tough battle against poverty", we carried out poverty alleviation work in Pishan and Moyu counties of Xinjiang by investing RMB 35.93 million in assistance funds and sending 77 patriotic cadres to remote villages to help local people pull themselves out of poverty. At the end of Year 2019, we opened 102 new air routes along those of the "Belt and Road Initiative" to help countries along the BRI achieve greater connectivity which in turn led to exceptional new trade opportunities and cultural connectivity. Concurrently, we have actively carried out special flights and volunteer activities to give back to the society.

At the beginning of Year 2020, the outbreak of the new coronary pneumonia brought severe trials to our airline. Under the unified command of the CPC Central Committee, people from all walks of life have gathered to form a united and victorious force to fight against this insidious epidemic. China Southern has undertaken as its Corporate Social Responsibility mission to immediately respond and devote itself to winning the war of epidemic prevention and management. From January 24 to February 29, 2020, China Southern completed 94 charter rescue flights, transporting 9,516 medical personnel and more than 495.28

tons of rescue supplies to the hardest hit areas of Hubei Province. China Southern will take all effective measures and mobilize all forces to prevent the spread of this epidemic through continual and immaculate cleaning of all aircraft. Although the epidemic has had a great impact on China Southern's flight operation, we strongly believe that China's economic development prospects will be even brighter when this epidemic has been eliminated.

In the face of this new campaign, China Southern, as always, will remain true to its original aspiration. With diligence, perseverance and courage, we will continue to promote 100% safe flight operations ... day or night ... rain or shine. China Southern will unswervingly serve as a world aviation leader and facilitator of social progress as we build our airline into a world-class air transport enterprise with Chinese characteristics - making passionate contributions for the great rejuvenation of the Chinese nation and the Chinese dream.

Wang changshun
Chairman of China Southern
Airlines Company Limited

About Us

Overview

Company Profile

China Southern was founded in Year 1995 and six years later was listed on both the Hong Kong and the New York Stock Exchanges. This was followed by a public listing on the Shanghai Stock Exchange in Year 2003. China Southern is the largest airline company in the People's Republic of China based on fleet size, number of routes and annual passenger carried. China Southern owns 8 holding public air transportation subsidiaries including Xiamen Airlines, Guizhou Airlines and Xiongan Airline; 16 branches including Xinjiang, Beijing and North; 23 domestic sales offices in nearly every major Chinese city including Hangzhou and Qingdao as well as 55 international sales offices located in major metropolitan destinations such as Sydney, London, Singapore, Dubai and New York City.

Working closely with partners, the network extends to more destinations around the world. China Southern continues to open new and encrypted route network, build Guangzhou headquarters hub, and will gradually build Beijing hub into an international and domestic aviation hub, forming a "north-south echo, wing to wing" dual hub pattern with Guangzhou hub. By the end of 2019, China Southern had operated 939 routes, including 113 new domestic routes and 23 new international and regional routes.



China Southern has more than **3,000** flights to **44** countries and regions and **243** destinations across the globe, with more than **500,000** seats



Achievements

Fleet size: No.1 in Asia and No.3 in the world

The largest first-class pilot training base (Zhuhai) in Asia

The engine maintenance base with the largest investment and the highest maintenance level in China. (cooperating with German MTU)

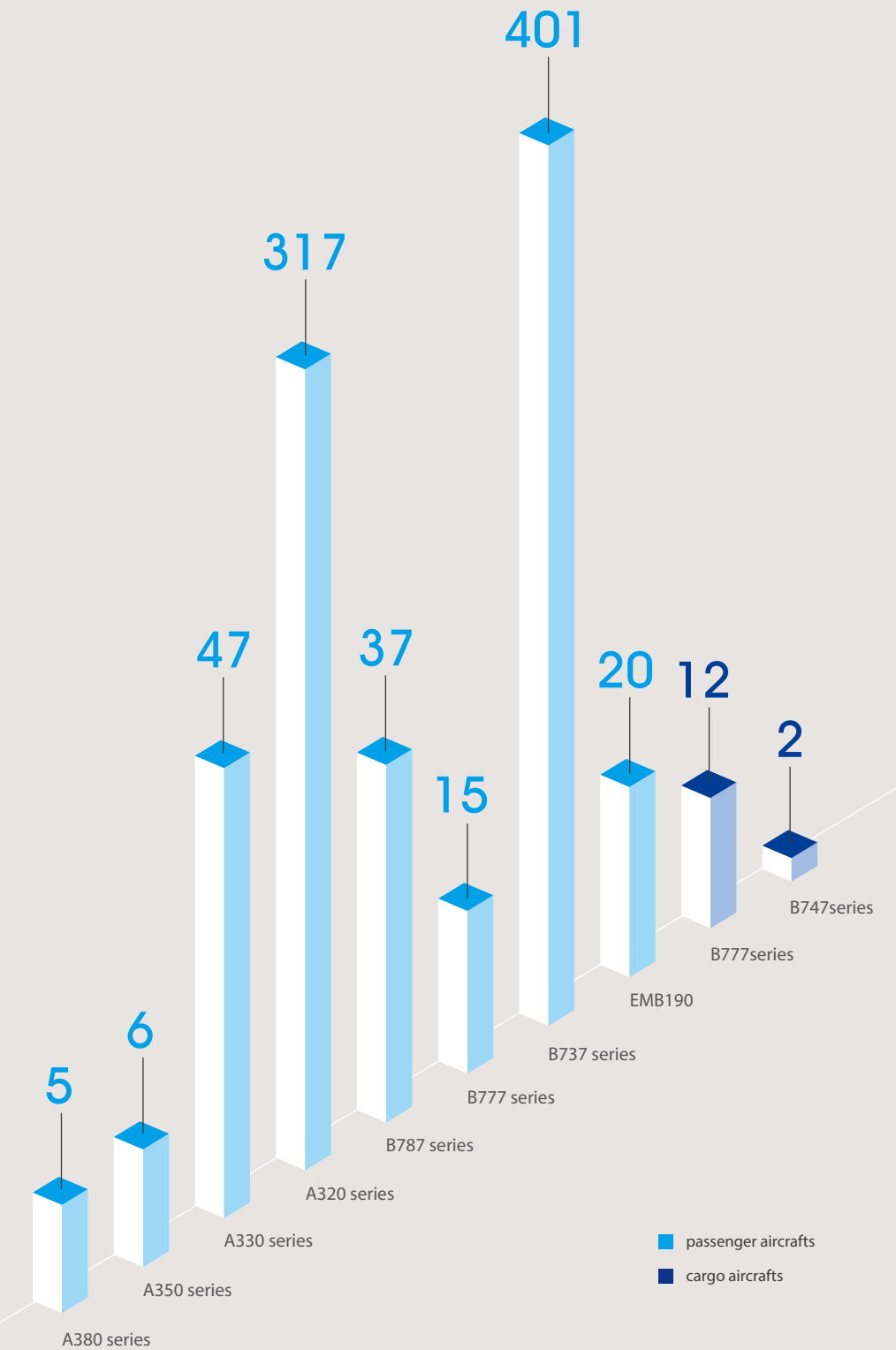
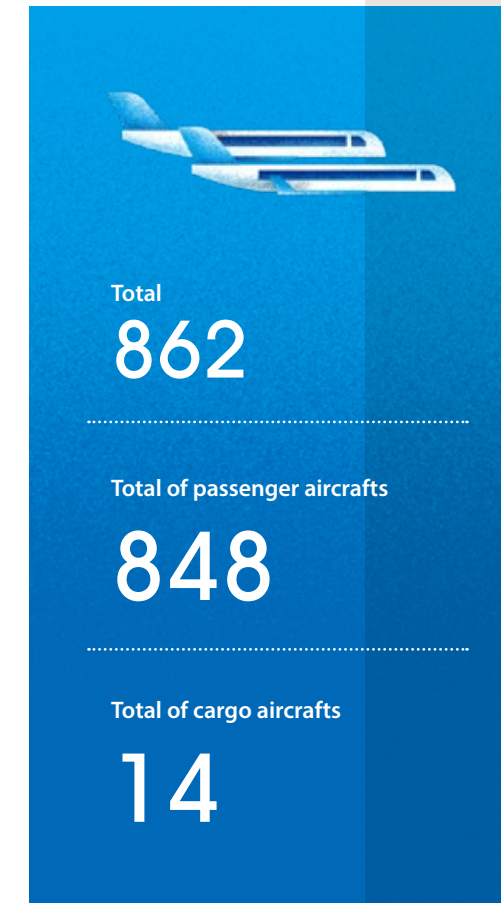
Passenger traffic ranked first among Chinese airlines for 41 consecutive years

Received the *Two-Star Flight Safety Diamond Award* by the Civil Aviation Administration of China (CAAC), as the leading Chinese carrier to maintain the highest safety records in China.

Ranked sixth in the 2019 World's Most Valuable Airline Brands released by Brand Finance. No.1 among Chinese airlines.

Note :source from IATA

Fleet Structure



Corporate Culture

China Southern issued the *Convention on Sunshine China Southern*, which serves as an action program and ideological guideline commonly created, followed and implemented by all people in China Southern in the new era.

Core Concepts

Sunshine China Southern Cultural character:

Application Concepts

Code of Conduct

Mission: Connecting the World to Create a Better Life

Vision: Building a World-class Airlines with Global Competitiveness

Spirit: Diligent, Practical, Inclusive, Innovative

Core Values: Customer, Staff, Advantage, Innovation, Return

Safety concept

happy work to realize safety and happiness

Service concept

sincere services to move customers and ourselves

Marketing concept

value creation for customers and the Company

Development concept

standardization, integration, intellectualization and globalization

Talent concept

people-oriented, all-inclusive and win-win growth

Code of conduct for the management

reasonable, compliant and responsible

Code of conduct for leader and employees

prudent, practical, careful, precise and incorruptible

Strategy and Governance

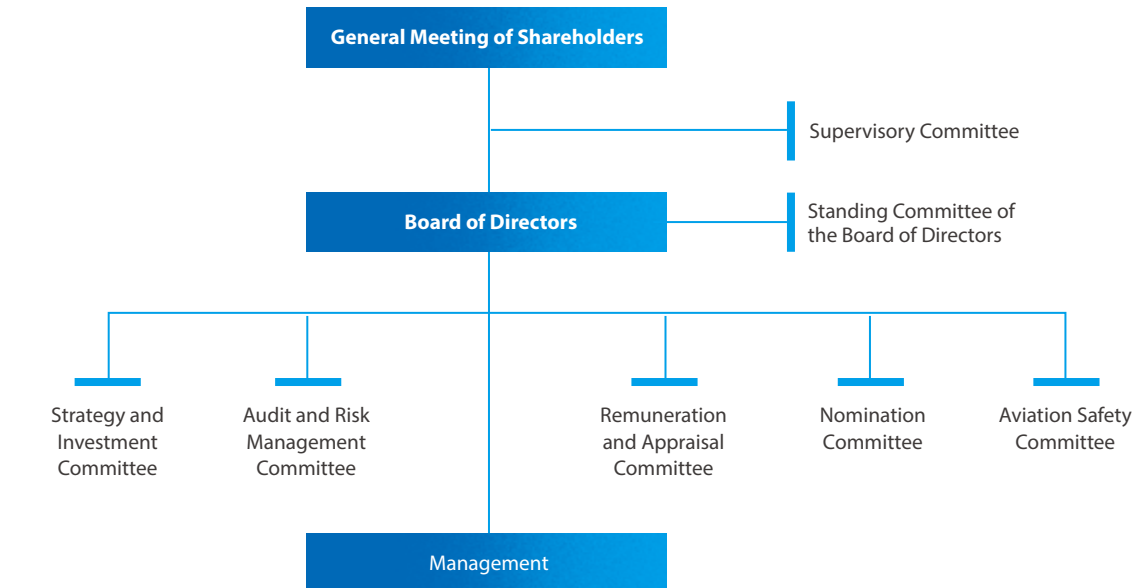
Development Strategy

China Southern had formulated a "Three Two Four Five Three" strategic framework to build a world-class airline. In 2019, China Southern formulated the Development Program for High-quality World-class Air Transport Enterprises, completed the rolling planning for 2019-2021, and ensured the orderly progress of the Company along the development strategy.

STRATEGIC OBJECTIVES	STRATEGIC LAYOUT	STRATEGIC ORIENTATION	GOVERNANCE SYSTEM	SUPPORT CAPACITY
first-class safety quality, first-class profitability, first-class brand image	construction of Guangzhou-Beijing double hub flight operation	standardization, integration, intelligence, and globalization	perfection of the party's leadership, governance structure, strategic management, market mechanism and corporate culture	condition guarantee, resource guarantee, environment guarantee

Corporate Governance

Since its establishment, China Southern has been strictly abiding by the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Governance Standards of Listed Companies*, *Code on Corporate Governance*, Appendix 14 to *Listing Rules for Stock Exchange of Hong Kong limited*, formulated corporate governance documents such as the *Articles of Association*, *Rules of Procedure of Shareholders' General Meetings*, *Rules of Procedure of Board of Directors and Rules of Board of Supervisors*, and established appropriate internal control systems to standardized corporate governance. Please refer to the annual report of China Southern for details of corporate governance structure and corporate governance mechanism.



Information Disclosure and Investor Relation Management

China Southern strictly comply with the regulatory requirements of listed companies to carry out information disclosure, to ensure the transparency of operations. In 2019, China Southern issued more than 350 announcements in Chinese and English, hosted or participated in more than 90 performance conferences, road shows and telephone conferences, communicated deeply with more than 1,000 investors, continuously improved online and offline platforms, actively communicated with shareholders, and ensured investors' right to know. Due to good corporate governance and listing compliance performance, China Southern has been awarded the A-level evaluation of information disclosure by Shanghai Stock Exchange for 6 consecutive years.



China Southern has been awarded the **A-level** evaluation of information disclosure by Shanghai Stock Exchange for 6 consecutive years.



Annual major business decisions, rules and regulations and review of economic contracts

100%

Compliance Management

In accordance with the compliance management requirements of SASAC, China Southern formulated and issued the Compliance Management Work Plan, established compliance management system, and promoted the integration of manual management and compliance management to ensure compliance operations. At the same time, China Southern has compiled targeted compliance guidelines for related party transactions, data security and privacy protection, labor and employment, anti-monopoly and other key areas to ensure the compliance and implementation of the company's operation and globalization strategy. In addition, the Company's legal risk management is involved in the whole process of key reform projects, and the annual review of major operation decisions, rules and regulations and economic contracts covers the whole process of legal review of major projects.

Internal Audits

China Southern Airlines gave full play to the role of internal audit in the company's supervision system, continued to deepen the reform of audit functions, focused on key areas and important risks, and carried out special audits on the construction of the China Southern base in Beijing Daxing International Airport, poverty alleviation projects and funds, inventory and accounts receivable, the payment of arrears to private enterprises and the implementation of wages for migrant workers; Focused on important positions and conduct audits on economic responsibilities of leading cadres, continuously improved the internal control system, built an internal control system that places equal emphasis on financial data risk and integrity risk prevention and control, especially in the areas of capital, marketing, procurement and capital construction. The implementation of internal audit promoted the development of the central work, comprehensive reforms, the normal operation of power, anti-corruption and integrity, the implementation of corporate strategies, prevented and resolved major risks, and promoted high-quality development of enterprises. A total of 42 audit projects were carried out throughout the year, and 680 management suggestions were put forward.

Anti-Corruption

China Southern always maintained a high-pressure situation of disciplinary violations, reported and punished employees for violations, and has closed 36 cases of disciplinary violations throughout the year, strengthening the deterrence of "Dare not to Corrupt"; tightening the cage of the system, formulated and promulgated the "Provisions on Intervention of Records and Reports on Major Events Intervened by Leading Cadres", and improved the long-term mechanism of "not Afford to Corrupt"; Promoted the regularization and institutionalization of disciplinary education, increased the intensity of warning education,

strengthened the concept of discipline of cadres and employees, and consciously built a "not Want to Corrupt" ideological defense line.

In terms of risk prevention and control of supplier integrity, China Southern has set up a procurement management department to implement unified and centralized procurement of the company, revised the "Management Measures for Procurement Evaluating Personal", and minimized the risk of bid evaluation. The *Regulations on Prohibiting Transaction with Enterprises Established by Relatives of Leading Cadres* was promulgated to prohibit transaction with enterprises established by relatives of leading

cadres. Suppliers shall sign "Letter of Tendering" and "Commitment Letter of Bidding integrity", and be required not to engage in transfer of benefits, bribery, embezzlement and other behaviors involving improper interests.

In addition, China Southern has set up a unified reporting channel and implemented a hierarchical responsibility system for complaint reporting. Discipline inspection and supervision agencies at all levels are responsible for receiving complaint concerning reports and problem clues on employees' violations of discipline, and keep the information on reporters strictly confidential.

Intellectual Property Rights

China Southern attaches great importance to the protection of brand equity. According to the *Trademark Law of the People's Republic of China*, the *Patent Law of the People's Republic of China* and other laws and regulations, the management of trademarks, patents and software copyrights were standardized through the series of regulations, such as "Intellectual Property Rights Management Manual", "Trademark Management Booklet", "Patent Management Booklet", "Commercial Secret Management Booklet" and other intellectual property rights protection system. At the same time, China Southern has established a complete set of trademark management system to clarify the specific operation methods and procedures of trademark registration, use, management and protection, and has set up full-time and part-time trademark management personnel to ensure that the company's brand rights and interests are not infringed.



Party Building

Guided by Xi Jinping thought on socialism with Chinese characteristics for a new era, China Southern has been working hard to strengthen party building, promote the in-depth integration of party building work with production and operation, and gather the powerful forces of entrepreneurship for the company's high-quality development.

We carried out the education on the theme of "remain true to our original aspiration and keep our mission firmly in mind" in two batches in a solid and orderly manner, promoting rectification of inspections and theme education, highlighting on the focus issues of passengers and employees.



We have cooperated with the team of disciplinary inspectors, made all-out efforts to rectify the problems clarified by Central Inspection and Supervision Group, and continued to promote the establishment of rectification programs to address both symptoms and root causes. The overall rectification rate of 130 rectification measures exceeded 98%, and more than 50 policies were established and improved.

China Southern's thematic education is orderly organized and led effectively. The study and discussion is conducted in-depth. The investigation and research are practical, and the effect of rectification is obvious.

—Proposed by leader of the Twelfth Central Inspection and Supervision Group of the CPC Central Committee during his investigation and guidance tour in China Southern



Deepening Reform

Reform is the source of vitality for development and progress. China Southern has always persisted in the reform, established the office of leading group for deepening reform, intensified the reform, actively carried out the "double hundred action", compensation system, centralized procurement, headquarters functionalization and other reform actions, constantly stimulated the vitality of the enterprise and accelerated the construction of a world-class enterprise.

Steadily promoting the "double hundred actions". In accordance with SASAC relevant requirements of State Council, China Southern Airlines Cargo Logistics (Guangzhou) Co., Ltd. and China Southern General Aviation Co., LTD., the two enterprises included in the "double hundred actions", have continuously improved the mixed-ownership reform plan, steadily promoted the reform of optimizing the modern corporate governance system, market-oriented operation mechanism, incentive and restraint mechanism, etc.

Deepening the market-oriented reform. China Southern launched a special campaign to make the headquarters more functionalized, and identified 26 rectification measures to enhance its internal vitality, market competitiveness and development driving force. It continued to promote the reform of the regional marketing system, establish a European marketing center, and improve the market response capacity.

CASE Opening a new path for international cooperation

In order to adapt to international cooperation and market changes, equity investment, joint venture cooperation and inter-alliance cooperation have become a new trend in the development of international aviation market. In order to make a breakthrough in the international market, China Southern decided to withdraw from SKYTEAM after careful study, enter the international stage as an independent identity, actively expand the global "circle of friends", and strive to blaze a new path of international development.

Withdrawing from the alliance, cooperation continues. Work closely with members of the SkyTeam Alliance such as KLM, Delta Air Lines, and Air France after withdrawal.



Accepting and developing new partners. Code sharing and frequent flyer cooperation with American Airlines; code sharing cooperation with Emirates; code sharing cooperation with Finnair for the first time to fill gaps in Nordic network routes; Established joint venture partnership with British Airways; Qatar Airways has become a shareholder of China Southern, carrying out all-round and multi-level cooperation to actively develop new partners.

Reserving passengers' rights. Innovatively launched the "China Southern CZ Priority" elite member service brand, carrying the original "Tianhe Youxiang SkyPriority" service rights, to ensure that after the official withdrawal from membership in 2020, members' mileage accumulation and redemption functions, elite member privileges service rights continue to be retained, in other words, passengers rights and interests are not affected.

Awards and Honors



Ranked 6th in Top 50 Global Brand Value of the 2019 Aviation Industry, Ranked first in Chinese airlines.
Brand Finance

Best Airline Award
The 5th CAPSE (civil aviation passenger service evaluation) aviation service award presentation ceremony

Ranked 14th World's Best Airline
Skytrax

2019 Best First Class Lounge in China
Skytrax

The first airline in Asia to obtain a full process tracking compliance certification
International Air Transport Association

The Best Airline
Civil Aviation resources Network

Asian Quality Award
Asian Quality Network

2019 Chinese Brand Powerful Model 100 Brands
"2019 Chinese Brand Powerful Grand Ceremony" event hosted by China Media Group

2019 Best Airline in China
Business Travel magazine Asia Quality Network

Awarded the highest ranking "good" in the 2018 assessment on the effectiveness of targeted poverty alleviation work by the central agencies
SASAC leading group for poverty alleviation and development

Grade A in information disclosure
Shanghai Stock Exchange

Best Ticketing Service Award
The 5th CAPSE (civil aviation passenger service evaluation) aviation service award presentation ceremony

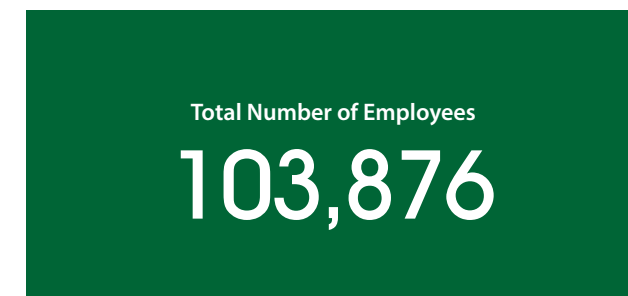
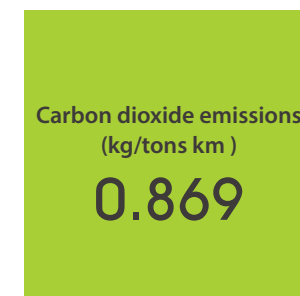
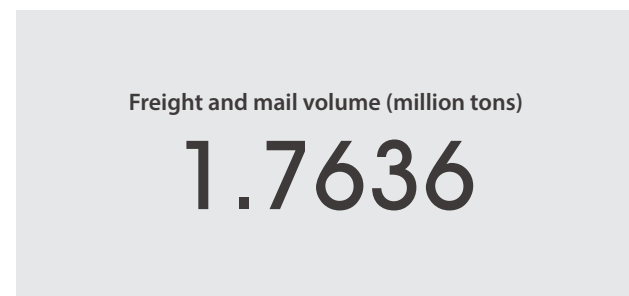
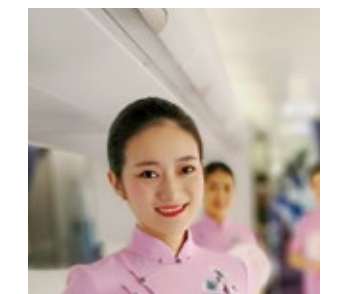
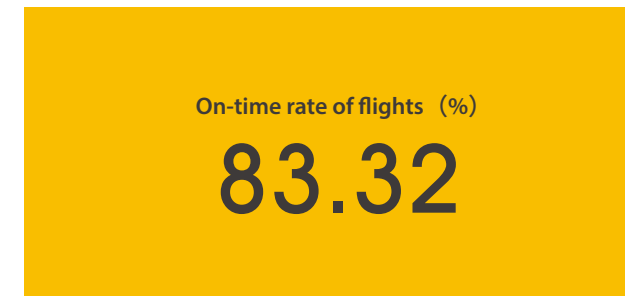
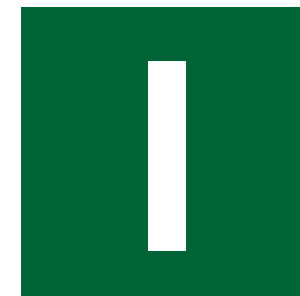
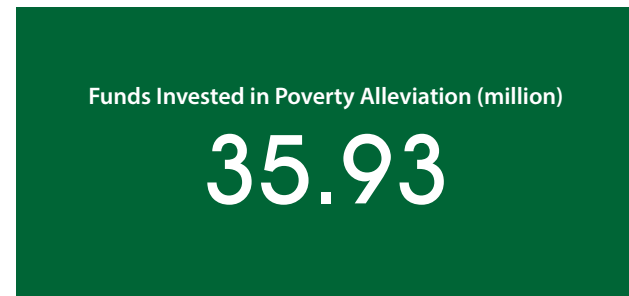
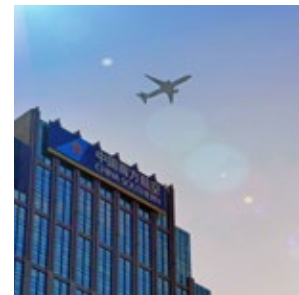
Progress in excellence in inflight entertainment
The 5th CAPSE (civil aviation passenger service evaluation) aviation service award presentation ceremony

No. 1 in the list of 'Central Enterprises' Overseas Image Communication Index
Research Report on Central Enterprise Overseas Image Dissemination (2019)" released by Overseas Data Research Center

No. 1 Overseas Social Media for Central Enterprises in Aviation
Research Report on Central Enterprise Overseas Image Dissemination (2019) released by Overseas Data Research Center

Poverty Alleviation Cases Selected in Blue Paper on Central Corporate Social Responsibility (2019)
Joint research group of State-owned Assets Supervision and Administration Commission of the State Council and Chinese Academy of Social Sciences

2019 Key Performance



Construction of Daxing Airport Facilitates, Rapid Development of China Southern

On September 25, 2019, Beijing Daxing International Airport was officially opened. Daxing International Airport is the century project that General Secretary Xi Jinping personally decides, personally promotes, and personally announces the launch of flight operation. It is a new source of power for national development and a comprehensive transportation hub in the Beijing-Tianjin-Hebei region that supports the construction of Xiong'an New District. China Southern serves the national strategy with the most resolute and positive attitude. As the main base airline, China Southern will fully promote Beijing Daxing International Airport to become an international and domestic composite aviation hub, and create a future-oriented green, intelligent, new experience of technology travel that opens the era of China Southern's Guangzhou-Beijing "dual hub".



National strategy, a new driving force for national development

Daxing International Airport has set a number of world records and is hailed as the "New Seven Wonders". In addition to the breathtaking buildings, Daxing Airport's unique location advantage, airspace structure and functional design make it a "new country gate" and "a new source of power for national development."

Location advantage, connecting Beijing, Tianjin and Hebei

It is located in the middle of Beijing-Tianjin-Hebei, 46 kilometers from Tiananmen in a straight line, 54 kilometers from the sub-center of Beijing city, and 65 kilometers from Xiong'an New District. As a comprehensive transportation hub in Beijing-Tianjin-Hebei, it will greatly promote the development of Tianjin and Hebei.

Airspace advantages, shorter uptime

The unique airspace structure makes it unnecessary for China Southern flights at Daxing Airport to pass through the Beijing area and bypass, and the air flight time is shorter; the "three vertical and one horizontal" omnidirectional configuration runway designed according to the characteristics of air operations can reduce more ground taxi time.

More than 30 minutes

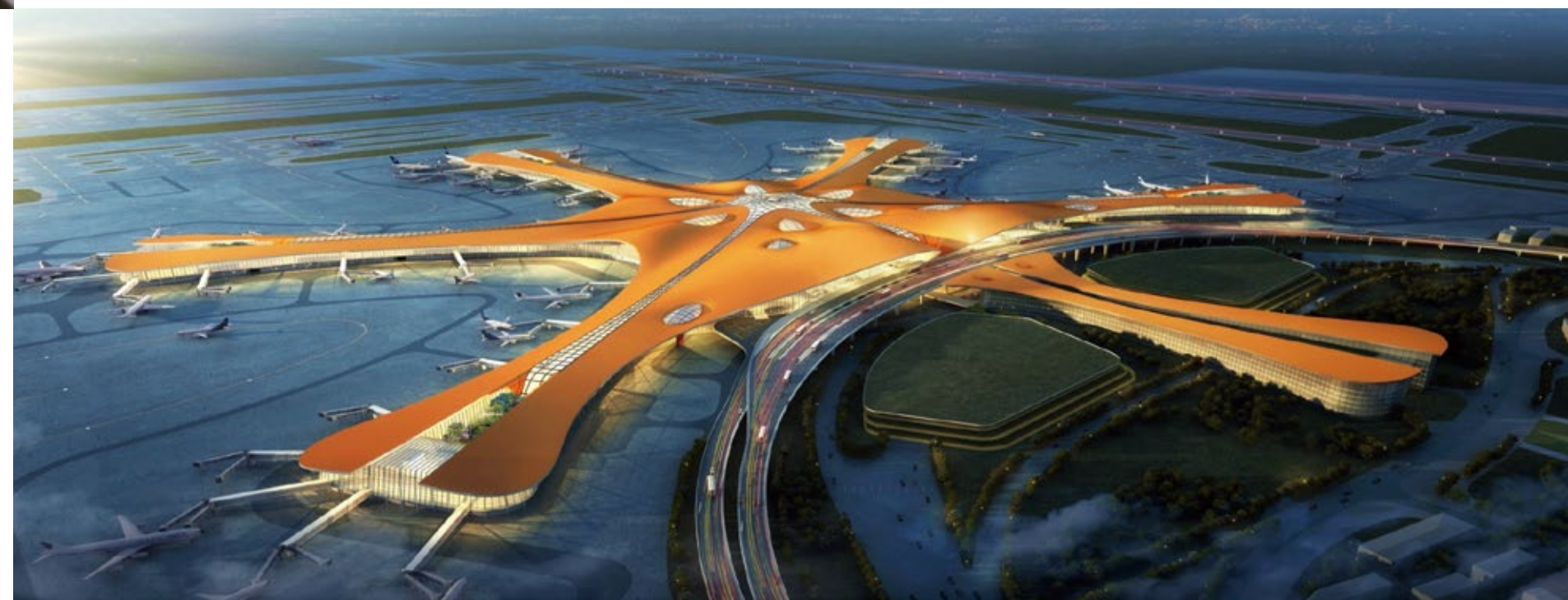
China Southern flights, to and from Daxing International Airport in the direction of South China, Southwest and East China, save taxi time and air flight time more than 30 minutes on average compared with the flights of Capital Airport.

Transportation advantage, convenient pit stop transfer

In order to make passenger travel more convenient, Daxing Airport has constructed an integrated transportation backbone network of "five verticals and two horizontals". There are 16 tracks passing directly below the terminal building, which can realize three-dimensional transfers of aircraft, high-speed rail, and expressways. The radial design of the center of the six finger corridors of the airport allows passengers to board a plane for up to 8 minutes after walking from Terminal Center to the farthest boarding point after security check.

20 minutes

For Daxing Airport international flight, it only takes 20 minutes from the terminal to boarding, about 40 minutes less than T3 of Beijing Capital Airport.



Focus on 2019

Construction of Daxing Airport Facilitates, Rapid Development of China Southern

A pioneer and the largest main base company

China Southern actively responds to the national strategy to take a lead to station at Daxing International Airport. It is the main base airline with the largest resource share, the widest flight network coverage, and the largest number of passenger carriers at Daxing Airport. It has also built the largest hangar in Asia, the largest operation control center in Asia, and

the largest aviation food production base in Asia, helping Daxing Airport to become an international first-class and world-leading international aviation hub. The construction of Daxing Airport provides favorable conditions and resources for China Southern to build a Beijing hub, and a strategic opportunity to achieve high-quality development of the company.

As of the end of March 2021, China Southern Airlines and its holding subsidiaries have undertaken about **43%** of business traffic volume at Daxing Airport

Completed **13** inaugural flights and the first batch of transit routes

More than **900** departures and arrivals at Daxing Airport in 2025

Asia's largest hangar

With a total area of about 40,000 square meters, it can accommodate two A380, three B777, and three narrow-body aircrafts at the same time. The maintenance is more scientific, efficient and intensive.

Asia's largest operations control center

Covering an area of more than 3,000 square meters, it is the super-brain of China Southern at Daxing Airport, the collaborative office of operation control, hub ground control and maintenance control, that is the first among domestic airlines.



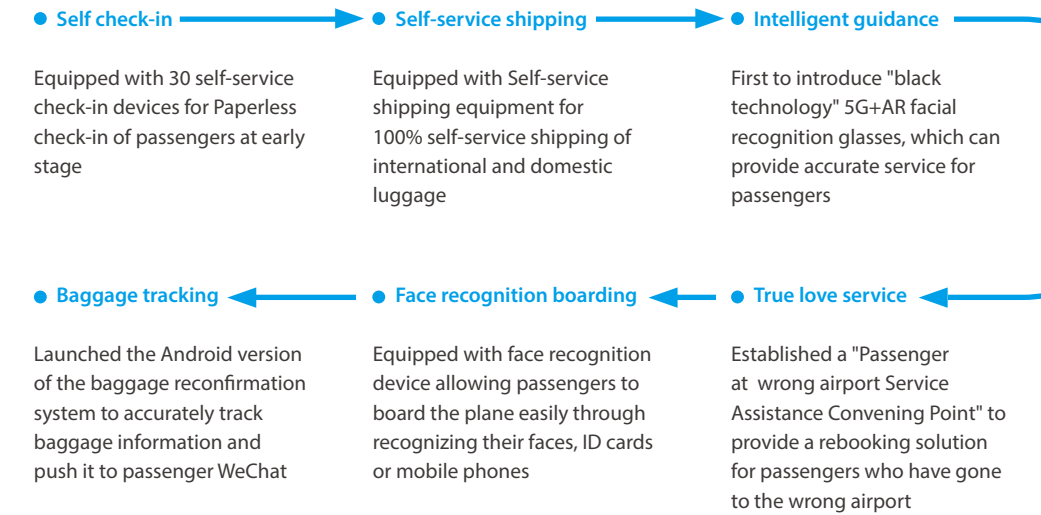
Asia's largest aviation food production base

It covers an area of 53,000 square meters, with an average daily capacity of 100,000 units and a peak daily capacity of 180,000 units, which can meet the capacity demand in the next five years or even longer term.

Intelligent and exclusive enjoyment bringing new travel experience for passengers

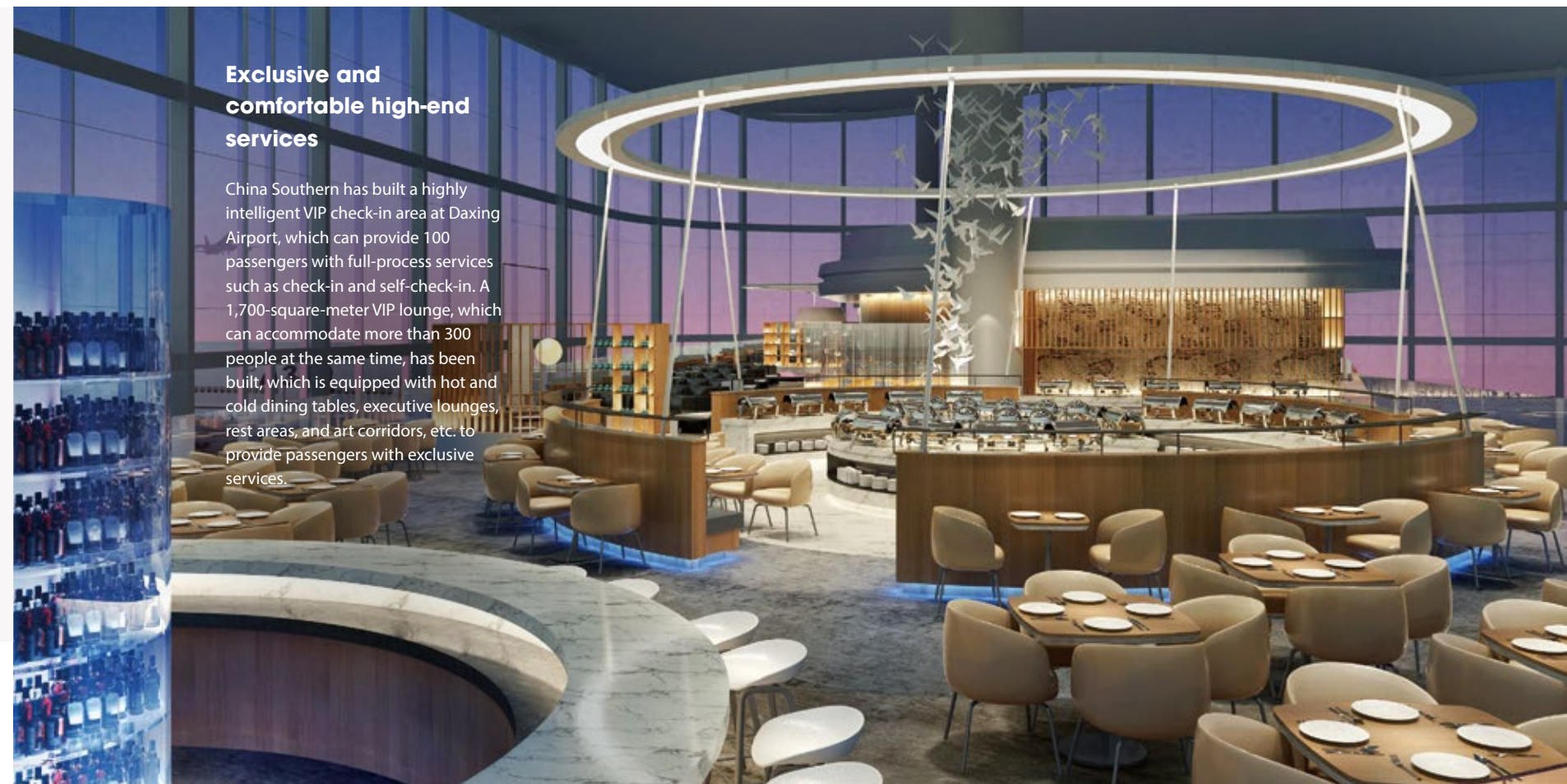
China Southern is committed to creating a smart, convenient, comfortable and exclusive new travel experience for passengers. It is equipped with advanced technology, user-friendly and integrated aesthetic design service facilities to allow passengers to enjoy the quality of "full process, zero intervention, paperless" services, bringing new travel experiences for travelers.

"Full Process, Zero Intervention, Paperless" Services



Exclusive and comfortable high-end services

China Southern has built a highly intelligent VIP check-in area at Daxing Airport, which can provide 100 passengers with full-process services such as check-in and self-check-in. A 1,700-square-meter VIP lounge, which can accommodate more than 300 people at the same time, has been built, which is equipped with hot and cold dining tables, executive lounges, rest areas, and art corridors, etc. to provide passengers with exclusive services.





Full Service Takeoff in the Bay Area

The construction of the Guangdong-Hong Kong-Macao Greater Bay Area is a major decision for the country to comprehensively deepen reform and expand opening up under the new situation. China Southern actively responds to the central government's call, grasps the major opportunities in the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, comprehensively deepens reforms, increases investment in transportation capacity, innovates products and services, fully builds the Guangzhou international aviation hub, and continues to expand Shenzhen, Zhuhai, Macao and other urban route networks, provide world-class aviation upstream and downstream solutions for the construction of world-class Bay Area, and contribute to the economic development of the Bay Area.

Expanding the air route network and promoting connectivity between the Bay Area and the rest of the world

The route to Guangzhou

In recent years, China Southern has continued to open and encrypt the Guangzhou route network, and has made every effort to build the "route to Guangzhou" international aviation hub. It has formed two sectors of Europe and Oceania as its core, with Southeast Asia, South Asia, and East Asia as its hinterland. The route

network layout in Africa has helped Guangzhou form a "4-hour air traffic circle" with major cities in China and Southeast Asia, and a "12-hour air traffic circle" with major cities in the world. Guangzhou hub has become the most important gateway hub between mainland China and Oceania and Southeast Asia.



Shenzhen routes

International long-distance routes in Shenzhen such as Melbourne, Moscow, Sydney, and Dubai have been successively opened and direct flights to Bangkok, Jakarta, Bali, Hanoi, Phuket and other Southeast Asian routes have been improved. The expand of Shenzhen international routes have been speed up to serve the construction of Shenzhen's leading demonstration area.

Macao routes

Plan the layout of the Macau market, add Wuhan-Macau, Changsha-Macau and Chongqing-Macau routes to the winter and spring routes, and fully support Macau's development.

Zhuhai routes

The Zhuhai route network is optimized to reach major domestic cities including Beijing, Shanghai, and Hangzhou. The route network effectively covers provincial capital hub cities and tourist hotspot cities.

Hong Kong routes

The Company Operates 5 routes including Hong Kong-Beijing, Hong Kong-Wuhan, Hong Kong-Shenyang, Hong Kong-Yiwu, Hong Kong-Meizhou to support the development of Hong Kong.

核心价值观
CHINA SOUTHERN CORE VALUES

顾客至上 尊重人才 追求卓越
持续创新 爱心回报
CUSTOMER STAFF ADVANTAGE
INNOVATION RETURN

中国南方航空
CHINA SOUTHERN



Full Service Takeoff in the Bay Area

Pioneering central-regional cooperation to accelerate integration of aviation resources in the Bay Area

In order to further accelerate the integration of aviation resources in the Guangdong-Hong Kong-Macau Greater Bay Area, on July 20, 2019, China Southern Group announced the formal implementation of equity diversification reform. Guangdong Province, Guangzhou City, and Shenzhen, through their identified investment entities, paid cash to China Southern Group with Capital increase of 10 billion yuan and total capital increase of 30 billion yuan.

China Southern Group's equity diversification reform is the first innovation sample in the country that adopts a central-enterprise and local cooperation model to promote equity diversification reform at the central enterprise group level. This reform will significantly reduce the company's asset-liability ratio, provide a strong financial guarantee for the development of China Southern, and further improve the modern

enterprise system, and continue to move towards the goal of building a world-class air transport company. China Southern Airlines Group mainly used the capital increase for air transportation to serve the country's Belt and Road Initiative and Guangdong-Hong Kong-Macau Greater Bay Area strategy. It strongly supported the development of civil aviation in Guangzhou and Shenzhen. It also took into account investment in cities in Zhuhai, Huizhou, Jieyang, Zhanjiang, and Meizhou, comprehensively promoted the construction of a strong province of civil aviation in Guangdong. This reform has strengthened the deep cooperation between China Southern and two core airports of Guangzhou Baiyun and Shenzhen Baoan, as well as the integration efforts of China Southern in South China and the Guangdong-Hong Kong-Macau Greater Bay Area to better serve the construction of the Bay Area.

Innovative products and services making travel easier for Bay Area travelers

China Southern has launched an exclusive product and service system in the Greater Bay Area to provide passengers with greater choice of ticket purchases, better travel experiences, and more flexible membership rights, making travel more convenient for passengers.

Launching "Bay Area Pass" products. It includes the China Southern Express and free transfer products from other places. Passengers of China Southern Express departing from Guangzhou and Shenzhen can enjoy preferential changes to 10 routes including Beijing, Shanghai Hongqiao, Xi'an, Haikou, etc. by submitting an application no less than 4 hours before flight departure. Free transfers at different places provide passengers with more discounts for transfers from other places in Guangzhou, Shenzhen, Zhuhai, Hong Kong, and Macau to or from the same destination.

Launching ground-to-air combined transport services. Provide special door-to-door transfers for passengers from six cities of Shenzhen, Zhuhai, Jiangmen, Zhongshan, Dongguan, Foshan to Baiyun Airport, allowing travelers to travel without worry.



Targeted Poverty Alleviation-Jointly Building a Moderately Prosperous Society

Targeted poverty alleviation is an important guarantee for completing the building of a moderately prosperous society in all respects and realizing the "Chinese dream" of the great rejuvenation of the Chinese nation. China Southern has actively implemented the precise poverty alleviation requirements of the party central committee and the State Council, giving full play to the advantages of aviation business. Combined with the actual support, it has explored the development of a poverty alleviation model featuring "aviation guidance, industry-driven development, education, care and assistance, and sunshine poverty alleviation", and has taken concrete actions to help the local poor enter a moderately prosperous society in all respects with the Chinese people by 2020.

Set up "air poverty alleviation road of China Southern"

China Southern has made full use of its advantages in the market of civil aviation links to continuously improve the construction of "air poverty alleviation road", opening up air channels for poor areas to get rid of poverty and become rich.

Expand airline network

Three routes for poverty alleviation have been opened, namely, Hetian - Urumqi - Guangzhou, Hetian - Korla - Chengdu, and Kashgar - Hetian - Zhengzhou. Routes have been expanded among 19 provinces and cities, those providing aid to Xinjiang and those receiving aid, and the route network has been improved as well.

Optimize the development environment

China Southern has formulated preferential policies for air passenger and freight rates for poverty alleviation enterprises and products in designated poverty alleviation counties, attracted investment enterprises to enter, and optimized the local industry development environment.

Issue the Pearl Aid Xinjiang Card

China Southern has provided more than 60,000 aiding cadres with restroom services, extra baggage, priority boarding and other full-process services, helping them to aid Xinjiang with peace of mind and focus on poverty alleviation.



Promote the "Poverty Alleviation Products to the Blue Sky Project"

Considering the actual situation of regions receiving aid, China Southern develops industries to promote poverty alleviation in accordance with the poverty alleviation ideas of "markets lead industries, industry leads employment, employment promotes poverty alleviation, and poverty alleviation promotes stabilization".

Carry out industrial poverty alleviation

China Southern Assisted in introducing companies to build forest and fruit processing plants, labor insurance glove factories in Pishan County, clothing and footwear cooperatives in Moyu County. In Xinjiang, Liaoning, Jilin, Henan, Hubei, Hunan, Hainan, Guangxi, Guizhou, more than 10 industrial projects such as the cultivation of agaric, ginkgo, chrysanthemum, rice, navel orange, the breeding of chicken, goose, and sheep were carried out, to help the local poor out of poverty with long-term mechanisms.

Assist in attracting investment

Involved cadres have been sent to the developed region for investment promotion, introducing 6 enterprises for Pishan County with capital of 125 million yuan and 66 implemented projects for Moyu County with a capital of 220 million yuan.

Carry out poverty alleviation through consumption

China Southern Purchased 8.2 million yuan of agricultural products in Pishan County and Moyu County in 2019, helped to build and improve systems for online sales of agricultural products, e-commerce training, etc., promote and sell Xinjiang tourism resources and specialty products through platforms such as China Southern Aircraft Magazine, e-commerce platform, and employee mall. Agricultural products worth nearly 30 million yuan in Pishan County and Moyu County were sold.

Build "China Southern First-Class Pearl School"

China Southern attaches great importance to the development of education in poverty-stricken areas. Through the development of basic education, skills training, and support for cultural and sports undertakings. Focusing on intelligence development and ambition cultivation, China Southern continuously brings upward growth to the poor areas.

Improve local basic education level

For 15 consecutive years, China Southern has funded the construction of Pishan County's China Southern Pearl Primary School and Moyu County's China Southern Pearl Kindergarten. It plans to invest 58 million yuan in two years to build a new China Southern Pearl Primary School in Moyu County, of which 25 billion yuan was paid in 2019 to improve local basic education level.



Actively broaden visions

China Southern organized 22 outstanding teachers and 30 youths from designated counties to Guangzhou and Urumqi to conduct skills training camps and summer camps to improve teaching quality and enhance students' knowledge. It organized 20 youths from Altay region to carry out patriotic summer camps in Beijing to open up students' vision.

Support the cultural and sports undertakings

China Southern has supported the football team to go out to participate in the competition for 6 consecutive years, helping it to win the national championship many times. At the same time, in cooperation with the Ministry of Education, the National Youth Campus Football "Starry Sky" training camp was established in Moyu County to promote the development of youth football.



Targeted Poverty Alleviation-Jointly Building a Moderately Prosperous Society

Implement the "health poverty alleviation project of China Southern"



Support the "Emergency and Difficulty Relief" mission

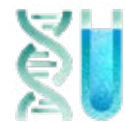
In 2019, we invested 2 million yuan to support Moyu County's "Emergency and Difficulty Relief" initiative, and donated a total of 6 million yuan to help more than 800 poor families with serious illness.

China Southern pays great attention to the groups who become poor due to illness and return to poverty due to illness, and helps improve the medical and health conditions of the poor by providing financial support and assisting in improving medical infrastructure.



Promote the implementation of medical insurance policies

China Southern promoted the implementation of the supplementary medical insurance policy for the deeply impoverished population in Moyu County, ensuring that 100% of the poor people who have registered in the program are insured, and guaranteed the full coverage of "diagnosis and treatment before payment" and "one-stop settlement services" for poor patients.



Improve medical and health conditions

The construction of 16 standardized township hospitals and 362 standardized administrative village clinics in Moyu County were completed to help improve medical infrastructure conditions.

Poverty Alleviation Footprint



[scan for more] the big world of the country: hand in hand, a poverty alleviation story of a beautiful flight attendant

In 2019, China Southern United Corporation actively responded to the country's call for precision poverty alleviation, extended its assistance footprint to a number of state-level poverty-stricken counties, and took practical actions to join hands with the poor to strive for prosperity.

Poverty Alleviation Sites of China Southern

- Pishan County, Moyu County, Xinjiang Uygur Autonomous Region
- Huaiji County, Guangdong Province
- Xingcheng city and Pulandian District, Liaoning Province
- Hunchun County and Dianjun District, Hubei Province
- Ledong Li Autonomous County, Hainan Province
- Fuchuan Yao Autonomous County, Guangxi Zhuang Autonomous Region
- Panzhou City, Guizhou Province
- Zhenping County and Sheqi County, Henan Province
- Taonan City, Jilin Province
- Xinning County, Hunan Province
- Xiushan Tujia and Miao Autonomous County, Chongqing



China Southern was awarded the highest ranking "good" in the 2018 assessment on the effectiveness of targeted poverty alleviation work by the central agencies

Poverty relief performance

Direct funding (RMB 10,000)

3,593

Poverty relief number of people from registered poor households (person)

3,045

Dispatched poverty alleviation officials on secondment

77

Poverty relief via industry development (Poverty Alleviation via Agriculture and Forestry)

Poverty alleviation projects launched

13

Industry funding for poverty relief (RMB10,000)

480

Poverty relief number of people from registered poor households (person)

3,045

Poverty relief via transfer employment

Funding in vocational skills training (RMB 10,000)

30

Training of grassroots cadres (person-times)

408

Vocational skill training (person)

16,440

Number of people from registered poor households who become employed with company's assistance

3,278

Poverty relief by education

Funding for subsidizing poor students (RMB 10,000)

80

Needy students given financial aid (person)

290

Investment amount of educational resources to improve poor areas (RMB 10,000)

2,570

Poverty relief via health support

Investment in medical and health service (RMB 10,000)

200

Other projects

Project number

8

Funding amount (RMB 10,000)

233

Mission of Fighting the Epidemic

At the beginning of 2020, a sudden battle to prevent and control new-type coronavirus infection in pneumonia started suddenly in China. The epidemic is ruthless whereas there is love on earth. After the epidemic attack, China Southern, as the central enterprise with high responsibility, responded to it at the fastest speed, making full use of aviation advantages, using all resources and strengths, racing against time, racing against the epidemic, and setting up the fastest channel for air war against epidemic through rescue charters, and devoted all its efforts to winning the battle against epidemic with all sectors of society.

From January 24 to February 29, 2020

China Southern has carried out **94** times of rescue charters

transporting **9,516** team members

495.28 tons of rescue supplies

China Southern Airlines donates **10** million yuan in cash to Hubei Province

Donate scarce medical supplies

The shortage of medical supplies in Hubei affects the heart of the world. China Southern took advantage of its overseas regional marketing center and sales department's territorial advantages, searched for sources of goods in various ways, purchased medical supplies in various ways, and opened green channels for procurement, customs clearance, and logistics to ensure the donated materials delivered to Hubei as soon as possible. On February 9, China Southern Airlines Group donated 10,000 sets of protective clothing and 10,000 surgical masks to Hubei Province through the State-owned Assets Supervision and Administration Commission of the State Council, and 20,000 medical masks to the Hubei Bureau of Civil Aviation.

Rescue charter flights to Hubei

Time is life. In order to ensure that medical personnel and medical supplies can go to the front line of the epidemic prevention as soon as possible, China Southern made every effort to provide emergency rescue support and urgently transported medical team members and supplies from Guangdong, Guangxi, Liaoning, Jilin, Chongqing, Heilongjiang, Guizhou, Xinjiang, Henan to Hubei and the front as soon as possible. At the same time, China Southern opened a green transportation channel for the transfer of aid materials for the epidemic, and provided free air transportation and priority to guarantee the domestic and overseas aid materials donated by the public.



Transport overseas compatriots home

In the case of the suspension of foreign airlines, China Southern took an active role in carrying out charter flights to overseas cities such as Phuket, Thailand, and received Chinese travelers to return to China. By Feb. 29, 2020, China Southern has transported 432 Hubei travelers.

Safeguard passenger life

China Southern always puts the safety and health of passengers first. After the epidemic broke out, China Southern issued the policy of refund and changes as soon as possible in accordance with the requirements of the Civil Aviation Administration and other departments. It issued a total of 4 external announcements and 6 internal operating guidelines to quickly process ticket refunds and changes. At the same time, according to the requirements of the Civil Aviation Administration, the on-board meal supply standard was adjusted to effectively reduce the close contact of personnel, and the aircraft cabin was fully disinfected to ensure that the cabin was clean enough to block the spread of the epidemic in the cabin to the greatest extent.

Special rights tribute to medical workers

In order to pay tribute to the front-line medical workers, China Southern launched the exclusive service of "Honorary Medical Card" for medical workers. In addition to providing regular membership benefits for medical workers who are new members of the Pearl club, there are also three major benefits such as bonus miles, exclusive coupons, and benefits for up to 7 immediate relatives. The actions aim at expressing our great gratitude to medical staff for their efforts.

Mission of Fighting the Epidemic

on New Year's Eve, rushing to Wuhan for rescue

On Jan. 24, 2020, when people are immersed in the festival atmosphere, Luo Haizhong, Manager of the Operation Command of the Hubei Branch of China Southern, received an urgent notice: China Southern will fly a rescue charter flight, carrying medical personnel from Guangzhou to Wuhan for assistance. This is the first medical support charter mission performed by China Southern and one of the first medical support flights at Wuhan Tianhe Airport. Luo Haizhong immediately released the notice. In less than 40 minutes, all the staff on duty in various departments, such as ground service, freight transportation, maintenance, transportation, and information, arrived. At the same time, in Guangzhou, China Southern selected the capable personnel at the earliest time to make preparations and protection.

On Jan.25, spanning the Lunar New Year, Flight CZ5241 took off at 10pm from Guangzhou on the special mission, Carrying 128 Guangdong medical staff and 3.4 tons of materials, and successfully arrived at Wuhan Tianhe Airport at 00:14. In Wuhan, Luo Haizhong had already made preparations and, in coordination with the airport, parked the plane at a road crossing near the quarantine zone. "It's better to get the medics off the ferry and onto the bus directly. They're all going to the front at once. We shall try to save every extra minute for them." Luo Haizhong said.



Wang Changshun, Chairman of China Southern went to the frontline to direct the anti-epidemic work.



Ma Xulun, General Manager of China Southern went to the frontline of ground service to guide the anti-epidemic work.

China Southern people without hesitation

In front of the raging epidemic, there were no onlookers. In the fight against the "epidemic", the people of China Southern held their position and participated in their own ways to contribute to the prevention and control of the epidemic.



Yang Siyi

Flight Department, Hunan Branch



On the fifth day of the Chinese New Year, I received a special flight order: I am supposed to land at 2 o'clock at night and get up at 4:30 am to report. I have to change the plane and crew four times, take two breaks, and wait for the plane once in the terminal. Maybe canceled ... I replied," No problem, I'll fly. "After completing the first day flight mission, although exhausted, but in front of the epidemic, the mission is on my shoulder. If there is another special mission, I will still answer " I will continue to fly ".



Tian Jing

chief steward



When I saw the solicitation order in the early morning, I immediately asked for joining in the battle of epidemic. The simplest idea at that time was that I was a party member and a native of Wuhan, Hubei province. I was duty-bound to do something for my hometown. In the face of the epidemic, all people should do their part in their posts and do what they can."



Zhang Honglin

Aircraft Maintenance Base of Xinjiang



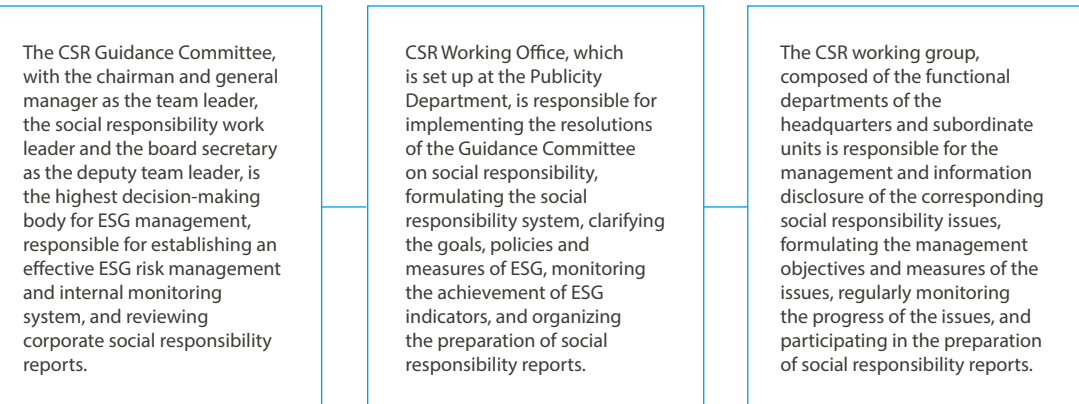
The first batch of Xinjiang aid medical teams took the CZ7997 charter flight to Wuhan. Two crew members were required to follow the plane to complete the maintenance and release of the flight after it landed in Wuhan. I submitted the application without hesitation. My wife was very worried and opposed me. Between the worries of my family and the cries of responsibility, I finally convinced my wife, "the protective measures are complete, and I'm going with the medical staff. Don't worry, I will return safely for you and the plane."



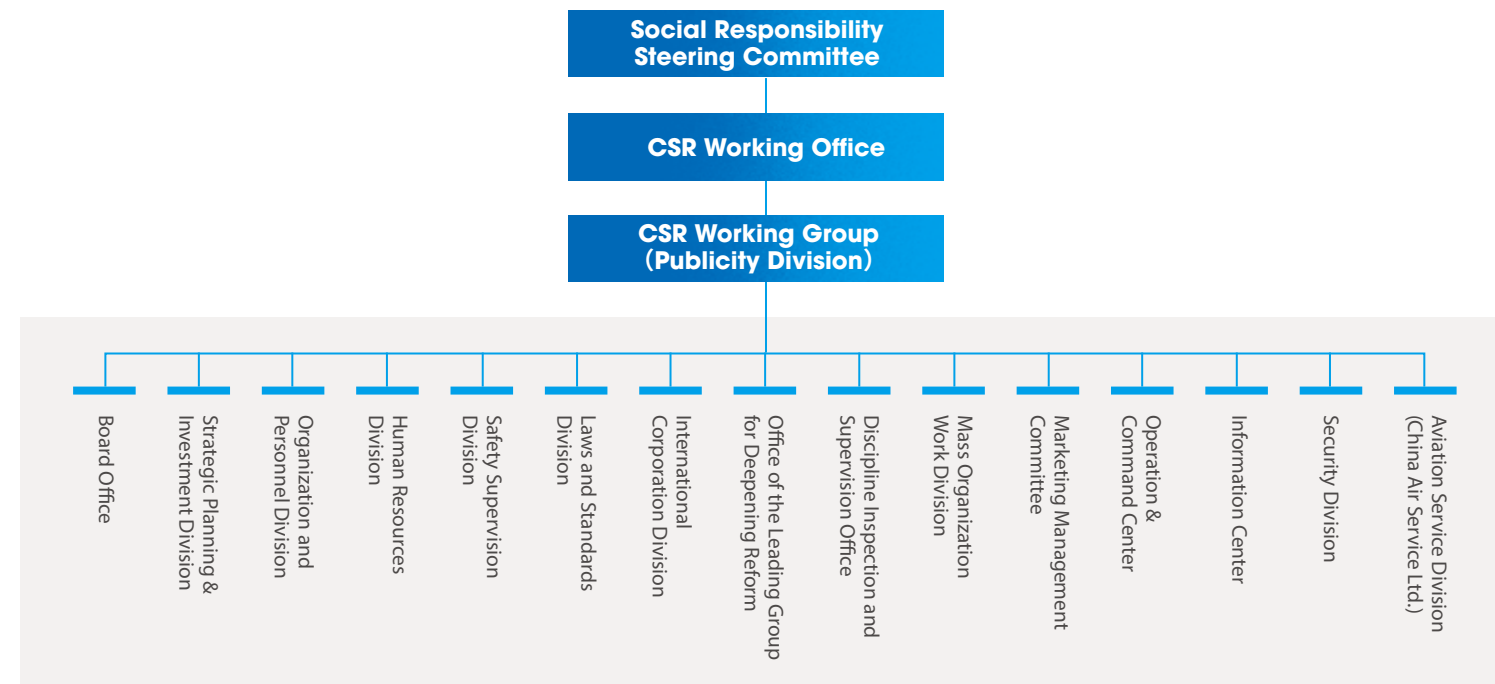
Responsibility Management

CSR Governance

In accordance with the requirements by SASAC, Hong Kong stock exchange and Shanghai stock exchange for the work of social responsibility, China Southern have formulated the "General Handbook of CSR Management" (and its separate volumes), established the social responsibility management architecture, made clear the responsibilities of relevant departments and further enhanced CSR management ability.



CSR Operation Structure



Response to UN Sustainable Development Goals

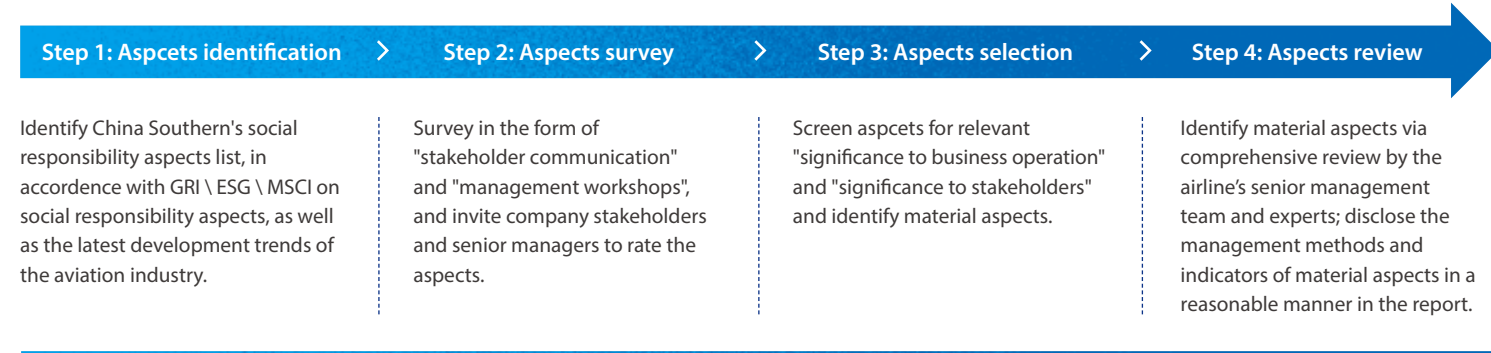
In response to the United Nations' 2030 Agenda for Sustainable Development, China Southern has identified eight priority actions from the 17 sustainable development goals, given full play to its industry advantages and resource expertise to contribute to the cause of global sustainable development.

<p>1 NO POVERTY</p> 	<ul style="list-style-type: none"> • A total of 35.93 million yuan was invested in the project, and 77 cadres were sent to take temporary posts or stay in villages for poverty alleviation • We trained 408 cadres at the community level, and help poor areas to become well-off by adopting the model of "leading by aviation, driving by industry, focusing on education, caring for and assisting the need, and warmly helping the poor". 	<p>4 QUALITY EDUCATION</p> 	<ul style="list-style-type: none"> • Implement the reform of the employee compensation system; Establish a more equitable and reasonable compensation system; Provide employees with good compensation and benefits.
<p>5 GENDER EQUALITY</p> 		<ul style="list-style-type: none"> • For 15 consecutive years, the Company has funded the construction of China Southern Pearl Primary School primary school in Pishan county and China Southern Pearl kindergarten in Moyu County. The company plans to invest 58 million yuan in two years to build a new China Southern Pearl Primary School in Moyu County to improve the local education level and prevent inter-generational poverty. 	<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 
<ul style="list-style-type: none"> • Promote "equal pay for equal work" - irrespective of gender - and protect the rights and interests of female employees by signing collective contracts; Help 63 illness-stricken female employees apply for mutual aid funds amounting to RMB 0.9million. 	<p>6 CLEAN WATER AND SANITATION</p> 	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<ul style="list-style-type: none"> • Promote energy conservation and environmental protection during the national energy conservation publicity week; Call for low-carbon travel from all walks of life; Actively control the discharge of waste water and exhaust gas; Make the first use of bio-jet fuel for intercontinental flight to reduce the impact of production and operation on the environment.
<p>15 LIFE ON LAND</p> 	<ul style="list-style-type: none"> • Regularly test aircraft drinking water to ensure water safety and hygiene; Promote aircraft dry cleaning technology; Save water in aircraft cleaning. 	<p>13 CLIMATE ACTION</p> 	<ul style="list-style-type: none"> • Sign the "Buckingham Palace Declaration"; comply with 11 commitments stated in the Declaration, Participate in the global effort in stopping illegal transportation and trade of wildlife and wildlife products.
<ul style="list-style-type: none"> • Promote the world's first 10,000 ton carbon quota swap trade between the EU and Guangdong; Continue to reduce jet fuel consumption. The annual carbon dioxide emissions per ton-km is 0.869 kg. 			

Analysis of Material Aspects

In order to further improve the pertinence of information disclosure in the report, China Southern conducts analysis of material aspects, identifies key material aspects, and responds to the appeal and expectations of stakeholders through different communication channels and platforms.

Identification Flow of China Southern Material Aspects



List of CSR Material Aspects of China Southern

Aspects	Report Location
1 Implementing targeted poverty alleviation	P24-P27
2 Anti-corruption	P9
3 Assurance of passengers' health and safety	P46
4 Safeguarding safe flight	P42- P45
5 Responds to climate change	P52-P55
6 Attention to waste disposal	P56-P57
7 Reduction in flight delays	P62-P63
8 Protection of passenger privacy	P70
9 Easier travel business	P64-P65
10 Supporting employee training and education	P77-P78
11 Assurance of employees' diversity and equality of opportunity and treatment	P74-P75
12 Attention to employees' remunerations and benefits	P76
13 Performing "Belt and Road Initiative" responsibility	P85-P87
14 Promoting suppliers to fulfill their social responsibilities	P89

Communication with the Stakeholders

China Southern has always been committed to building a diversified communication mechanism, actively and extensively communicating with stakeholders through multiple channels and ways, and continuously improving its ability to fulfill its responsibilities based on the opinions of stakeholders.

Investors

Expectations and requirements

- Corporate governance
- Risk Control
- Return on investment

Means and channels of communication

- Regular disclosure of business information
- Shareholders' meeting, report and notification
- Continued growth in performance to ensure shareholder returns

Government

Expectations and requirements

- Legal operation
- Increase in tax contribution
- Increase in employment

Means and channels of communication

- Special reports, visits and investigations
- Project cooperation and business meetings
- Statistical reports

Environment

Expectations and requirements

- Energy saving and emission reduction;
- climate change
- Ecological preservation and pollution reduction
- Noise reduction

Means and channels of communication

- Green flight and carbon emission reduction
- Ground environmental protection
- Noise reduction measures

Customers

Expectations and requirements

- Continuous safety
- Quick response to customer complaints and suggestions

Means and channels of communication

- Safety management system
- Customer relation management and online services

Employees

Expectations and requirements

- Establishing effective communication channels
- Improving training
- Improving employee compensation and benefits
- Open, fair and health human resource policy

Means and channels of communication

- Employee Representatives General Meeting
- Diversified employee training
- Compensation system reform
- Integrated staff management

Suppliers

Expectations and requirements

- Ethical operation
- Co-development

Means and channels of communication

- Transparent procurement
- Training and technology exchange seminars

Financial Institutions

Expectations and requirements

- Enhancing debt-repayment ability
- Reducing risk

Means and channels of communication

- Strengthen compliance management
- Improve business level

Community

Expectations and requirements

- Helping targeted poverty alleviation
- Volunteer service

Means and channels of communication

- Carry out targeted poverty alleviation
- Charitable activities and volunteers

Media

Expectations and requirements

- Establishing information disclosure channels
- Timely expressing the voice of China Southern

Means and channels of communication

- Press conferences
- Media forums

Other players in the industry

Expectations and requirements

- Fair competition and friendly cooperation
- Healthy and harmonious industry Development

Means and channels of communication

- Cooperation
- Communications, forums and conferences



Public Open Day events

First quarter: Birdview Guangdong, Hong Kong and Macau from Helicopter

On March 25, more than 30 people from media and public representatives were invited to take the China Southern navigation helicopter to birdview the Hong Kong-Zhuhai-Macau Bridge and the Guangdong-Hong Kong-Macau Greater Bay Area from the air to experience the great changes of the motherland.

Second quarter: Walk into Daxing Airport construction site

On June 29, more than 50 citizens and reporters walked into Daxing Airport, visited the "Three Asia's Largest" Projects of China Southern, the locomotive maintenance hangar, the Transportation Control Center, and aviation food production base, and experienced China's speed and quality.

Third quarter: Experience the first flight of Daxing

On September 25, a total of 162 people from hundreds of media and citizen representatives experienced Daxing Airport's "five vertical and two horizontal" three-dimensional transportation network, took the first flight of Daxing International Airport, and learned about China Southern's Guangzhou-Beijing "dual hub" planning and construction.

Fourth quarter: Explore China Southern's Daxing base in new flight season

On October 26th and 27th, 120 media and citizen representatives visited China Southern's largest aviation food production base of Asia, its largest operations control center of Asia, China Southern's exclusive check-in area and passenger lounge, etc.



"Social Responsibility Day"

On April 22, on the CZ3121 (Guangzhou-Beijing) flight "China Southern Social Responsibility", China Southern released a social responsibility report at an altitude of 10,000 meters to introduce to the public the spread of China Southern's social responsibility concepts and progress.



"State-owned Enterprise Open Class" activity

On May 22, China Southern and South China University of Technology together held a special public lecture "Leaders on the Podium" in South China University of Technology. Wang Changshun, Board Chairman of China Southern, delivered a lecture and exchanged the history and innovation of China Southern with university students.

Safety

HAPPY WORK SAFETY AND HAPPINESS



Safety is the lifeline of airlines and the cornerstone of stable operations. It is also the primary goal for all China Southern staff to work together. China Southern adheres to the safety concept of "happy work, safety and happiness", establishes a zero mindset, always treats safety with a reassuring attitude, continuously improves the safety management system, strictly implements various safety measures, and makes every effort to ensure every flight and every passenger Security. With unremitting efforts, China Southern continued to maintain the No.1 safety record of China Civil Aviation in 2019.



Safety Management

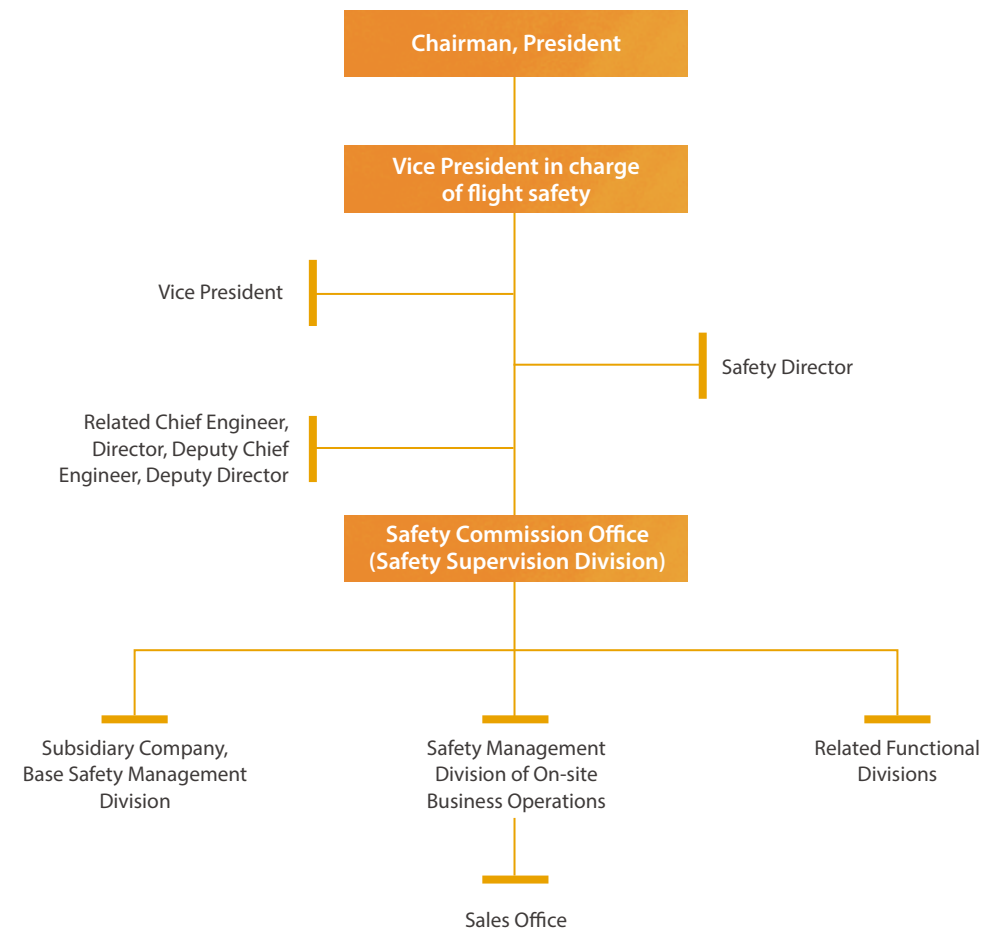
China Southern strictly complies with safety laws and regulations such as the Work Safety Law, the Civil Aviation Law, the Emergency Law, and the Anti-Terrorism Law, and establishes a safety management system (SMS) including rules and regulations, accountability system implementation, risk management, safety inspection and audit, etc., with a sound mechanism and system guarantee, to build the company's foundation for safe operation. In 2019, China Southern thoroughly studied and implemented the spirit of General Secretary Xi Jinping's important instructions on civil aviation safety work, strictly followed the implementation of Article 26 of Civil Aviation Administration and Article 34 of China Southern, and made every effort to ensure the safety of aviation.

Safety governance structure

An aviation safety committee is set up under the board of directors of China Southern. As the company's highest safety management agency, it is responsible for researching, decision-making, managing and supervising

the implementation of important safety policies of the company. The company's chairman / general manager, as the company's first security responsible person, has set a deputy general manager for safety

and set up a safety management function department to establish a security management organizational structure covering all majors and levels to achieve full coverage of security management responsibilities.



Safety system construction

According to the characteristics of the large fleet size and complex structure, China Southern initiated the construction of seven major safety systems centered on safety responsibility, regulations and manuals, training, process control, risk management and control, safety culture, and technological innovation, and promoted the company's safety management to be institutionalized, structured, systematic, and informatized.

Construction of safety system

In 2019, China Southern introduced regulations such as *the Management Regulations for Dishonesty*, *the Management Regulations for Cockpit Sound Monitoring*, and *the Regulations for Comprehensive Smoking Banning of Aircraft* to strengthen institutional supervision. At the same time, the "Aviation Safety Management Manual" was comprehensively revised, precision assessments were implemented, safety assessment terms were significantly streamlined, key links were focused, and safety systems were continuously improved.

Safety risk management

China Southern has established a monitoring mechanism for "daily reports, weekly reviews, monthly summaries, and quarterly rankings" of safety risks. It regularly organizes operational seminars to analyze risk vulnerabilities using typical error cases, and improves awareness and capabilities of safety risk prevention. In 2019, in response to safety risks such as complex weather, aircraft failures, bird strikes, and air turbulence, timely prompts of safety risks were issued to curb the frequent occurrence of similar unsafe events.



CASE Innovating the "red paper" and "blue paper" system, making employees awe of safety

In order to encourage employees to respect the rules and safety in awe, China Southern has established a distinctive "red paper" and "blue paper" system in flight, aircraft maintenance, operation control, cabin, and security systems. "Red paper" is an illegal violation file while "Blue Paper" is a file of ability and quality, forming a personal discipline file of employees, which is closely linked to salary, cadre selection, evaluation of superiors, transfer to new plane models, and personnel mobility, etc. This system can educate staff throughout the full cycle of professional career.



Aviation Safety

China Southern has established comprehensive safety control measures in the entire chain of aviation safety, relying on the cooperation of flight, maintenance, cabin, security, ground services, and operation control departments to ensure that each flight is foolproof and allows passengers to reach their destination safely.

Safety Guarantee in Key Aspects

Pilot capacity building

According to the *Civil Aviation Law*, *Operational Certification Rules for Large Aircraft Public Air Transport Carriers* and the *Civil Aircraft Pilot Certification Rules*, China Southern revised and perfected the two manuals of the Flight System Management Manual and Flight Staff Training Outline. In 2019, China Southern innovated the training model, promoted online

training through online learning platform, and by the means of remote CBT teaching, standardized training program (STP), and CRM training camp to further consolidate the theoretical foundation of pilots and strengthen the construction of "three basic skills"; Organized 11 sessions of "Flight Lecture Hall" video training to improve the comprehensive ability of

pilots to deal with special situations; Taking co-pilot upgrade simulator training as a pilot, explored ability-based training courses to improve the training's pertinence and practicality; Promoted the training courses of RNP, CAT II, CAT III, HUD, strengthened the cultivation of pilots' ability to operate around the clock.



Maintenance safety

In order to ensure the quality of maintenance, China Southern continued to promote the comprehensive application of "production arrangements, construction procedures, work standards" safety management procedures, requiring maintenance personnel to strictly follow the standard procedures to ensure that they work according to manuals and work cards to reduce the risk of illegal operation of maintenance. In 2019, China Southern actively carried out "active offensive" safety management in maintenance, and concentrated its efforts on tool management, preventing missed follow-ups and preventing aircraft from scratching to guard against maintenance risks.

Operational Command safety

In 2019, China Southern's operation command system focuses on strengthening the management and control of operational risks such as style qualification, IT system risks, and "three new" routes. In particular, in order to ensure the smooth operation of Daxing Airport, the Civil Aviation Administration of China conducted the largest airspace adjustment in the domestic airspace mainly in North China. China Southern completed the route revision work as required. The revised route accounted for 35% of the company's total routes. The company issued a "three new" route safety alert in a timely manner, and issued a one-month early-warning to flight crews to achieve smooth flight operations without any occurrence of wrong route flight.

Air security

China Southern completed the revision of the "Aviation Security Operation Manual", "Aviation Security Personnel Work Manual", as well as the "Aviation Security Personnel Training Management Manual" and "Aviation Security Personnel Training Outline", and standardized the safety management with the manual rules and regulations. At the same time, China Southern carried out the "Safe Flight" operation, carefully implemented the "Ten Measures for Strictly Controlling the Safety Order on Board Aircraft" of the Public Security Bureau of the Civil Aviation Administration, and severely cracked down on the behaviors disturbing the cabin order on board. A total of 113 incidents were handed over to the public security organs on board, thus maintaining the cabin security order on board.

Crew Scheduling and fatigue management

China Southern has formulated *Operation Manual* to standardize the crew scheduling and the pilot fatigue management to ensure that pilots perform each flight mission in the best physical condition.



Scheduling management. Develop an automatic shift scheduling and automatic scheduling system to further standardize the management of crew member qualification data by means of information technology, and continuously strengthened data analysis capabilities to provide data support for scientific scheduling.



Fatigue management. Integrate the crew overnight process, optimize the route structure, reduce the crew's overnight ratios, increase the proportion of flight crews performing the same aircraft flight missions, reduce crew fatigue, thus reduce the safety risk caused by pilot fatigue.

Technology Guarantee flight safety

Advanced science, technology and equipment are important supports for civil aviation safety and a guarantee for improving operational efficiency. China Southern continued to strengthen its scientific and technological innovation capabilities, continuously promoted innovation in flight technology, and escorted safety with technology.



Operation command

- The introduction of the LIDO flight planning system has improved the automation level of the transportation control system, and completed the development of the "alarm function on comparison between planning and pilot report route", which enables comprehensive monitoring changes of flight plan reroutes.
- The ORCS system was initially established. Data processing functions of crosswinds during the take-off phase, short runways, comparisons between navigation database with planned routes, low temperature routes, and air bump risk nodes were developed, and monitoring information and three new route databases were accessed to achieve eight major flight monitoring alarms and "three new" route risk alerts.



Maintenance

- China Southern Jointly developed the Engmap engine management system with MTU, which integrates oil monitoring, borehole / magnetic plug inspection, fleet management, and repair management, and repair management to optimize the function of engine data collection, storage, analysis and etc.
- China Southern developed the aircraft maintenance dispatch system AMAS, which further extended the remote diagnosis system function, realized faster aircraft data information acquisition, more efficient troubleshooting decisions, faster deployment of aviation materials and personnel, and greatly improved the efficiency and quality of aircraft maintenance.



Security

- Develop a comprehensive security management system and a mobile "Guard Mobile" APP used by security personnel to help perform precise duties.
- Develop a security flight tracking system to achieve real-time monitoring of key flights.
- Develop a visual command system to achieve real-time video command between air and ground.

CASE STUDY

Developer of long-range aircraft "pulse diagnosis" system boarded the National Day parade float

On October 1, 2019, during the celebration of the 70th anniversary of the founding of the People's Republic of China, China Southern engineer Liu Yuhui boarded the "floating spring" square array float. He was also the only civil aviation person invited by the State-owned Assets Supervision and Administration Commission of the State Council. Liu Yuhui once led the research and development of the "Aircraft Remote Diagnosis Real-time Tracking System", breaking foreign technical blockades, achieving remote "diagnosis of the pulse" for aircraft, and receiving the "Second Prize for Scientific and Technological Progress" of the General Administration of Civil Aviation.



Chinese solution for remote "pulse diagnosis" of aircraft

The electronic display screen of the China Southern Aircraft Maintenance Control Center is full of dots of various colors. "Each dot is an aircraft, and different colors represent different health conditions of the aircraft. If any aircraft failure occurs, we can grasp it in real time and propose solutions to maintain it in time after the aircraft has landed." Liu Yuhui introduced.

This was not the case 20 years ago. At that time, engine performance monitoring also relied on pilots to manually copy in flight logbooks, which were subsequently entered into computer systems. At the same time, the aircraft does not know if there is a fault or where it is after it reaches the ground. Only then can it begin to judge, analyze, prepare aviation materials and maintain, which will easily cause the delay of the next shift and cannot meet the needs of rapid development.

At that time, there were existing fault monitoring systems in the world, but the fees were very expensive, which made China Southern determined to develop its own fault monitoring system. So Liu Yuhui set foot on the road of research and development without any hesitation. At that time, the domestic research and development of airborne information technology was still blank. Liu Yuhui led the team to overcome various difficulties and challenges. At the end of 2001, the prototype of China Southern's "Aircraft Remote Diagnosis Real-Time Tracking System" based on Boeing 777 aircraft was completed. The operation provided the "China Solution".

In 2016, the fourth-generation prototype of China Southern's self-developed remote diagnosis system was launched, and its performance reached the international advanced level. China Southern has also become the first and only company in China's civil aviation industry to have an independently developed remote diagnosis system.

Support the development of large passenger aircraft in China

From 2010 to 2012, COMAC sent more than 10 engineers to China Southern's "Airborne Information Room" to study on the research and development of domestic large passenger aircraft. Over the past two years, Liu Yuhui's team imparted systematic knowledge to engineers of COMAC without any reservations. Together, he completed more than 400,000 words of monographs and contributed to the self-developed large passenger planes in 2015.

"Only when China is strong and becomes a true 'aviation power' and seizes the commanding heights of the industry, can we get rid of the dilemma of 'restrained by others,'" said Liu Yuhui. Independent innovation is the only way for China Southern and even China's aviation industry to embark on high-quality development. China Southern has been always on the road.



Passenger Health and Safety

The number of passenger receiving health consultations throughout the year was

1,465, of which

136 were advised to suspend flight.

China Southern has formulated the *Aviation Health Management Manual*, *Aircraft Public Health Work Manual*, *Emergency Control Plan for Public Health Emergencies* to comprehensively guarantee passengers' safety on drinking water, food and health during flight.

Safe drinking water. Investigate the health status of aviation drinking water, conduct water quality audits of aviation drinking water at 12 domestic and foreign stations to ensure drinking water safety.

Aviation food safety. The four stages of procurement acceptance, basic hygiene, processing and inspection and taste testing in aviation food production are well carried out. On-site audits of 16 food raw material suppliers are carried out throughout the year, and key inspections such as storage processing temperature, time, and date identification are conducted to ensure aviation food safety.

Medical assistance. Establish a 24-hour on-call health consultation system for passengers, provide them with health medical consultation services before boarding, and ensure the health of passengers from the source. For passengers with sudden injuries and illnesses on board, upholding the principle of "life is above everything, proactive rescue, proactive comfort, respect for passengers", China Southern requires air-ground service departments to cooperate with each other, actively participate in handling, and make every effort to ensure that passengers receive medical assistance in the first time.

	2017	2018	2019
Deaths due to work (persons)	4	1	1
Proportion of employees killed by work (%)	0.0031	0.0010	0.0010
Working hours lost due to work (working days)	9,365	14,485	17,508

Note: we deeply regret that one employee of China Southern died suddenly at work in 2019. China Southern will continue to care about the physical condition of employees and urge employees to participate in the company's physical examination in a timely manner to ensure the physical and mental health of employees

Occupational Health and Safety

Safety and health are the prerequisites for personal growth and happiness. China Southern attaches great importance to the physical and mental health of each employee, strictly abides by laws and regulations such as *the Labor Law*, *the Prevention and Control of Occupational Diseases Law*, continuously strengthens the identification and assessment of employees' occupational health and safety risks, and adopts targeted health education and management measures to ensure employees are physically and mentally healthy.

Major health risks

Aircrew frequently travel to different places, eat and drink irregularly, and are prone to diseases such as the digestive system.

Pilots have an increased risk of metabolic and cardiovascular diseases, and their bodies are vulnerable to sub-health.

Aircrew members are highly stressed during their duties and are under great mental stress.



Strengthen health education, and carry out thematic education courses on common diseases, frequently-occurring diseases and healthy lifestyles of flight crews.

Carry out health grading management for pilots, develop personalized correction plans for personnel who combine multiple risk factors or clinical diseases, and reverse sub-health status.

Incorporate mental health knowledge into daily health education and incorporate mental health construction into the induction training of new crew members to ensure maximum physical and mental health.

Measures

Safety Performance

Under the guidance of the company's safety concept and relying on the cooperation of employees in various positions, in 2019, China Southern maintained the No. 1 safety record of China Civil Aviation.



Safe flight hours (10,000 hours)
295.1*

Accumulated safe flight hours (10,000 hours)
2,638.6*

Consecutive months for flight safety
242

Consecutive months for aviation safety
307

Incident rate per ten thousand flight hours
0.0088

General incident rate per ten thousand aircrafts
0

Aircraft ground incident rate per ten thousand aircrafts
0

Note: The safety flight time and the cumulative safety flight time are based on data provided by China Southern.

China Civil Aviation Transportation Aviation Man-made Cause Accidents

China Southern Civil aviation in China



Notes: The data above only include incidents produced at the Company, excluding those by manufacturers, accidents. Industrial data originate from Report on Statistic Analysis of Safety Data of Civil Aviation Industry issued by CAAC.

Environment

GREEN CONNECTIVITY, GUARDING OUR HOMELAND



Against the background of green and low-carbon development becoming a global consensus, as a "big player" in carbon emissions, how to reduce the consumption of energy and resources while minimizing the impact on the environment and in the meantime maintaining the rapid growth of air transport is a common challenge facing the industry. China Southern actively explores the application and practice of new environmental protection technologies and methods in the management, operation and flight processes, minimize its own impact on the environment and create more opportunities and possibilities for the sustainable development of the earth's ecology.



Management of Environmental Impact

● Emission of Greenhouse Gases

Carbon dioxide emission (10,000 tons)



Carbon dioxide emission (kg/ton-kilometer)



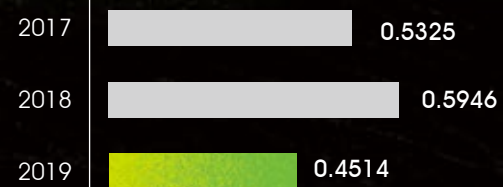
	2019
Category1—Carbon dioxide emission (10,000 tons)	2,845.89
Category2—Carbon dioxide emission (10,000 tons)	16.74

● Water Consumption

Total water consumption (10,000 tons)



Water intensity m³/10,000 yuan

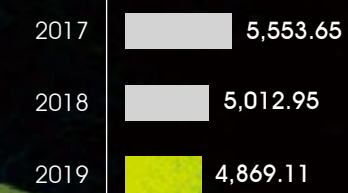


● Energy Consumption

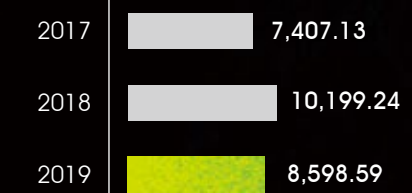
Fuel (10,000 tons)



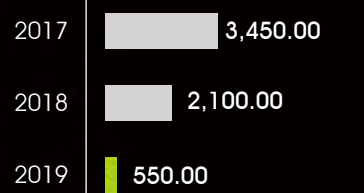
Gasoline (tons)



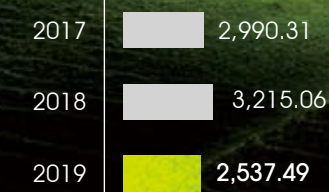
Diesel (tons)



Coal (tons)



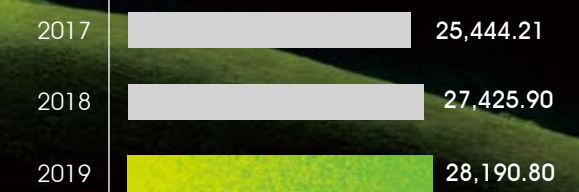
Natural gas (10,000 m³)



Liquefied gas (tons)



Electricity (10,000 kWh)



Waste Treatment

2019	Treatment capacity	Treatment rate (%)
Hazardous waste	615.205 tons	100
non-hazardous waste (On-board service)	7,909.5 m ³	100

Consumption of packaging Materials

Indicator	2019
Total consumption of packaging materials in the process of aviation food production (tons)	881.03

Response to Climate Change

Greenhouse gas emissions are an important cause of global climate change, and extreme weather caused by climate change has also affected the sustainable development of the aviation industry to a certain extent. Facing global climate change issues, China Southern actively responds to international and domestic aviation carbon emission reduction regulations, actively manages its own carbon footprint, and takes practical actions to help achieve the Paris Agreement's carbon reduction targets.

In 2019, China Southern and the International Air Transport Association (IATA) launched a strategic cooperation in environmental assessment projects and was elected as a member of IATA's newly established Sustainability and Environmental Advisory Committee. In July of the same year, the Aviation Environmental Protection Committee of the China Air Transport Association was formally established. China Southern actively joined and responded to the relevant requirements of the "Resolution on Aviation Carbon Reduction" to promote the green development of civil aviation.

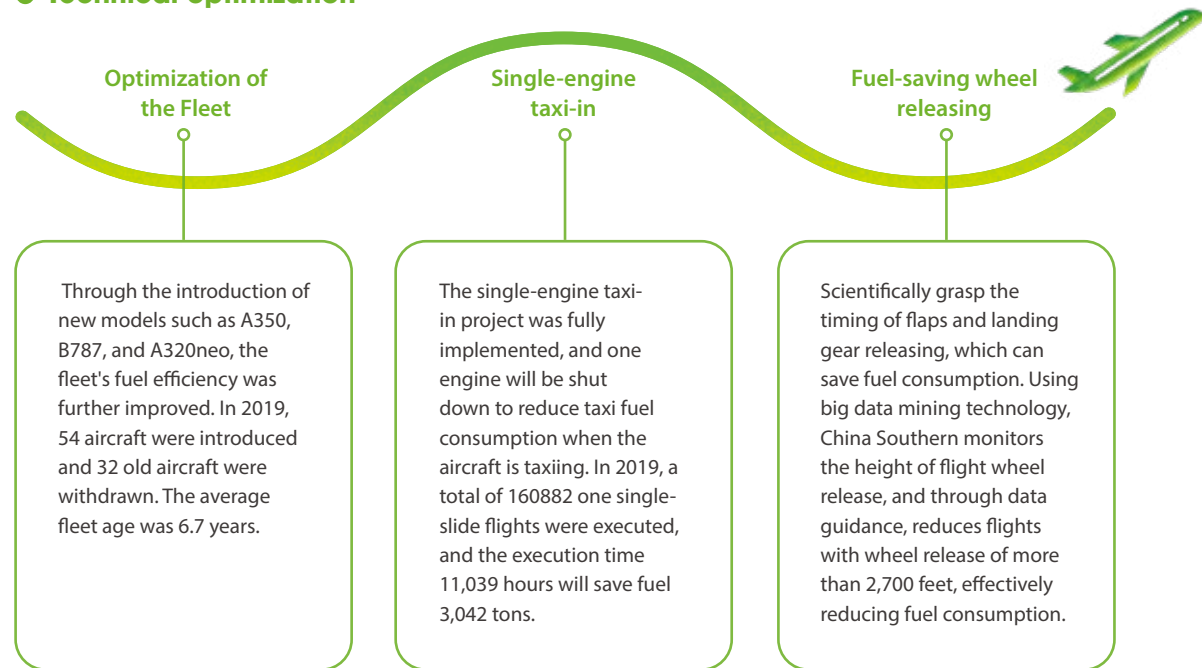


Scan and learn more about the requirements of the Resolution on Aviation Carbon Reduction

Green Flight

China Southern has formulated the "Energy Saving and Emission Reduction Management Manual" and "Energy and Environmental Management Business Processes" and other systems to comprehensively improve the efficiency of aviation fuel use and achieve green flight through technical optimization, management improvement, and big data analysis.

● Technical optimization



CASE STUDY

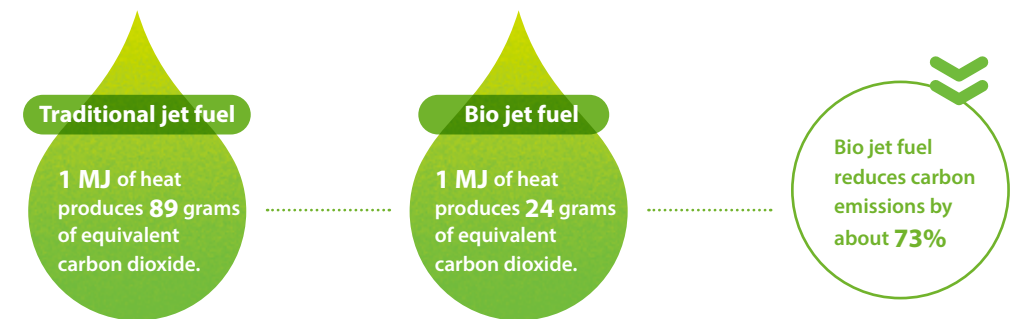
China southern used bio-jet fuel for intercontinental flight for the first time

On February 23, a new A320neo aircraft numbered B-305E flew from Toulouse, France, to Astana, Kazakhstan, and arrived at Guangzhou Baiyun International Airport to join the China Southern fleet. The first segment of the intercontinental flight used 10% blended aviation bio-fuel, which was the first time that China Southern

used bio-fuel to perform flight missions.

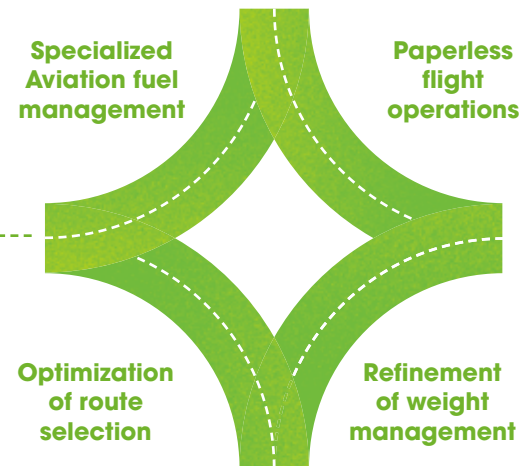
The bio-jet fuel refilled on this flight is made from sugarcane, which reduces carbon emissions by about 73% compared to traditional jet fuel, and has greater emission reduction benefits. In addition, the aviation fuel used this time has been certified for

airworthiness, and has no negative impact on food security, water resources protection, soil protection, etc., with low carbon emissions and sustainability. China Southern has played a significant role in promoting the use of green aviation fuel in the civil aviation industry.



● Management promotion

Set up five professional fuel-saving project teams including flight fuel-saving, ground fuel, aircraft weight, flight plan reliability, and aviation fuel informatization, and formulate 19 fuel-saving measures to promote the company's fuel-saving and oil-control.



Paperless dispatch and release at domestic sites and 61 overseas sites makes flight operations safer, smarter, and more efficient. In 2019, EFB electronic release saved 2,798.82 tons of jet fuel.

By adjusting the route direction, promoting the use of temporary routes, shortening the distance and reducing the flight time, etc., China Southern has achieved the goal of saving aviation fuel. In 2019, the utilization rate of China Southern' temporary routes reached 24.61% monthly, saving flight distance of 2.08 million miles, and optimizing the route to save a total of about 25,000 tons of aviation fuel.

Comprehensively sort out historical data of machine supplies and flight water refills, formulate flight water refill standards, and adjust the water refill amount of wide-body aircraft flights with flight schedules of 4 hours or less to 60% of the water tank volume to achieve weight reduction flight .

● Data Assisted Fuel Saving

Based on the Internet of Things and cloud technology, China Southern independently developed the "Fuel e-Cloud" and MRV system for carbon emissions data of flight activities to achieve fine-grained control of aviation fuel and carbon emission data, and provide reference information for further improvement of fuel efficiency.

CASE Developing a carbon emission data detection and reporting system to help the healthy development of China's carbon emission market

In 2019, China Southern independently developed the first carbon emission data MRV system of civil aviation in China in accordance with "the Interim measures on carbon dioxide monitoring, reporting and verification of civil aviation flight activities".

Through the system, you can get all the monthly data of China Southern, and compare it with the CAA clearing center data. For each flight, flights are performed from the three dimensions of average fuel consumption, average fuel consumption in air time and average fuel consumption in gear time. The fuel consumption verification finally formed a carbon emission report submitted to the Civil Aviation Administration, which improved the accuracy of carbon emission monitoring data and helped the healthy development of China's carbon emission market.



CASE Development of "Fuel e-Cloud" provides a Chinese solution for the development of jet fuel data international standards

Based on the Internet of Things and cloud technology, China Southern independently developed the "Fuel e-Cloud" real-time big data sharing platform to provide digital tools for refined management of fuels. On this platform, the refueling status of each aircraft of China Southern can be viewed in real time. After refueling, the data will be uploaded to the platform within 10 seconds and displayed on the pilot's electronic flight bag, and the fuel cost of the flight will be automatically generated.

With the "Fuel e-cloud" platform, China Southern reduced refueling guarantee time by about 17% with the complete connection of flight and refueling information, thus improving the flight regularity. At the same time, it also promoted the establishment of fuel-saving culture, combined with evaluation and comparison, which promotes pilots to effectively reduce the amount of overscheduled refueling, estimated to reduce the waste of aviation fuel by about 1,500 tons per year.

In July 2019, IATA invited China Southern to join the "aviation fuel data standards group" to participate in the formulation of global aviation fuel data standards, helping CAAC to have a say in the formulation of international aviation fuel data standards, and providing Chinese solutions to the data standards of global airlines.

Participation in Carbon Trading

As a pioneer of carbon trading pilot in China, China Southern fulfilled its obligations to participate in the EU carbon trading for flights commuting between two destinations within the

EU and carbon market in Guangdong province in 2018 in April and June, according to the requirements of carbon trading between CAAC and EU. In participating in the Guangdong

province carbon trading agreement, thanks to the improvement of carbon emission efficiency of China Southern, China Southern has a surplus quota of more than 400,000 tons in 2018.

Complete the world's first single **10,000**-ton EU carbon quota and Guangdong carbon quota swap trade.





Pollution Prevention

● Exhaust gas

Through measures such as strengthening aviation fuel management, increasing investment in technological transformation, and improving energy efficiency, the impact of exhaust emissions on the environment and employees is minimized. In 2019, China Southern handled a total of 225.6 million cubic meters of exhaust gas.

● Hazardous waste

Hazardous waste such as waste kerosene, waste miscellaneous oil, waste medicines, and waste lamps generated during aircraft maintenance, air service, and ground office are classified and collected in accordance with the "National Hazardous Waste Nomenclature", and finally delivered to qualified Hazardous waste treatment companies to conduct professional waste management. In 2019, China Southern handled a total of 615.205 tons of hazardous waste, with a treatment rate of 100%.

Wastewater and exhaust gas generated during air transportation will result in some pollution. Complying with the regulations such as the "Water Pollution Control Law of the People's Republic of China" and the "Air Pollution Control Law of the People's Republic of China" and other regulations, China Southern treated on-board sewage, industrial wastewater and domestic sewage generated during ground handling operations and had measurable environmental impact reduction.

● Wastewater



After being collected by a professional sewage truck, it will be disposed of by a qualified sewage treatment plant.



Industrial wastewater generated during aircraft maintenance and aircraft cleaning is collected and sent to a wastewater treatment station for treatment by GAMECO (Guangzhou Aircraft Maintenance Engineering Co.,Ltd). In the year, 16,477 tons of industrial wastewater were treated.



Regarding the domestic sewage produced in the process of aviation food production, standardized waste water discharge outlets are set up and managed by special persons. In the whole year, 224,000 tons of wastewater generated by aviation food production were treated by Guangzhou Nanland Air Catering Co. Ltd., and the treatment rate was 100%.

Classification of hazardous waste	Treatment mode	Treatment amount (tons)
Maintenance and engineering	Waste cleaning agent	83.303
	Waste organic solvent	10.306
	Waste kerosene	324.213
	Waste oil	91.656
	Paint coat and slag	40.668
	Waste activated carbon	14.515
	Waste acid	0.14
	Waste encasement and container	30.096
	Waste lead-acid battery	6.86

Resource Conservation

● Non-hazardous waste treatment

China Southern collects non-hazardous wastes such as cabin food packaging materials, recyclable magazines, kitchen waste, office and domestic wastes during the event, and then transfer them to a qualified recycling company to promote the recycling of resources. In 2019, China Southern handled 7,909.5 cubic meters of non-hazardous waste on board, with a treatment rate of 100%.

Water, paper, plastic, wood and other resources are inevitably consumed in the course of aviation flight and ground services. China Southern attaches great importance to resource conservation and utilization efficiency improvement in all aspects of operation to promote resource conservation.



Water conservation

By implementing accurate cabin water refilling and adopting aircraft dry-cleaning technology, water consumption on board and aircraft clean water can be saved.



Saving paper

In passenger transportation services, electronic boarding passes, electronic invoices, and electronic luggage tags are promoted with the use of electronic platforms such as "China Southern" to reduce paper printing. In freight services, continuous promotion of electronic freight orders can save paper freight orders 171,000 pieces per month, and the amount of domestic electronic freight orders ranks first in the world.

CASE Airplane washing and dry cleaning

Traditional aircraft cleaning requires a large amount of water, and professional treatment of sewage is required after cleaning, which consumes a lot of resources. GAMECO (Guangzhou Aircraft Maintenance Engineering Co.,Ltd) actively promotes the application of aircraft dry cleaning technology, directly applying professional cleaning agents to the aircraft fuselage, and then drying it with professional cleaning equipment. Compared with traditional washing, dry cleaning technology can reduce 98% of cleaning water.

	Traditional cleaning	Dry cleaning
Water consumption	30 tons of water for A320	60 liters of water for A320
Cleaning site	Specified cleaning site	Ordinary aircraft stand
Drainage facilities	Special drainage is required	Little sewage is spilled
Cleaning duration	Unable to achieve continuous cleaning	Able to keep the plane appearance clean for a long time; reducing the frequency of cleaning
Cleaning time	More ground time is required	Reducing ground time
Pollutant treatment	Sewage treatment is required	Reducing sewage treatment; detergent bio-degradation rate can be more than 96%

Spread of Green Ideas

Energy conservation and emission reduction require the concerted efforts of the whole society. Faced with a large population of customers, China Southern uses its own expertise to guide more stakeholders to participate in energy conservation and emission reduction actions and jointly participate in the sustainable development process of mankind.

CASE Waste sorting, China Southern in action

China Southern has actively responded to Shanghai's garbage classification. Since August 22, it has officially implemented garbage classification on arriving flights. According to the "Guidelines for the Classification and Distribution of Domestic Garbage in Shanghai", dry and wet waste is sorted before landing on the plane. Recycling of dry waste of cans, plastic bottles, and other wastes are performed. After centralized recovery, wet garbage such as food boxes, residual food will be returned to the ground personnel for disposal. China Southern's on-board garbage sorting behavior was praised by passengers.

CASE "Green Development, Energy Saving First" Energy Saving Publicity Week

June 17-23 is the National Energy Saving Publicity Week. China Southern carried out healthy riding activities for internal employees, and used award-winning riding power generation to light up China Southern's aircraft, as well as green development display boards and initiative signature boards, to let employees understand the concepts, achievements and practices of energy conservation and environmental protection. At the same time, an award-winning quiz on the basic knowledge of energy saving and emission reduction was held on the flight, and passengers were urged to participate to convey the environmental protection concept to the public.

CASE Launching a green flight project to promote green travel for passengers

In response to the waste of onboard meals, China Southern launched a green flight project in 2019, calling on passengers who do not need to dine to give up onboard meals in advance to achieve green flight. For passengers participating in green flight projects, China Southern awards them 300-500 miles to achieve mutual benefits and win-win results. As of December 25, 2019, China Southern has opened green flights on 650 flights, sending precise invitation text messages to more than 30,000 passengers every day, and a total of 215,000 passengers have successfully participated in green flights, reducing 215,000 meals on board.





Service
**AFFINITY AND
REFINEMENT,
GREAT FLIGHT
EXPERIENCE**



Every time a passenger chooses a CSA flight, they have unlimited trust in CSA, which is an inexhaustible driving force for CSA to continuously optimize its services. China Southern is committed to providing "affinity + refinement" intimate, warm and delicate air and ground services, as well as professional, efficient, safe and efficient passenger and cargo services, delivering warmth and joy in each service and creating value for passengers.



Passenger Services

China Southern always adheres to the "customer first" sincere service concept, starting from the needs of passengers, constantly optimizing the details of each service to bring a beautiful air journey to passengers all over the world.

Improving flight normality

Flight normality is an indicator of concern for travelling passengers, and an important manifestation of China Southern's operating efficiency and service quality. China Southern has formulated and continuously improved the systems of "normality management", "risk flight monitoring and guarantee management system", "2019 flight normalization improvement project plan" and other systems. By continuing to promote large-scale operation construction, it has increased operational normality assessment and risk flight management and control to ensure that passengers travel on time.



● Continue to promote the construction of overall operations

China Southern has started overall operation construction since 2018. By establishing a centralized operation platform and establishing a unified operation management and control model, China Southern has improved the company's decision-making efficiency and service support capabilities, and improved flight normality.

Centralized operation. AOC, a centralized operation platform for headquarters, and GOC, a subsidiary's centralized operation platform for subsidiary companies, were established to greatly improve joint decision-making efficiency through two platforms and coordinately resolve issues such as flight delays.

Unified scheduling. Unify flight planning resources and capacity, set up operation schedule and dispatch centers, realize flat operation management, greatly shorten the information chain, and timely handle abnormal air flight conditions.

● Improve the support ability of key links

China Southern has comprehensively sorted out service processes to improve the efficiency of collaboration and reduce flight delays on key links affecting the normality of flights.

Close door early. Sort out the ground service process, and improve the cooperation efficiency of various units such as maintenance, ground service and transportation.

Quick launch: This include- tow the aircraft outward from the jetway and optimize the taxi path to improve operational efficiency by cooperating with apron control.

The ground glides. Optimize the parking position arrangement, increase the nearby takeoff and landing rates, and effectively shorten the average taxi time by taking into account flight connection, exit and slide-in routes, and plane position characteristics.

Two-way coordination. Coordinate airport ground support resources and air traffic control resources, actively participate in the formulation of the "A-CDM Cooperative Operation Rules", complete the entry of seats in the traffic control rooms of various regions in the country, and establish a stable coordination mechanism.

rapid transit stop. Establish a rapid transit stop comment and notification mechanism, specifically sort out the guarantee process, and improve the success rate of rapid transit stops.

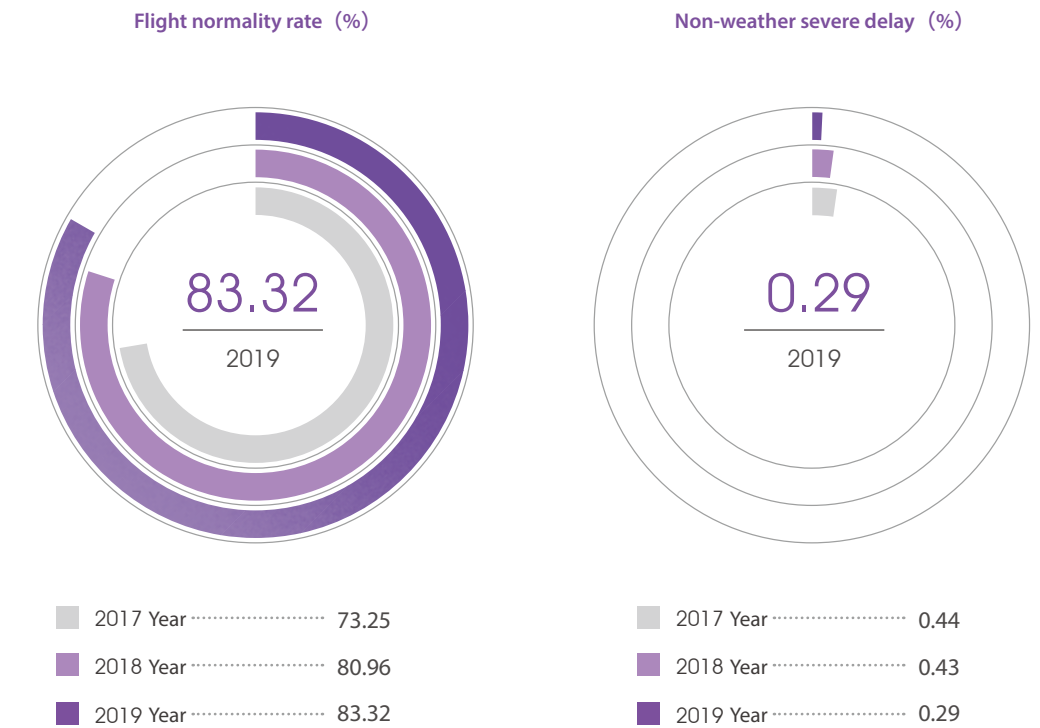


China Southern flight normality rate ranks first among the three major domestic airlines.

CASE From 120 minutes to 57 minutes, the A380 quickly passed the station

The Airbus A380 is the largest passenger aircraft in the world. Every time the A380 lands, the race against time starts. In order to provide better services for the next voyage, the aircraft needs to complete baggage transportation, cargo handling, meal distribution, regular cleaning, maintenance, and aviation security inspections at the airport. The time here is counted in minute.

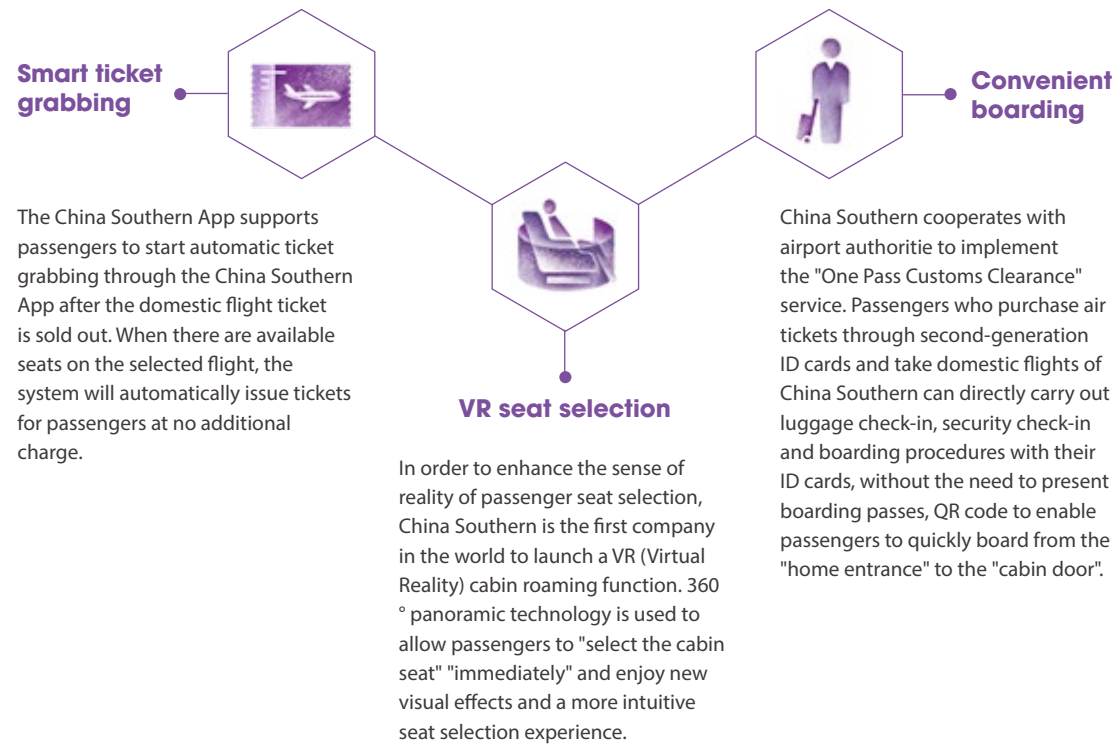
In order to ensure the rapid transit of the A380, China Southern issued the "implementation plan for A380 aircraft rapid transit stop within 90 minutes." On June 19, 2019, the CZ3109 flight started a rapid transit stop. From opening door to closing door, the flight transit took only 57 minutes, less than half the 120 minutes standard of the CAAC, and one of the fast guarantee records in recent years. The implementation of rapid transit greatly improved the overall efficiency of flight operation.



Upgrading Smart Travel

From self-service ticket purchase, seat selection, refund and change to self-service consignment service, and self-service check-in, China Southern continuously improves every travel aspect. While changing the travel habits of passengers, it brings "one machine in hand, the whole process worry-free" smart travel experience.

In 2019, China Southern continued to optimize the "China Southern e-platform" platform function, the main ticket purchase flow, upgrades, first-line sales assistance systems, paid seat selection, electronic boarding passes, 100% pre-selected seats, paid lounges, green flight, electronic invoices, automatic refund and change, which make travel truly "just go".



App Online Features / Items

547



App Online Features / Items

547

Total number of App download activation/million

56.4630



Number of active social media followers/million

39.3835

Number of passengers checking in by mobile

20,205,331

Note: The number of mobile check-in passengers includes applets, apps, touch screens and text messages.

CASE STUDY

Baggage tracking through the whole process, let luggage "talk"

"Where did my luggage go?" "How long can I get my luggage?" These questions are information that many travelers want to know when traveling. China Southern uses Full Baggage Tracking System to achieve precise positioning and real-time sharing of luggage, allowing passengers to "trace" their luggage.

Know your luggage information

From September 1, 2019, China Southern has fully put into use radio frequency identification (RFID) luggage tags in Guangzhou's T2 terminal. When passengers check in their luggage, information will be written into the chip embedded in the luggage tag. The speed of baggage transportation is near instantaneous as is the information collection for the entire process of baggage transportation.

Real-time push of luggage status

China Southern is the first airline in China to realize the function of self-service inquiry and active push of information in the whole process of luggage. Sky Pearl Club member passengers can now log into China Southern's official smartphone App or the Company's WeChat public account to receive real-time status of the transportation of their checked luggage.

Baggage arrival time reminder

Starting from August 14, China Southern added a pre-arrival time reminder service to all baggage transfer displays (No. 31-40) in the arrival area of domestic flights at the Guangzhou hub for the first time. Before the baggage claim turntable of the flight, passengers can look up to know when their checked luggage is expected to arrive at the turntable, reducing the anxiety of waiting for luggage.

I often depart from Guangzhou. Now I can use the China Southern App to select seats and check-in passes in advance, which is particularly convenient. I can also control the time more freely by air and save 5 to 10 minutes without checking in at the counter.

—Miss Li, Frequent Traveler

Obtained the IATA Baggage Tracking Resolution 753 Hub Compliance Certification, the first in Asia and the sixth company in the world to obtain IATA Baggage Tracking Hub compliance certification





Creating a Beautiful Journey

China Southern launched the "Family Service 360" service. Friendly warm professional service, friendly precise communication and exquisite details, as well as putting ourselves right in passengers' shoes render the passengers with the warmth of a spring breeze and kindred love, an atmosphere of mutual trust and numerous touching moments.

3 6 0

Three key phrases — Friendly ice-breaking communication

service process perfection and warm service and guidance at farewell

"Family Service 360" service



Six details presented — friendly and spontaneous kindness

warm and delighted words, preference prediction, pleasant environment, fine dining and consistent good service

zero — distance emotional connection

More delicious

China Southern cooperated with Michelin chefs to develop high-quality meals and promote them to all routes that deliver Western-style meals. Customers who like Chinese food can also choose fist products such as "China Southern Big Stuffed Bun " and "China Southern Big Bowl Porridge" to taste authentic, exquisite on-board meals with Lingnan characteristics.

More abundant

Promote a new version of the top TV theme planning program, enrich the content of the music channel, plan the exclusive premiere of the excellent documentary "Four Springs", and launch classic themes such as "China Southern and Your Family Fun" to enrich the travel itinerary.

Cleaner

Innovative cabin cleaning kits were launched and used on Beijing-Guangzhou route and 7 international routes. The ground floor cleaning standards were promoted and the "Outside Station Lounge Cleaning Checklist" was implemented, which was well received by passengers.

Special Passenger Services

China Southern has formulated the "China Southern Air Transport Service Plan for Disabled Persons" and "China Southern Full Process Service Specification For Wheelchair Passengers " to regulate the management of special passenger services and provide more personalized, specialized and professional services for special passengers.

Wheelchair service. Provide wheelchair services for passengers with mobility impairments to cover the places of the apron, passenger elevators, cabins and onboard, as well as check-in electric wheelchair services.



Unaccompanied passenger service. Provide unattended children and unaccompanied elders with special services such as waiting area, reading books, exclusive TV channels for children, and directing boarding by special persons on domestic flights taking off from Guangzhou. In 2019, the China Southern App innovatively launched the ticket purchase function for unaccompanied children.

Special meals. Provide special meal reservation at departure station, and Provide special meal reservation service through "China Southern e-flight " to meet the needs of different tastes.



Freight Services

China Southern relies on its developed route network to provide customers with dense freight coverage across China and Asia, connecting major cities in Europe, America, Australia, and Africa, and providing efficient, fast, and reliable air freight corridors for goods around the world.



Freighter fleet size of

14 aircraft

operation of

12

international all-cargo routes

weekly freighter volume of

50 flights

China Southern Express

"China Southern Express" products meet the service requirements of domestic aviation high-end freight product transportation by "ten advantages". Those are transportation commitment, VIP window, priority booking, early delivery, extended time limit, SMS tracking, fast delivery, free change, dedicated line inquiry and customer-customized.

Temperature control services

China Southern's "Temperature Control Products" service relies on high-efficiency air transportation, and uses cold-chain packaging or airworthy temperature-control containers, together with high-level cabins and ground service. Safe and reliable aviation cold chain service is provided for cargo sensitive to temperature, such as the fresh, the perishable or drugs. In 2019, China Southern completed the system construction, personnel training, and hardware renovation in accordance

with the Temperature-controlled Drug Transport Specifications. In January 2020, China Southern Airlines successfully passed the *International Aviation Association CEIV Pharma Certification* and ensured that the compliance of temperature-controlled drugs throughout the air transport operation and their stable quality to prevent incidents of drug failure or even endangering the health and safety of patients taking drugs.



CASE

Chinese import air carrier of Sanofi Pasteur vaccine

China Southern has developed a special transportation plan for Sanofi Pasteur's penta vaccine and influenza vaccine. In order to meet the temperature conditions of 2-8°C during the entire transportation, China Southern provides exclusive services in terms of guaranteeing processes, information transmission, facilities and equipment, and emergency disposal. In addition, China Southern has designated certain person to follow up with customers during the entire transportation process to achieve zero-error service, and became the designated Chinese import air carrier of Sanofi Pasteur vaccine. So far, the two sides have cooperated to transport more than 1,000 tons of imported vaccine products.

Customer Relationship

China Southern cherishes the good relationship with customers, and with the increasingly perfected system and actions in place, it protects the rights and privacy of customers, responds to customer needs and feedback, and improves the overall service level.

Customer Rights Protection

China Southern has formulated the "Transportation Service Management Manual", "Transportation Service Management System", "Transportation Service Management System", and "Transportation Service Product Management" to effectively protect the rights and interests of passengers.

Adjust the time ladder from 2 to 4:

Before adjustment
2 hours before departure
Within 2 hours before departure

After adjustment
7 days before departure (inclusive)
7 days to 2 days before departure (inclusive)
2 days to 4 hours before departure (inclusive)
Within 2 hours before departure

CASE

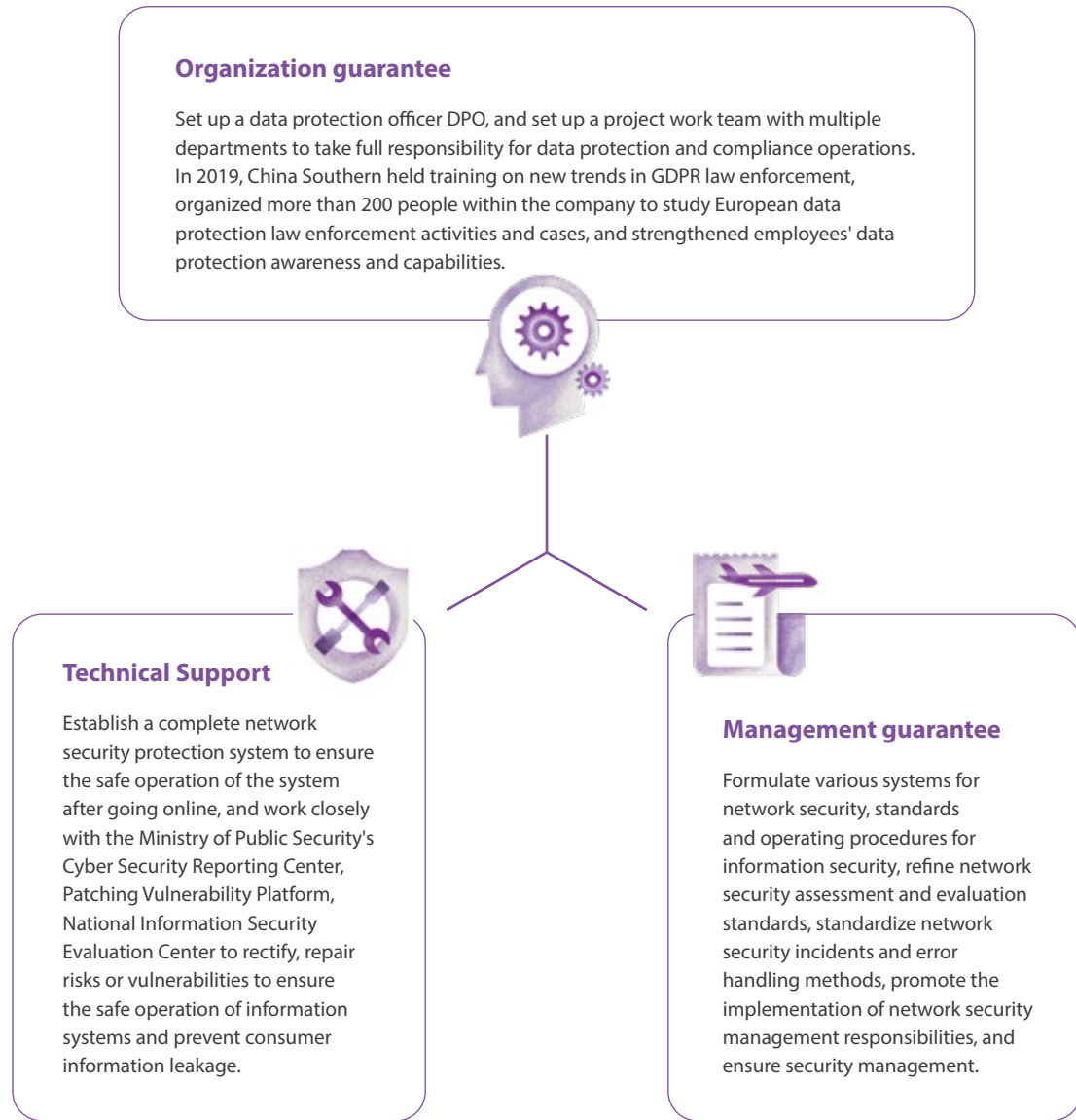
Refunds, Rules & Fares

In 2019, China Southern officially implemented a "staircase fee" for domestic airline ticket refund and modification fees. Tickets were reclassified in more steps, and the rules were clearer. "Earlier refunds, lower fees" and "the higher the class, the lower the fee". The principle of "no refunds, no changes, no transfers" no longer exists, which better meets the needs of passengers for flexible refunds.



Customer Privacy Protection

China Southern strictly complies with the requirements of the *Cyber Security Law of the People's Republic of China* and the *General Data Protection Regulation (GDPR) of the European Union*, and has formulated the "Administrative Measures for the Protection of Personal Privacy Data". In 2019, China Southern officially launched the measures of GDPR and responded promptly to its requirements, taking practical actions to protect user privacy. There were no complaints about violations of customer privacy and loss of customer data due to the security problems of information system throughout the year.



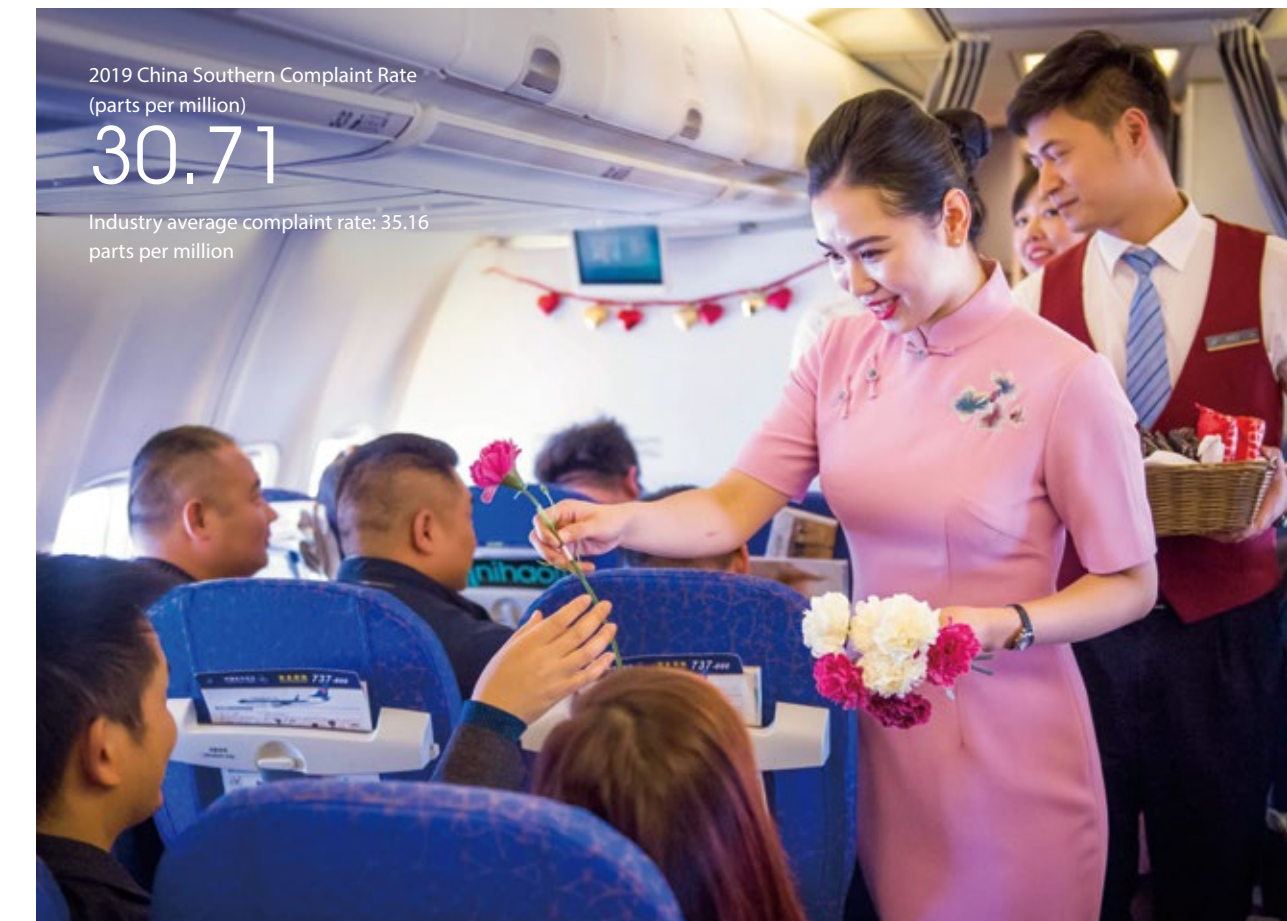
Customer Complaint Management

China Southern has continuously optimized and improved the *Customer Care Management Manual*, unified the complaint management system, established a complaint warning and process improvement mechanism, and implemented closed-loop management of complaints. China Southern attaches great importance to passenger opinions, makes full use of internal and external evaluation data such as passenger full-process satisfaction evaluation and special evaluation to find service problems and continuously improves passenger satisfaction. China Southern listened to and responded to passengers' opinions and needs through text messages, apps, surveys and other forms, and actively paid attention to the evaluation of services by external skytrax, Australian Review Network and domestic civil aviation resources network, and continuously improved service levels to make passengers more satisfied.

Optimize management processes. Establish a closed-loop service management mechanism for early warning and process optimization, change passive processing to active prevention, analyze customer complaints and major service incidents every month, and turn service shortcomings into springboards for improving service quality.

Reduce processing time. The mobile version of the customer care management system was launched to implement the pop-up reminder function for overdue complaints and speed up the complaint processing speed. Concurrently, senior managers made quick approval for all passenger compensation.

Comprehensive linkage improvement. Establish an overdue complaint improvement project team, implement segmented area management and responsibilities to certain people. Focus on improving passenger service experience, centralized complaints, service pain points and difficulties. Coordinate efforts of all parties to improve and optimize, and reduce passenger complaint rates from the source.



Employee
**HAPPY
CONNECTIVITY,
WIN-WIN
GROWTH**



The creativity of employees is an inexhaustible motive force for achieving sustainable development. As a high capital-intensive, high-tech, high-risk service industry, aviation companies have a greater dependence on human resources. In the process of international development, China Southern brings together talents from all corners of the world with an inclusive concept, providing employees with broad development space and opportunities, constantly inspiring the sense of ownership and innovation, and realizing the common efforts and growth of employees and the Company.



Rights and Interests Protection

China Southern strictly abides by the "Labor Law of the People's Republic of China" and other regulations, and gradually improves the human resource management system and employment policies. All important employment policies have been reviewed by the legal department for compliance and submitted to the company's decision-making bodies and the staff representative conference for review so as to protect all legal rights and interests of employees. In 2019, there were no major incidents that violated human rights and legal rights of employees.

Fair Employment

China Southern actively adheres to international conventions on labor and human rights, advocates equal and non-discriminatory employment policies, and provides inclusive, fair promotion opportunities for employees of different genders, ages, education, nationalities, nationalities, races, regions, religious beliefs and cultural backgrounds, eliminates all forms of forced labor, and protects employees' right to work and rest.



In 2019, China Southern's labor contract signing rate and employee social security coverage rate are 100%



In terms of staff recruitment, China Southern conducts its human resource recruitment in accordance with the principles of open, fair and just recruitment, and does not use gender, age, etc. as recruitment criteria.

With regard to employee dismissal, in strict accordance with the provisions of the Labor Law and on the rescission or termination of labor contracts, the Company has formulated the "Regulations on the Management of Labor

Contracts of the Company" to make specific restrictions on recession or termination of employees' labor contracts.

In terms of compliance employment, China Southern signed a "collective contract" and "Special Collective Contract for Labor Safety and Health" with employees to protect employees' legal rights and interests in promotion, departure, working hours, compensation and benefits, and signed a "Special Collective Contract for the Protection

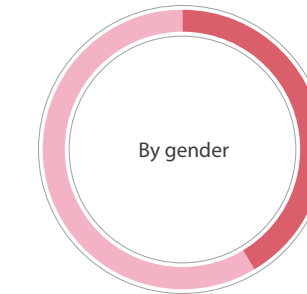
of Female Employees' Rights and Interests" which clearly states that gender equality must be adhered to in terms of recruitment, assessment, and promotion.

In terms of preventing violations, China Southern has established a human resources evaluation system, which regularly inspects and evaluates human resources work, investigates and deals with human resource issues found.

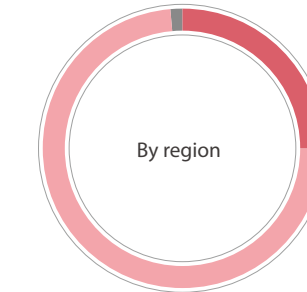
Staff Structure *

Total number of employees
103,876 person

Newly recruited employees
9,542



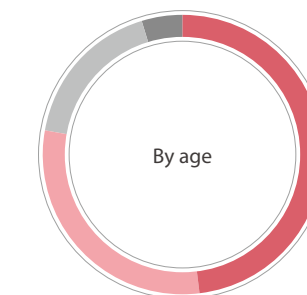
Female 41.39%
Male 58.61%



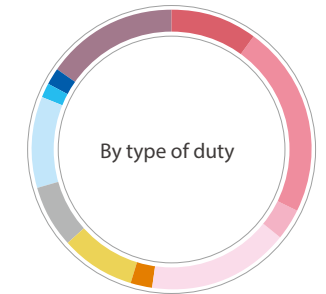
Guangzhou 25.01%
China (except Guangzhou) 73.73%
Overseas 1.26%



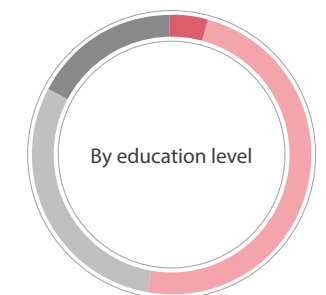
Full time employees 99.87%
Part time employees 0.13%



30 years old or below 48.09%
31-40 years old 29.83%
41-50 years old 17.36%
51 years old or above 4.72%



pilot 10.18%
Cabin crew(including part-time security personnel) 22.28%
Air marshal 3.39%
Maintenance and engineering 16.60%
Operational control 2.38%
Passenger transportation 8.61%
Freight transportation 7.32%
Ground services 10.39%
IT 1.84%
Finance 1.86%
Others 15.15%



Master degree or above 4.24%
Bachelor degree 48.77%
College degree 30.03%
Secondary education or below 16.96%

Note: Employee data is based on consolidated financial statements of China Southern.



Compensation and Benefits

China Southern adheres to the principle of marketization, adapts to labor market conditions and needs of the company's development strategy, provides employees with a competitive salary level in the industry, and fully attracts and motivates outstanding talents. Adhere to value creation as the guidance, linked to post value and performance contribution, formulate salary management methods for air crew and ground staff, establish and improve a dynamic employee salary growth mechanism, provide employees with good benefits, and enhance their sense of belonging, happiness and gain.

Diversified benefits

Ten insurance and two benefits

Basic endowment insurance, basic medical insurance, supplementary medical insurance, work injury insurance, maternity insurance, unemployment insurance, personal accident insurance, pilot disability insurance, employer liability insurance, aircrew special personal insurance, enterprise annuity, housing provident fund .

Holiday benefits

Statutory holidays, holidays for some employees (Women's Day, Children's Day, Youth Day, ethnic minority holidays), paid annual leave, family leave, marriage leave, menstrual leave, maternity leave, nursing leave, paternity leave, work injury leave, sick leave, funeral leave, one-child care leave, birthday leave, etc.

Health Checkup

Provide a free health checkup for employees once a year.

CASE

Reform of compensation policy, sharing reform and development bonus with employees

In 2019, in accordance with the overall goals of "ranks can go up and down, income can increase or decrease, employees can move in and out", China Southern comprehensively launched the reform of the employment, labor and distribution systems, and established the new position specification system, performance evaluation, compensation management, and total payroll management mechanisms. At the same time, China Southern took the opportunity to reform the employment compensation system, perfected the construction of incentive mechanisms, and further stimulated the enthusiasm, initiative and creativity of all employees.

Employee Development

China Southern regards employee development as a prerequisite for the long-term development of the company. According to the company's strategic orientation, it formulates the "Master Education & Training Plan (2018-2025)", establishes a unified training plan, strengthens the top-level design, and promotes the integrated development of training. At the same time, China Southern has established a training system including a curriculum system, a teacher system, and an operating system, which constitute a mutually supportive organizational learning system, offer diversified training, comprehensively help employees grow, and provide talent guarantee for the construction of a world-class enterprise.

Training of high-skilled personnel.

The "Hundred Talents Plan" was launched. In 2019, the warehousing and project approval of personnel in the maintenance and cabin system was carried out. The personnel in the maintenance and cabin system were supported to carry out industry-university-research projects with special funds, and the training of highly skilled personnel was promoted in an orderly manner.

Training of young cadres.

Carry out the "Ten, One Hundred, One Thousand" plan, organize mid-level youth classes and basic training classes for cadres in different stages, and strive to build a highly qualified and professional young cadre team with politically competent, highly skilled, professionally competent and worthy of heavy responsibilities. Throughout the year, two mid-level youth classes and two basic training classes were held to train 104 outstanding young cadres.

Special training for staffs.

Throughout the year, 1,996 in-service training sessions for pilots, flight attendants, and security personnel were conducted. A total of 25 English training courses were organized, and 44 business training courses were conducted. Training for 888 new employee were completed, and 184 new PC courses and 1,278 micro-lecture chapters were added to the online training, which constantly improved employees' professional capabilities.





CASE

Training in Tsinghua promotes growth of the trainees

Carrying out excellent team leader training is a major project implemented by China Southern to strengthen the training of basic talents. From March 10th to April 3rd, China Southern's 29th and 30th Excellent Team Leader Training Classes were held at Tsinghua University. Over 220 outstanding team leaders from various units of China Southern spent 10 unforgettable days in Tsinghua University. During the training, more than 10 well-known experts in the field of management taught courses for China Southern students on aviation business management, innovative thinking, and improvement of work efficiency, and stimulated students' enthusiasm through various teaching activities such as special lectures and case studies, which broadens students' horizons and improves their business capabilities.

After 10 days of study, I not only updated my ideas and thinking mode, expanded my working ideas and improved my ideological realm, but also forged a deep friendship with my classmates!

—Fan kun, student representative of the 29th session



Staff Training

Staff training	Training concerned staff	Training time per staff/hours
Total	63,665	134.36
By gender	Female	28,616
	Male	35,049
By level	High-level	596
	Mid-level	4,745
	Basic-level	58,324

Note : data on Xiamen Airlines and non-aviation holding subsidiary excluded

Happy Workplace

China Southern attaches importance to employees' living standards and quality of life, provides employees with humane care and rich spiritual and cultural life, and creates a relaxed and enjoyable workplace environment, so that everyone in China Southern can fully enjoy the sense of value and gain in professional life.

Employee care

China Southern continued to promote employee health care projects, formulated the "Administrative Measures for Employees' Mutual Aid Funds", the "Administrative Measures for labor Workers' Mutual Aid Funds", the "Administrative Measures for Civil Aviation Female Employees' Mutual Aid Funds," and "Administrative Measures for Assistance for Difficult Employees". Caring activities for company employees were implemented.

In 2019, China southern applied for a total of 900,000 yuan for 63 sick female employees. It set up files for employees with difficulties and allocated 1.224 million yuan of funds for employees with difficulties reaching 380 families; A total of 4.655 million yuan was distributed to special groups, including 9 labor workers from poor families, 63 sick female employees and 479 employees suffering from serious diseases.

Staff activities

China southern advocates "happy work and healthy life" for employees, actively enriches their spare time life, and helps them achieve the balance between work and life. In 2019, with the platform of the fourth staff culture festival of "Sunshine southern airlines, beautiful home", China southern successively held a series of staff culture activities including spring reception party, spring garden party, table tennis competition, chess and card competition, host competition, and book and picture competition, providing a personal display platform for employees and enriching their spiritual and cultural life.

CASE

Establishing a 1 + e staff service system to provide intelligent and considerate services for staffs

In 2019, China Southern's Guangzhou Headquarters staff service center's three-site self-service equipment was fully put into operation, realizing 7 * 24 hours self-printing service of 8 kinds of certificates including identity certificate, work experience certificate, visa certificate, etc., to accelerate the intelligentization of staff services. At the same time, China Southern also put into operation the first intelligent robot to provide staffs with business handling guidelines, shuttle inquiry, and flight dynamic inquiry services to further improve service levels for the staffs.



Society

WARM CONNECTION AND HARMONIOUS DEVELOPMENT



As a responsible international enterprise, China Southern attaches great importance to both corporate development and social prosperity. It takes advantage of its own advantages to ensure special flights, actively conducts public welfare volunteer activities, promotes win-win cooperation among countries and regions along the "Belt and Road Initiative", and works with suppliers to create responsible supply chain to contribute to the building of a community of Shared future for mankind through commitment and friendship.



Special Flight

China Southern strives to ensure the smooth flow of major transportation, successfully executes various important charter flights and special flight missions, and launches emergency rescue operations. In 2019, China Southern focused on the transportation guarantee tasks of the "two sessions", the Boao Forum, the "One Belt And One Road" summit forum, the Beijing Garden Expo, the Asian Civilization Dialogue Conference, the World Port Conference, the China-Africa Economic and Trade Fair, the Davos Forum, the Military Games. The major special transportation support tasks of civil aviation have highlighted the responsibilities of state-owned enterprises.

A total of **54** important charter missions were performed throughout the year, and **4,915** Person-times were transported.

CASE ✈

Emergency rescue aid to Mozambique thousands miles away

In mid-March 2019, Mozambique was hit by a tropical cyclone "Idai". Storms and heavy rainfall caused severe floods, landslides and river breakwaters, causing major casualties and property damage. Mozambique entered a state of emergency across the country and requested the Chinese government to implement Rescue.

It is the first time China Southern has flown to Mozambique for a rescue. At noon on March 22, on receiving the rescue mission, China Southern immediately began preparations for route calculation and operational risk assessment. However, there are no direct flights between Mozambique and the Beijing Capital Airport, and emergency rescue flights need to fly over 6 countries. China Southern has completed the route performance analysis and assessment, the application of the flight schedule, and the international overflight permission application in the shortest time. At 17:58 on March 24, China Southern's rescue flight took off from Beijing. Fourteen hours and 18 minutes later, a flight carrying 65 medical paramedics and nearly 20 tons of emergency aid arrived in Maputo, the capital of Mozambique.

China Southern once again successfully completed the emergency rescue flight support mission, demonstrating the national strength and the role of China Southern as a central enterprise.



Volunteer Service

The development of an enterprise are inseparable from society. China Southern always sticks to its original intention, keeps its mission in mind, and takes the responsibility of giving back love to society as its duty. China Southern insists on fulfilling its political, economic, social, environmental protection and public welfare responsibilities, and promotes harmonious social development.

In 2019, China Southern formulated the "Implementation Opinions on Further Strengthening China Southern's Voluntary Service Work", set up a Volunteer Service Steering Committee and Volunteer Association to continuously expand community participation and promote community development with better policy and organizational guarantees.

In 2019,
 Number of volunteers
3,500 person-times
 Volunteer hours
36,000 hours



CASE ✈

"99 Charity Day-Little Red Flower" theme flight

From September 10 to 12, 2019, China Southern and Tencent Public Welfare jointly launched the "99 Public Welfare Day-Little Red Flower" theme flight from Guangzhou-Urumqi-Vienna. The "99 Charity Day-Little Red Flower" theme flight aims to encourage passengers to "do good deeds together" and bring "samples of China" to Europe. Passengers on this public-interest flight were surrounded by "little red flowers", which symbolize love, as they took a rest from the lounge, boarded the plane and entered the cabin. Many tourists took the initiative to learn about the charity project and donated money. They also wrote their best wishes to the recipients on the postcards.


CASE
Warm winter trip, let love spread

In order to carry forward the traditional virtue of respecting the old and cherishing the young of the Chinese nation and carry out the practice that the elderly and children can feel the warmth in the cold winter, China Southern Shenzhen Branch and Shenzhen Airlines Food Company organized a warm winter activity in Shenzhen Baoan Welfare Institute in the winter solstice of 2019. During the event, the condolation group performed a wonderful program for the children of the orphanage. The passion and vigorous song and dance performances brought the unique winter warmth to the orphanage, and signified the grand opening of the warm winter activity with cheers. People gathered together to make dumplings, baked pastries, and experienced the lively atmosphere of the festival. China Southern hopes to provide help for the elderly and children within its ability. It calls on people from all walks of life to pay attention to and care for the disadvantaged, and to form a social trend of enthusiasm for public welfare and respect for the elderly and the young.

“Belt and Road Initiative”

The "Belt and Road Initiative" has established a broader platform for Chinese companies to "go global". China Southern actively integrates into the country's "Belt and Road Initiative", continues to increase international and regional transportation capacity investment, actively integrates into local communities, and helps countries along the "Belt and Road Initiative" to achieve facility connectivity, smooth trade, and cultural connectivity.

By the end of 2019, China Southern has opened

102 routes along the "Belt and Road Initiative", and has

768 round-trip flights every

week. The number of routes, flight frequency and market share rank first among domestic airlines. (The data includes Chongqing airline and excludes Xiamen Airlines)

Route connectivity

China Southern has continued to increase its capacity investment and established a comprehensive air route network in South Asia, Southeast Asia, South Pacific, and Central and Western Asia, which are the major areas covered by the "One Belt and One Road" Initiative, and has become the main force for aviation connectivity between China and the countries and regions along the route.

China Southern opens Guangzhou-Cebu, Sanya-Bangkok, Guangzhou-Urumqi-Nur-Sultan, Guangzhou-Changsha-Nairobi and other routes, increasing the frequency of Guangzhou-Manila, Shenzhen-Jakarta, Guangzhou-Bali and other routes to strengthen the interconnection with the countries along the route.

Smooth trade

China Southern has continuously strengthened the air connectivity between China and the cities along the "Belt and Road Initiative", which has directly promoted regional economic development. It also has a continuous stream of development vitality for personnel exchanges and material exchanges.

In Xinjiang, China Southern signed a strategic cooperation agreement with the Xinjiang Uygur Autonomous Region. Xinjiang's air route network can reach more than 10 neighboring countries, including Kazakhstan, Turkmenistan, Russia, Pakistan, and Georgia, and it is working hard to propel the construction of Urumqi International Aviation Hub and promote economic development. China Southern Airlines opens first direct flight to Turkey from Central China, allowing passengers from Central to and from Turkey to shorten at least 10 hours, accelerating cultural, tourism, and economic exchanges between Central China and Turkey.





Cultural connectivity

With the continuous development and deepening of business, China Southern has also taken root in the areas along the "Belt and Road Initiative". China Southern has recruited local staff. There are more than 200 foreign flight attendants from France, the Netherlands, Australia, Malaysia and other countries, providing services to passengers on flights to different corners of the world. At the same time, China Southern's sales offices around the world have conducted cultural exchanges with local communities, actively integrated into local communities, and promoted the friendship between Chinese people and the people along the "Belt and Road Initiative".



Netherlands

Signed a contract with the famous football team Ajax and became the exclusive air ticket cooperation supplier



United States

Walk into the Shouxing Building in the San Francisco Bay Area, carried out the activity "service community, warm mountain residence"

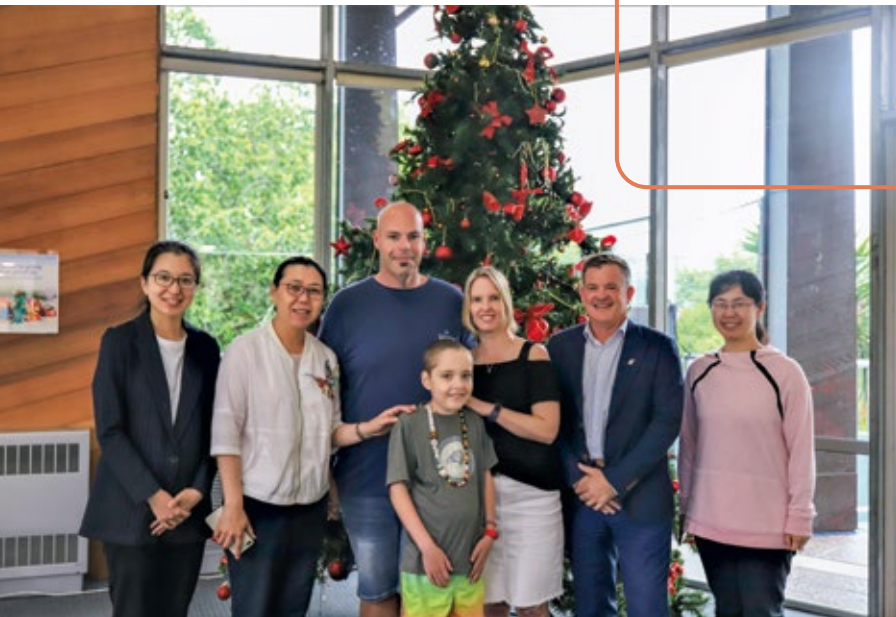


Italy

Participated in the Italian Chinese Film Festival and awarded honors to local government officials and civil society people who made outstanding contributions

New Zealand

Become a National Partner of "Uncle McDonald's House Charity Foundation"



Netherlands

Settled in the 20th Lantern Festival in Auckland as the sole airline sponsor



United States

Hosted the listing ceremony of San Francisco-Guangzhou Tourism Promotion Center to introduce Guangzhou tourism resources



CASE ✈️

Holding "air temple fair", opening the window of Lingnan culture for the world

During the Spring Festival of 2019, China Southern held an "air temple fair" in the cabin of the aircraft for the second consecutive year. More than 2,000 passengers from Africa, Asia, North America, Latin America, Oceania, and Europe hung lanterns, guessed lantern riddles, ate dumplings and experienced the endless charm of traditional Chinese culture, Lingnan culture, and Guangfu temple fair.

China Southern flight attendants turned into "Guangfu Cultural Courier", introduced the Chinese New Year customs, the Guangfu Temple Fair and the cultural connotation to the passengers, invited the passengers to guess lantern riddles and make lanterns, and sent a Chinese New Year gift package to each passenger. The postcards show the traditional customs and intangible cultural heritage of Guangzhou, so that visitors will know more about Guangfu Temple. The air journey of passengers has become an immersive journey of Chinese culture, and the aircraft cabin has become a space for the dissemination and exchange of Chinese culture.


This aerial temple fair has a very new form of activity and is a very good cultural dissemination event.

 --- Ms. Zhang,
a Chinese Canadian tourist



Supply Chain Management

China Southern believes that a sustainable supply chain can promote its own better operation and the growth of its suppliers. In 2019, China Southern has been actively transforming to supply chain procurement. According to the modern supply chain management concept, it has improved rules and regulations, strengthened hierarchical management, comprehensively standardized supplier management, and prevented supply chain risks. It has worked with the supply chain to provide better services for passengers and other relevant parties, and promoted the high-quality development of the company.

Standardized procurement management

China Southern has developed 15 policies including "Procurement Management Volume", "Procurement Risk Control Management Volume" and procurement volumes for flight, engineering and construction projects, and maintenance, also including "Supplier Management Measures" and "Supplier Inspection Post Operation Process". The internal control system of China Southern's procurement and supplier management were standardized and improved to prevent risks in the supply chain.

Hierarchical management of suppliers

By Carrying out hierarchical and differentiated management of supply, and divide suppliers into excellent suppliers, qualified suppliers, registered suppliers and blacklisted suppliers, China Southern has built a comprehensive supplier library and brand library, standardized the management of suppliers, and provided preferential policies for excellent suppliers, thus excellent suppliers have the motivation to continue to strengthen the cooperation with China Southern and create a benign supplier ecosystem.

Responsible procurement

China Southern promotes the procurement of green products from the source. In the cabin, China Southern purchased the dining car made of lightweight materials to reduce the weight of the dining car and reduce fuel consumption in flight. At Daxing International Airport, China Southern is 100% committed to using new energy general vehicles, with the purchase of 16 new vehicles during the year.



Total number of suppliers
13,479

South Central China 4,473	Northeast China 1,260	East China 1,323
North China 1,330	Northwest China 861	Southwest China 742
Hong Kong, Macau and Taiwan 16	Outside Mainland 2,298	Regions not specified 1,176

Report Indicators Index

ESG indicators index

Aspect	Aspect number	"Comply or Explain" provision	Location in this report
Environmental			
A1 : Emissions	General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuers relating to waste gas and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste	P52, P56, P57
	A1.1	The types of emissions and respective emissions data	P50-51, P56
	A1.2	Energy direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tons) and (if applicable) intensity (eg, per unit of production volume, per facility)	P50
	A1.3	Total hazardous waste produced (in tons)and, where appropriate, intensity(e.g. per unit of production volume, per facility.	P51
	A1.4	Total non-hazardous waste produced (in tons)and, where appropriate, intensity(e.g. per unit of production volume, per facility.	P51
	A1.5	Description of the emissions targets and the steps taken	Emission targets have not been disclosed for the time being, and relevant plans are being formulated.
	A1.6	Description of the methods used to treat hazardous and non-hazardous waste; description of the waste reduction goals and steps taken.	P56-P57 Waste reduction targets have not been disclosed for the time being, and relevant plans are being formulated.
A2 : Use of Resources	General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	P52
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (KWH in 1000s) and intensity (e.g. per unit of production volume, per facility).	P50-P51
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P50
	A2.3	Description of the energy efficiency goals and the steps taken.	P52-P55 Targets have not been disclosed for the time being, and relevant plans are being formulated
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved	P57
	A2.5	Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced	P51
A3 : The Environment and Natural Resources	General disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	P52- P54
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P52- P54

Aspect	Aspect number	"Comply or Explain" provision	Location in this report
A4 : Climate Change	General disclosure	Identification and response to mitigation measures related to significant climate-related issues that have and may affect issuers	P52-P55
	A4.1	Description of the major climate-related issues that have had and are likely to have an impact on issuers and the actions taken to address them.	P52
Social			
B : Employment	General disclosure	Information on : (a) policies and (b) compliance with relevant laws and regulations that have a material impact on the issuer relating to remuneration and dismissal, recruitment and promotion, working hours, leave, equal opportunities, diversity, anti-discrimination and other welfare and benefits.	P74
	B1.1	Total number of employees by gender, type of employment (including full-time and part-time), age group and region.	P75
	B1.2	Rate of employee turnover by gender, age group and region.	N/A The related information have not been disclosed for the time being and the relevant data statistics is being conducted.
B2 : Health and Safety	General disclosure	Information on : (a) policies and (b) compliance with relevant laws and regulations that have a material impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	P46
	B2.1	Number and rate of deaths due to work in each of the past three years (including reporting year)	P46
	B2.2	Number of working days lost due to work-related injury.	P46
B3 : Development and Training	General disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities	P77-P78
	B3.1	Percentage of trainees by gender and type of employees (e.g. senior management, middle management, etc.).	P78
	B3.2	Average number of hours of training completed per employee by gender and type of employee.	P78
B4 : Labor Standards	General disclosure	Information on : (a) policies and (b) compliance with relevant laws and regulations that have a material impact on the issuer relating to preventing child and forced labor.	P74
	B4.1	Description of measures to review employment practices to avoid child and forced labor.	P74
B5 : Supply Chain	B4.2	Description of steps taken to eliminate such practices when discovered.	P74
	General disclosure	policies on managing supply chain environmental and social risk.	P89

Aspect	Aspect number	"Comply or Explain" provision	Location in this report
B : Supply Chain Management	B5.1	Number of suppliers by region.	P89
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, the way they are implemented and monitored.	P89
	B5.3	Description on the practices for identifying environmental and social risks at each stage of the supply chain, as well as the implementation and monitoring methods.	N/A China Southern gradually improving its supply chain management methods, incorporating environmental and social risks into its management.
	B5.4	Description on the practices used to promote the use of environmentally friendly products and services in the selection of suppliers and the relevant enforcement and monitoring methods.	P89
B6 : Products Responsibility	General disclosure	Information on : (a) policies and (b) compliance with relevant laws and regulations that have a material impact on the issuer relating to health and safety, advertising, labeling and privacy matters relating to products and services provided and methods of redress	P46
	B6.1	Percentage of total products sold or shipped that need to be recalled for safety and health reasons.	Label related policy is not available
	B6.2	The number of complaints received about products and services and how to respond.	P71
	B6.3	Description on practices related to the protection and protection of intellectual property rights.	P9
	B6.4	Description on the quality verification process and product recovery procedures.	Label related policy is not available
	B6.5	Description on the consumer data protection and privacy policy and the relevant enforcement and monitoring methods.	P70
B7 : Anti-corruption	General disclosure	Information on : (a) policies and (b) compliance with relevant laws and regulations that have a material impact on the issuer relating to bribery, extortion, fraud and money laundering.	P9
	B7.1	The number and results of corruption cases brought against and concluded against the issuer or its employees during the reporting period.	P9
	B7.2	Description on preventive measures and reporting procedures, as well as relevant enforcement and monitoring methods.	P9
	B7.3	Description on the anti-corruption training activities provided to directors and staff	P9
B8 : Community Investment	General disclosure	policies on community involvement to understand the needs of the community in which the operation operates and to ensure its activities take into consideration the communities' interests.	P24-P27, P83
	B8.1	Focus areas of contribution (e.g. education, environmental issues, Labour needs, health, culture, sports).	P24-P27, P83
	B8.2	Resources (such as money or time) used in the focus area.	P26-P27

GRI standards indicator index

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