



**China Southern Airlines Co., Ltd.**

Report Preparation: Steering Committee of Social Responsibility of China Southern Air Holding Co., Ltd.

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2023  
China Southern Airlines Co., Ltd.  
**Corporate Social  
Responsibility Report**

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## Letter from the Chairman

In 2023, under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, China Southern Airlines upheld the guiding principles in the 20th CPC National Congress, and harmonized efforts concerning safe production and operations, as well as reform and development. We diligently fulfilled our economic, political, and social obligations as a central state-owned enterprise and actively exemplified the civil aviation commitment to benefiting the people.

### The security situation remained stable

China Southern followed General Secretary Xi Jinping's important instructions on civil aviation safety, advanced the construction of seven major safety systems, and effectively managed risks associated with the rapid increase in flights. With an annual total of 2.842 million safe transportation flight hours and a cumulative total exceeding 30 million safe flight hours, the company was honored with the "Three-Star Flight Safety Diamond Award", maintaining its leading safety position in China's civil aviation industry.

### The business response achieved good results

Domestic flights were completely reinstated to support economic and social advancement while international routes were progressively reopened. The annual aggregate transportation turnover, passenger traffic, and cargo/mail volume amounted to 29.79 billion ton-kilometers, 142 million passengers, and 1.583 million tons, respectively. China Southern drove the adjustment and optimization of its five major structures: fleet, market, human resources, industry, and assets and liabilities. Emphasizing the initiative of "strengthening weak links, enhancing quality, and pursuing excellence", we prioritized enhancing operational efficiency, conducting special activities for streamlined cost control, fostering the China Southern ecosystem, and swiftly enhancing operational performance and benefits.

### The development momentum was constantly stimulated

We enhanced China Southern's concept for high-quality development, detailing six major actions under new circumstances. Positive progress was made in key strategies such as contributing to the development of Beijing as a transportation hub, enhancing market control in the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area), and digital transformation. China Southern achieved Grade A in the three-year evaluation of state-owned enterprise reform, leading among the three major airlines. Additionally, two "double hundred enterprises"—Logistics and General Aviation companies—were chosen as benchmarks. We further intensified and enhanced the reform of state-owned enterprises in terms of functions, missions, and mechanisms from a new starting point, and accelerated the development of key strategic emerging industries that are closely linked to the civil aviation industry.

### The service brand continued to improve

We consistently implemented initiatives to enhance flight punctuality, including a passenger-centric flight punctuality system. Our annual flight punctuality rate stood at 88.82%, surpassing the industry average by 1.02%. China Southern continued to propel the integration of humanized, digitalized, refined, personalized, and convenient services, elevating the service quality management system. We were granted notable accolades by streamlining the entire customer service chain and processes and executing a meal quality enhancement program, including the "Five Star Diamond Award for Airlines" from the World Brand Lab and CAPSE's prestigious "Best Airline Award" for six successive years.

### The green development was accelerated

In alignment with China's carbon peaking and carbon neutrality goals, a *Carbon Peaking Action Plan of China Southern Air Holding Company* was formulated, with implementation of digital fuel-saving practices across operations, electronic waybills, on-demand meal services, and the Fly Green Passenger Carbon Offset Service. Over the year, the Fly Green on-demand meal service engaged more than 4,863,500 passengers. In 2023, we saved 175,100 tons of fuel and reduced 551,600 tons of carbon emissions. These efforts earned us the title of "Sustainable Brand of the Year" from the Sky Choice Travel Awards by China Civil Aviation magazine.

### Efforts were made to help rural revitalization

We established a unique support model under a co-development framework agreement with Hotan in Xinjiang, and launched comprehensive programs to offer organizational, industrial, talent, educational, and consumer support. An aircraft livery-themed Xinjiang Hotan Rural Revitalization was introduced, and an Air Support Pathway was developed across the board. In 2023, we invested a total of RMB 74.6987 million in recipient counties for paired-up assistance, providing training to 3,061 individuals and attracting investment totaling RMB 1.828 billion. Our initiatives also led to the establishment of 28 enterprises and projects in those counties, creating over 1,200 new jobs.

2024 is a key year to achieve the goals and tasks of the 14th Five-Year Plan, as well as for China Southern to fully recover from the impact of COVID-19 and pursue high-quality development. China Southern will adhere to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implement the guiding principles of the 20th CPC National Congress, and steadfastly advance high-quality development. With unwavering confidence, shared objectives, and pioneering spirit, we will take concrete steps while striving to become a world-class airline, making greater contribution to advancing national rejuvenation through the Chinese path to modernization.

Ma Xulun  
Chairman  
China Southern Airlines Co., Ltd.



# Honors

AAA-level Enterprise of Market Quality Credit by China Association for Quality

★

China Association for Quality

Five Star Diamond Award for Airlines in 2023

★

World Brand Lab

AAA

Three-Star Flight Safety Diamond Award

★

Civil Aviation Administration of China

Ranking 13th among "Best Airlines in the World" by Skytrax

★

Skytrax

China Reform ESG Ratings AA-rating

★

China Reform Consulting under China Reform Holdings Corporation Ltd.

"Cargo Airline of the Year", "Sustainable Contribution Brand of the Year", and "Corporate Social Responsibility Brand of the Year" of the Sky Choice Travel Awards

★

CAAC Inflight Magazine

Top 1 in the 2023 "Safe Civil Aviation" Assessment (Central and Southern China)

★

The Office of the Capital Spiritual Civilization Construction Committee

Ranking 6th among the "World's 50 Most Valuable Airlines" in 2023

★

Brand Finance

"Corporate Governance Best Practice Case" and "Best Practice Case of Boards of Directors of Listed Companies" in 2023

★

China Association for Public Companies

Being awarded an A-rating in information disclosure of the listed company for the 10th consecutive year

★

Shanghai Stock Exchange

"Top 50 Central State-owned Enterprises in the ESG Golden Bull Awards" and "Top 100 Enterprises in the ESG Golden Bull Awards"

★

China Securities Journal, and China Reform Consulting under China Reform Holdings Corporation Ltd.

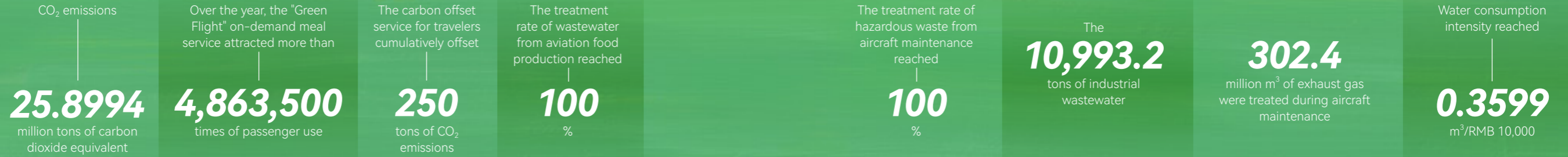
Award Name	Awarded by
Ranking 12 <sup>th</sup> in the "2022 Top 30 Central State-owned Enterprises in Brand Building Capability"	State-owned Assets Supervision and Administration Commission of the State Council
China Southern's "Flight Data Analysis and Simulation Playback" won the third prize in the user service category of the First State-owned Enterprise Digital Scenario Innovation Professional Competition	State-owned Assets Supervision and Administration Commission of the State Council
China Southern's "Easy Luggage Pass" project won the second prize in the production and operation section in the First State-owned Enterprise Digital Scenario Innovation Professional Competition	State-owned Assets Supervision and Administration Commission of the State Council
Three collectives and one individual were honored with the National May Day Labor Award	All China Federation of Trade Unions
"China Southern App Service Experience Upgrade" was selected as the Excellent Case by the Ministry of Industry and Information Technology	Ministry of Industry and Information Technology of the People's Republic of China
The China Southern Development History Gallery was selected as the "Three Cases of Enterprise Archive Work Innovation in 2023"	National Archives Administration of China
One collective and two individuals won the National "Two Red and Two Excellent (Excellent Red Flag Youth League Committee and Red Flag Youth League Branch, Outstanding Communist Youth League Member, and Excellent Communist Youth League Cadre)" Commendation	Central Committee of the Communist Youth League
China Southern's two studios were awarded as the National Civil Aviation Model Worker and Craftsman Talent's Innovation Studios	Civil Aviation Trade Union of China, CAAC
"Best Airline Awards 2022" and "Civil Aviation Innovation Pioneer Award" by CAPSE	CAPSE
"China Southern's Cabin Service Quality Improvement Action in Spring Festival Travel Rush" project won the Excellence Award of the CAPSE Civil Aviation Quality Improvement Practice Competition	CAPSE
Outstanding Achievements of Transportation Brand Building in 2023	China Association of Communication Enterprise Management
Trusted Cloud 2022-2023 Annual User Best Practice Award	China Academy of Information and Communications Technology and China Communications Standards Association
The "Exploration and Practice of Smart Sharing Construction of China Southern" case won the Excellent Case Award for Shared Service	Financial Sharing Integration Professional Committee of Enterprise Financial Management Association of China
Being awarded a Special Prize in the National Red Cross Emergency Rescue Contest	The Red Cross Society of China and the Ministry of Emergency Management
China Southern Airlines e-Home Smart Collaborative Office Platform won the 2022-2023 Benchmark Case of Digital Transformation for Civil Aviation Enterprises	Civil Aviation Information Technology Application Branch of China Computer Users Association
"Top Team Award" in the Transportation Industry of the 5th National Network and Information Security Information Notification Mechanism Central State-owned Enterprise Cybersecurity Competition	Co-hosted by the Secretariat of Central State-owned Enterprise Network and Information Security Information Notification Mechanism, and the Critical Information Infrastructure Protection Center of the Ministry of Public Security
China Digital Breakthrough Practice Award	China Corporate Governance Experts 50+ Forum
2022 Excellent Case of Internet Application in Elderly-friendly and Barrier-free Transformation	China Academy of Information and Communications Technology
Capital Spiritual Civilization Construction Award	Office of Capital Spiritual Civilization Construction Committee
"ESG Model Enterprise Award for Listed Companies" in 2023	Times Media Group
The "Green Flight" On-demand Meal Service Project of China Southern was awarded as a 2023 Responsibility Case	Southern Weekly
"Golden Brand in 2023"	Yicai



# ESG Performance



## Environment



## Society



## Governance





# About Us

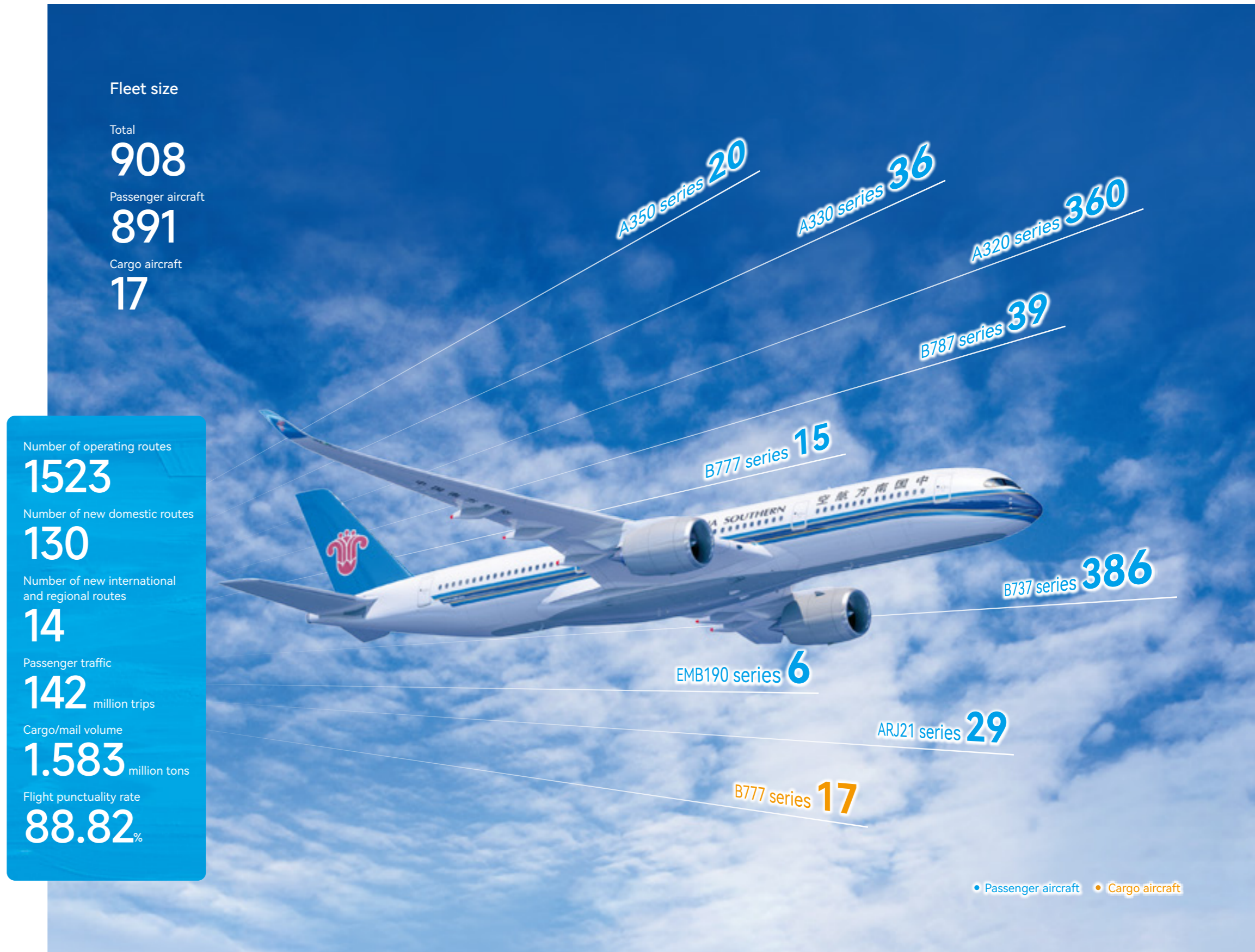
## Company Profile

Headquartered in Guangzhou, Guangdong Province, China Southern Airlines Co., Ltd. (short for "China Southern" or "the Company") is directly affiliated to China Southern Air Holding Company Ltd. and specializes in air transportation services. The company logo features a blue vertical tail fin with a brilliant red kapok flower on it. With the corporate mission of "Bringing Better Flights to More", China Southern adheres to the core values of "Safety First and Customer-Oriented", vigorously promotes the spirit of "Diligence, Pragmatism, Inclusiveness, and Innovativeness", and strives to become a world-leading air transportation service company.

China Southern directly or indirectly controls nine airlines engaged in passenger and cargo transportation services, namely Xiamen Airlines Co., Ltd., Chongqing Airlines Co., Ltd., Henan Airlines Co., Ltd., Guizhou Airlines Co., Ltd., Zhuhai Airlines Co., Ltd., Shantou Airlines Co., Ltd., Hebei Airlines Co., Ltd., Jiangxi Airlines Co., Ltd., and China Southern Airlines Cargo Logistics (Guangzhou) Co., Ltd., and has a stake in Sichuan Airlines Co., Ltd. It has 18 branches, such as the Xinjiang Branch, the Northern Branch, the Beijing Branch, the Shenzhen Branch, and the Shanghai Branch, and two bases, which are located in Nanyang and Foshan respectively. It also operates 21 domestic sales offices in cities such as Hangzhou, Nanjing, and Xining, and 52 overseas sales offices in Los Angeles, New York, London, and Paris, among other cities.

China Southern stands out as the premier transportation airline in China, boasting the largest fleet, a highly developed route network, and the highest annual passenger volume. We hold the top spot among domestic airlines across various metrics including the number of routes, flight frequency, and market share. Notably, we have maintained our lead in passenger traffic impressively for 44 consecutive years, surpassing all other domestic carriers. China Southern enjoys the highest safety rating and maintains the best safety record among domestic airlines, taking the lead in safety management in the world. In 2023, it became the first in the industry to receive the "Three-Star Flight Safety Diamond Award" granted by CAAC.

We have contributed a lot to the development of Guangzhou and Beijing as two comprehensive international air transportation hubs. In Guangzhou, China Southern has been promoting the "Canton Route" to help the city grow into the major gateway that connects the Chinese mainland with Oceania and Southeast Asia and serves the Greater Bay Area and the Belt and Road Initiative. Meanwhile, as the largest hub carrier in Beijing Daxing International Airport, it operates the hangar with the largest span in Asia, as well as Asia's largest operation control center and production base for in-flight food.

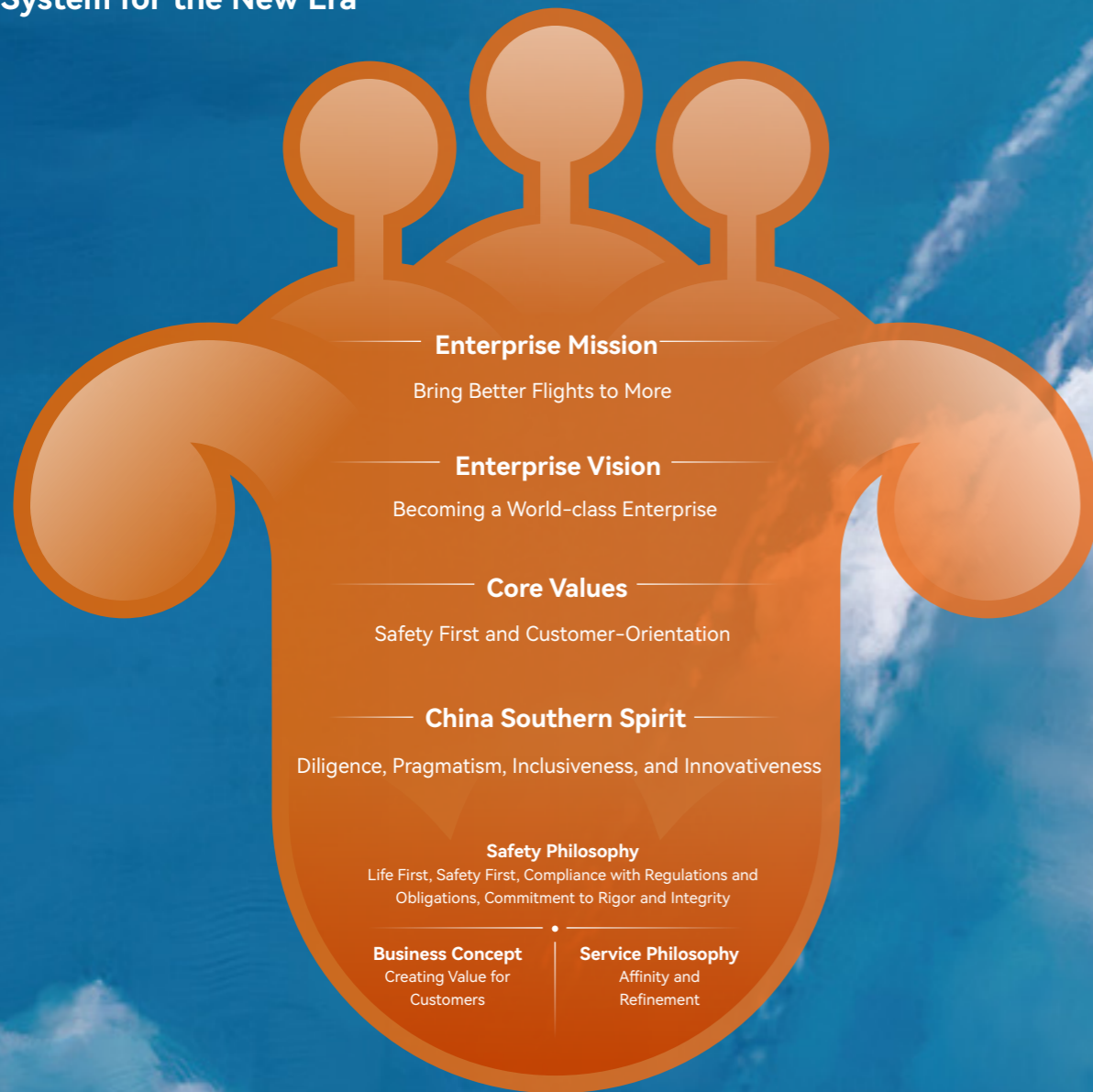




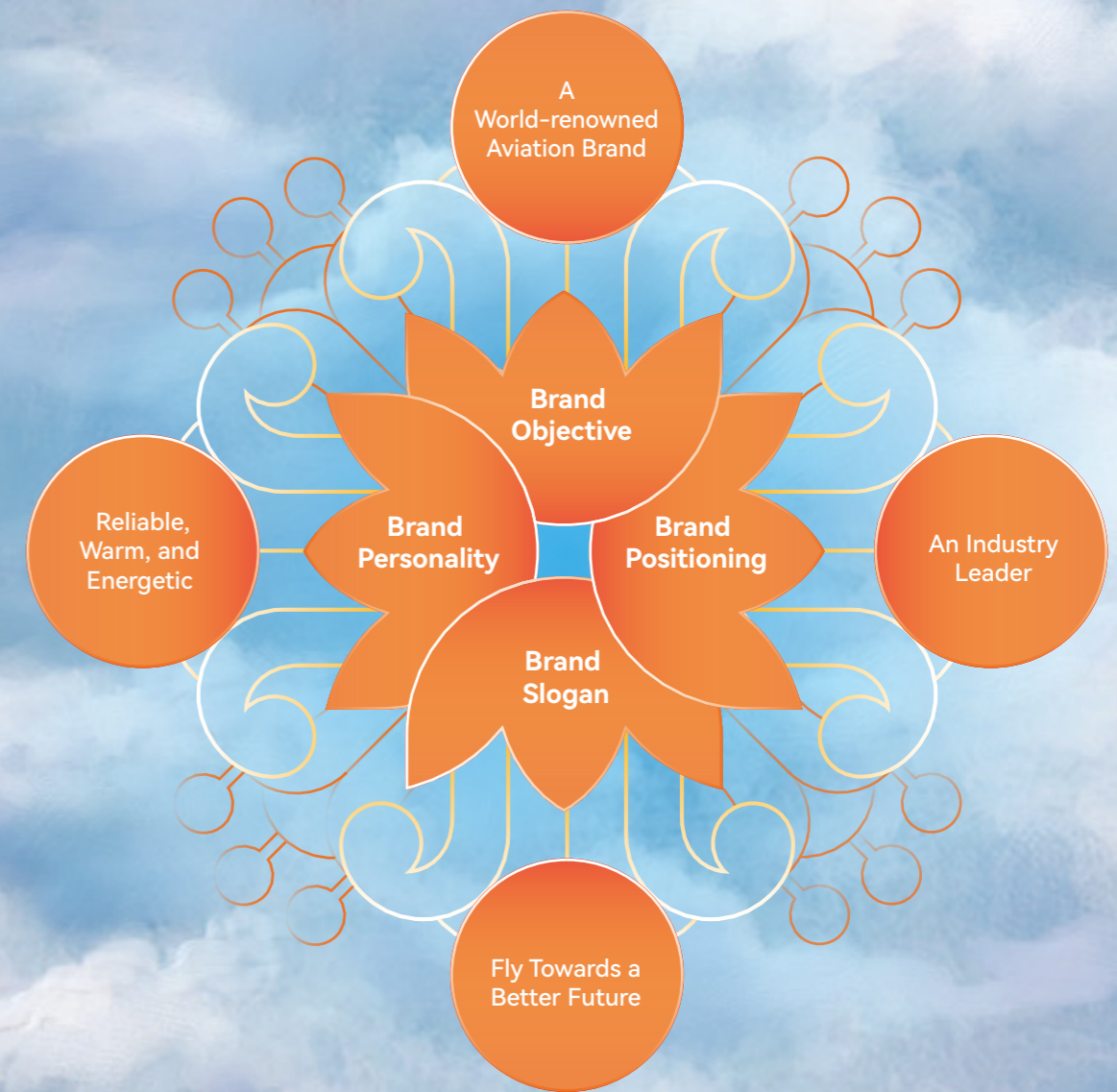
# Cultural brand

In 2023, we renewed our cultural concept system and brand concept system, being committed to leading the company in high-quality development and becoming a world-class enterprise with the soft power of the cultural brand. "Sunshine China Southern", as the corporate culture system of China Southern in the new era, is an important component of our development strategy and modern corporate management system. It serves as the ideological foundation and spiritual driving force for China Southern to achieve high-quality development and strive to become a world-class enterprise. It is also a set of action guidelines and work principles created, upheld, and practiced collectively by the staff of China Southern. The China Southern brand concept system serves as a critical component of the brand management strategy. It stands as a central proclamation of China Southern's brand identity, acting as a pioneering concept that guides the cohesive development of brand construction alongside production and operational management.

## "Sunshine China Southern" Cultural System for the New Era



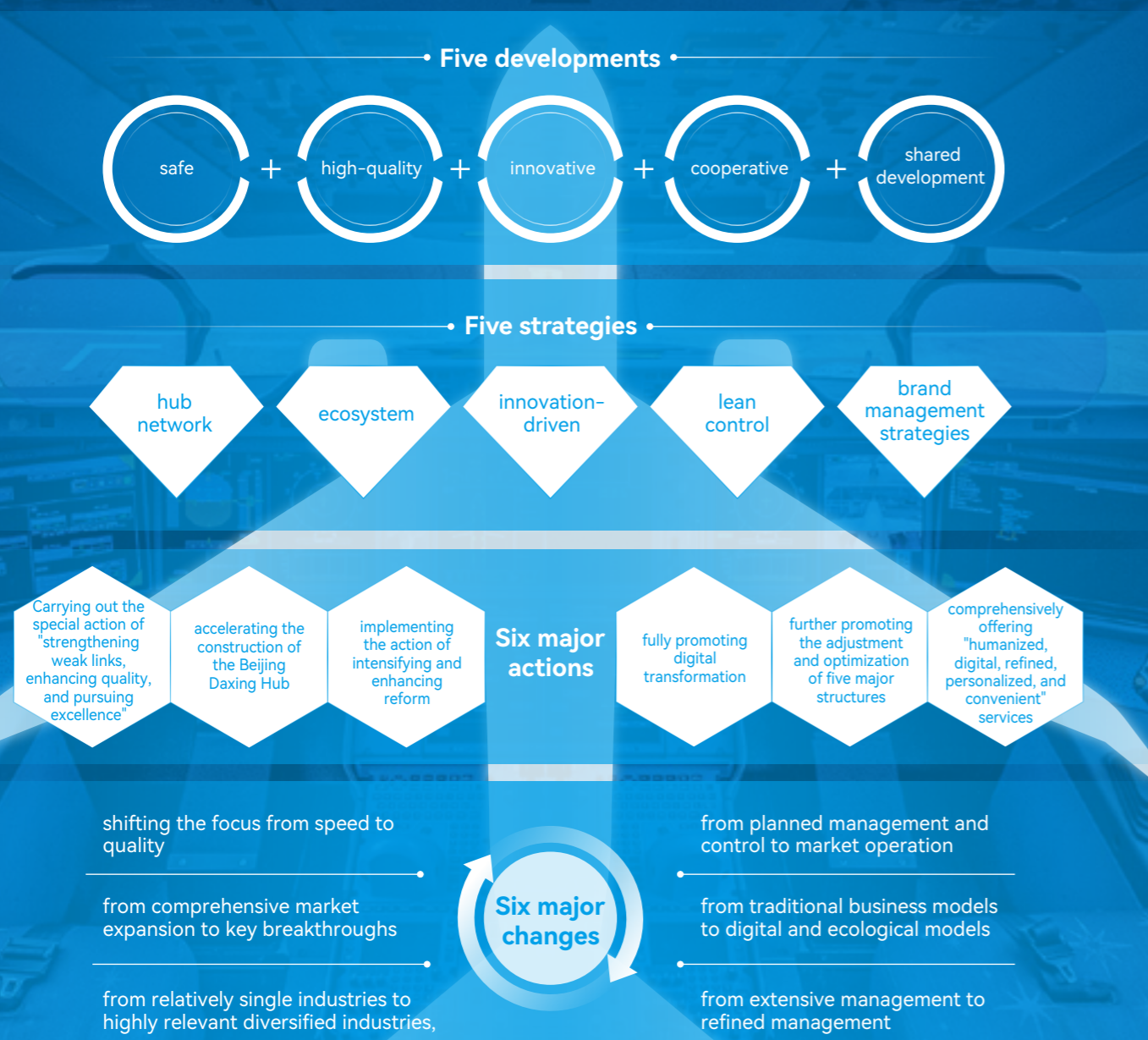
## China Southern Brand Concept System





# Development strategy

China Southern adheres to a vision centered on high quality and the pursuit of becoming a world-class enterprise. China Southern Airlines has outlined the high-quality development plan by upholding five key areas of progress, implementing five strategic approaches, driving six initiatives, and effecting six transformations. This strategic roadmap aims to chart a substantive and targeted path towards achieving high-quality development.



## China Southern in Daxing



The year 2023 marks the fourth anniversary of China Southern's operation in the Beijing Daxing International Airport. China Southern continued to deepen brand building of promoting its operation in the Beijing Daxing International Airport. With a focus on "accelerating the construction of the Beijing hub", it played a role as an entity in guaranteeing this construction. It took strategic decoding tasks as the main line to promote the improvement of safety and service quality and deepen the reform of management mechanism, accelerating the high-quality construction of the Beijing hub.



### The safety management was strengthened

China Southern focused on improving the safety governance system, enhancing safety governance capacity, and addressing prominent safety concerns, aiming to build an expansive security framework while maintaining a consistently stable safety environment within the Beijing hub.



### The quality of operation services was improved

China Southern deepened the chain coordination of operation services from the perspective of customers and took service satisfaction as a parameter for adjusting flight schedules, aiming to improve the stability of flight schedules. It also accelerated the construction of transfer hubs to maintain a 100% completion rate of swift transfer. It carried out special improvement for flight delays, advancing services for high-value customers, and implemented the meal improvement plan in the Beijing hub, raising the service standards of "China Southern Air Shuttle". The aim was to pool the joint efforts to improve the quality of operation services, enhancing the brand building of "choosing China Southern to fly to Beijing" in the Beijing hub.



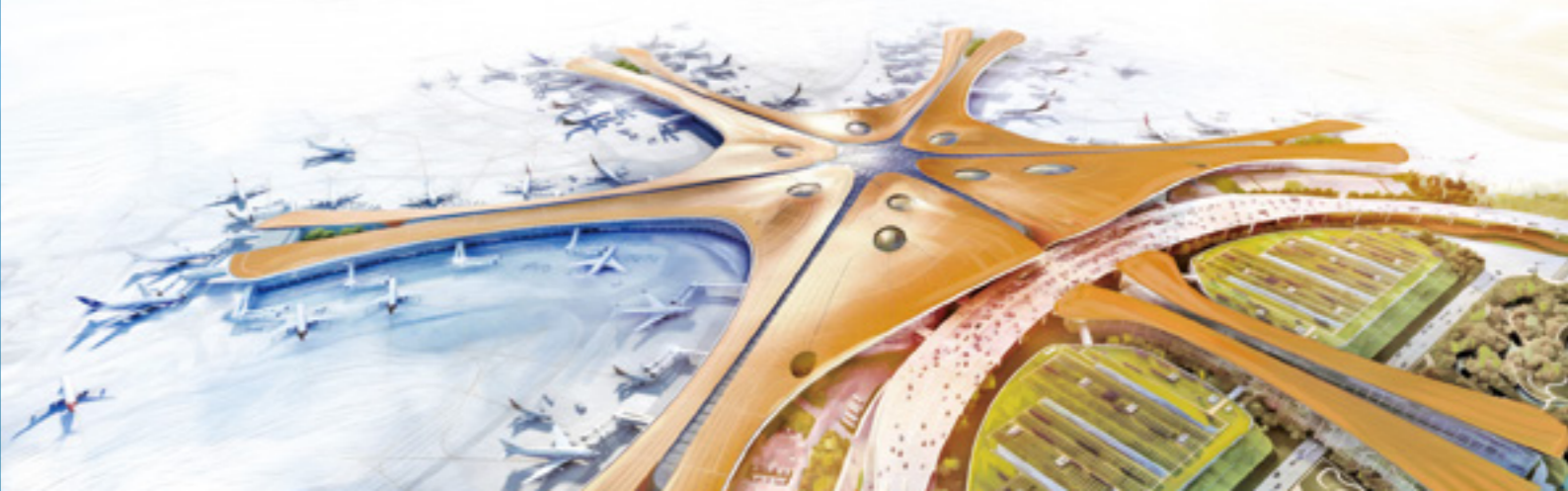
### Ways for carrying out diversified business services were explored

China Southern added more than 14 businesses such as transit services, special vehicles, and cargo terminal subcontracting at the Beijing Daxing International Airport. It also served as the agent for 10 foreign airlines such as American Airlines, Saudi Arabian Airlines, and Aeroflot-Russian Airlines in ground support business, with the highest share in ground support agency services at the airport. Furthermore, it formulated a plan for the organization of customer managers, established a list of all-staff marketing products, and carried out joint visits to group customers. With an innovative design of the model of "visit guide + business exchange", it undertook paid exchange activities from customers such as the Protocol Department of the Ministry of Foreign Affairs and Beijing Jiaotong University and carried out 11 study tour activities during the summer vacation, marking a significant milestone in the construction of its customer management system.



### China Southern assets in the Beijing Daxing International Airport were revitalized

China Southern took multiple measures to revitalize the leasing of idle real estate. Specifically, we successfully promoted the transfer of operation rights of the Daxing cargo terminal and North China Industry-Education Integration Training Base. Additionally, we fostered the revitalization of Building 4 of Daxing China Southern City and other key projects, stimulating the "internal driver" for high-quality construction.



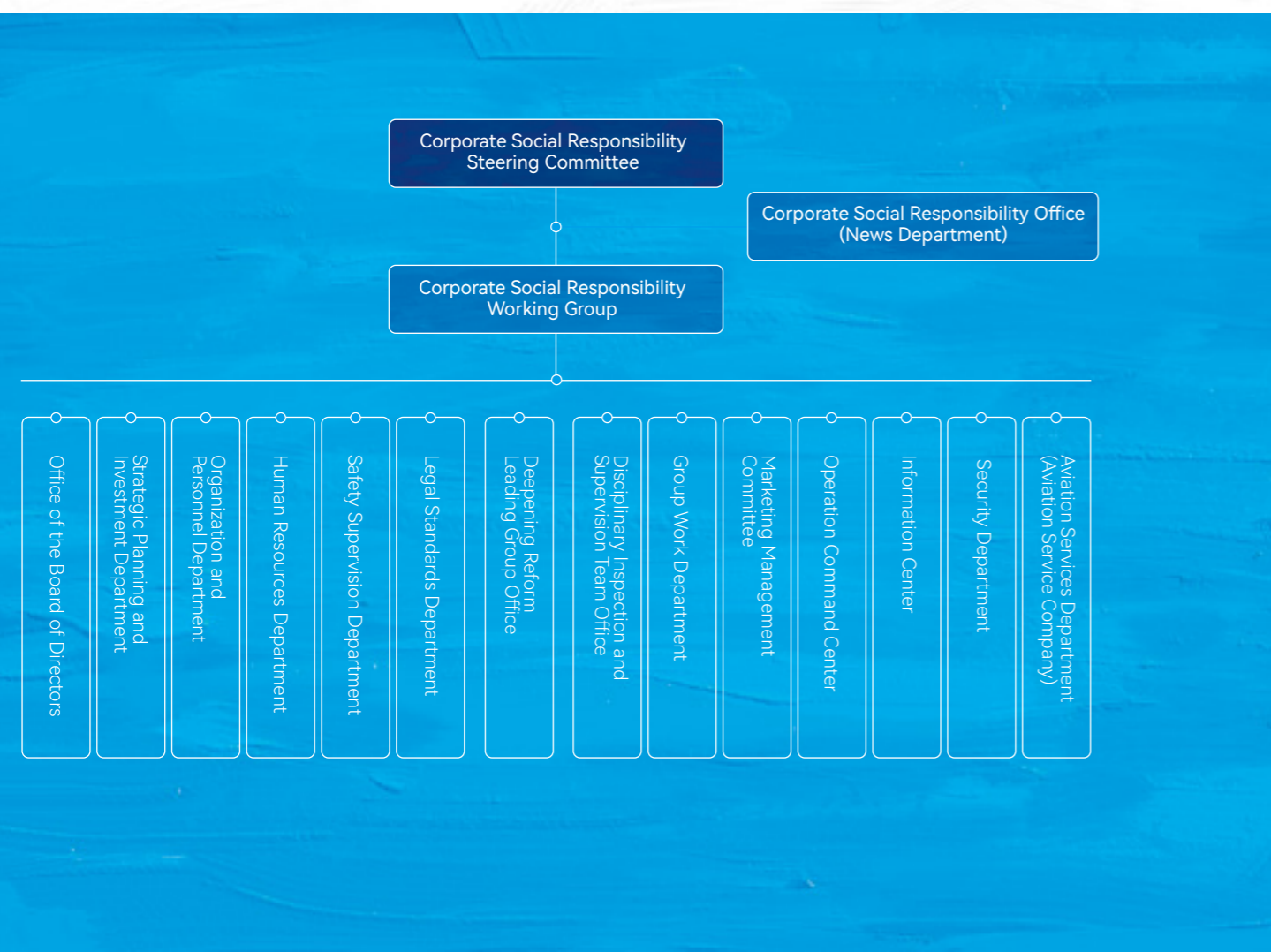


# Statement of the Board of Directors

The Board of Directors is the premier institution responsible for environmental, social, and governance (ESG) matters. It is responsible for coordinating, leading, supervising, and making decisions on sustainable development management and ESG-related major issues of the company. Additionally, it also reviews the progress of ESG goals. The Board of Directors authorized the Social Responsibility Steering Committee to formulate and implement ESG-related matters. It also added ESG-related responsibilities in the Strategy and Investment Committee of the Board of Directors, clarifying the management responsibilities for ESG work. Furthermore, it also collaborated in studying the operation rules of the ESG Committee and formulated a list of decisions for special committees of the two-level Board of Directors. The aim was to further enhance the closed-loop decision-making management of the Board of Directors.

The Board of Directors listens to the Committee's reports on important ESG-related matters and work progress through regular communication and meetings, to understand the current situation of ESG management, identify ESG management risks, ensure the integration of sustainable development concepts with the Company's operations, continuously promote the achievement of ESG goals, and make comprehensive planning for future ESG work. During the reporting period, the Board of Directors supervised and made decisions on important ESG-related matters and participated in assessing the importance and priority of ESG issues.

This report details the practical progress and achievements of China Southern in ESG management, which were deliberated and approved by the Board of Directors in March 2024.



## ESG objectives and progress management

Category	Objective	Progress
Vehicle management	By 2025, the electrification ratio of newly introduced vehicles and equipment inside and outside the site will reach 100%.	In progress
	By 2030, 100% of the vehicles inside the site will be electrified; by 2035, vehicles will be fully electrified.	In progress
Non-hazardous waste management	From January 1, 2023, the supply of disposable non-degradable plastic straws, mixing rods, meals/cups, and packaging bags on international passenger flights has been terminated.	Completed
	By the end of 2024, non-degradable plastic tapes, disposable non-degradable plastic rain clothes, wrapping films, and other goods packaging supplies will be significantly reduced.	In progress



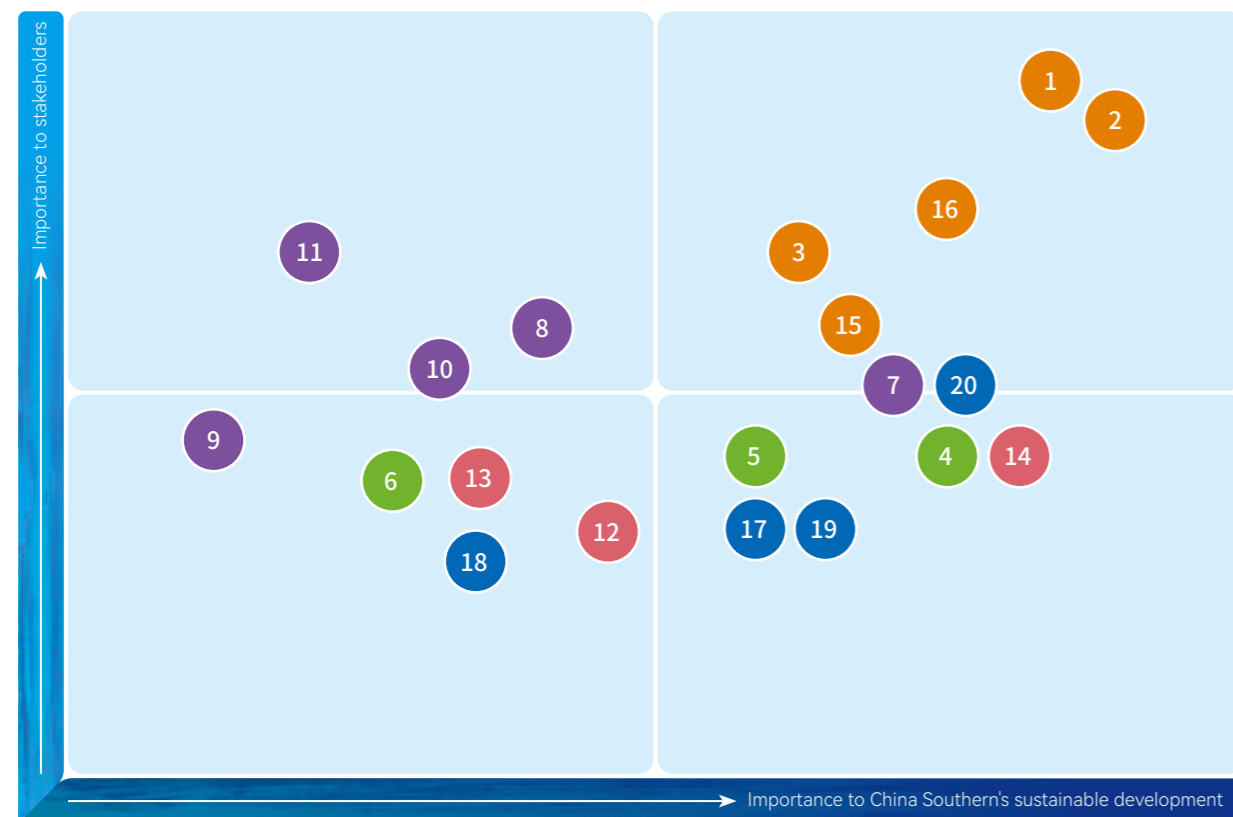
# Analysis of Substantive Issues

Attaching great importance to the concerns and expectations of stakeholders, China Southern identified and selected 20 substantive issues in key areas such as safety, environment, service, employees, society and economy based on internal and external development environments and corporate development strategies, combined with stakeholder surveys and communication, and made targeted responses in the report.

Substantive Issues of China Southern

1. Ensuring safe flight	6. Sustainable use of resources	11. Protection of passengers' rights and interests	16. Rural revitalization
2. Passenger health and safety	7. Improving of flight punctuality rate	12. Employee education and training	17. Anti-corruption
3. Occupational health and safety of employees	8. Data Security and Privacy Protection	13. Diversity and equality of opportunity	18. Supplier management
4. Addressing climate change	9. Convenient business handling	14. Employee compensation and welfare	19. Innovative development
5. Waste disposal	10. Improvement of passenger experience	15. Overseas responsibility fulfillment practice	20. Legal compliance

China Southern substantive issues importance analysis matrix



# Communication with Stakeholders

China Southern effectively protected the rights to know, participate and supervise of all stakeholders, established regular communication channels and methods for stakeholders, and enhanced interactions and mutual trust with them, working together to promote sustainable development.

Stakeholder	Expectations and Demands	Communication Channels and Methods
Investor	<ul style="list-style-type: none"> <li>Participate in corporate governance</li> <li>Protect shareholders' rights and interests</li> <li>Control risks</li> <li>Return on investment</li> <li>Disclosure of important information</li> </ul>	<ul style="list-style-type: none"> <li>Board of Directors</li> <li>General Meeting of Shareholders</li> <li>Board of Supervisors</li> <li>Periodic disclosure of reports and interim announcements</li> <li>Reverse roadshow</li> </ul>
Government	<ul style="list-style-type: none"> <li>Abide by the law and pay taxes according to the law</li> <li>Implement national strategies and deepen reform</li> <li>Maintain and increase the value of state-owned assets</li> <li>Safe flight</li> <li>Promote employment</li> <li>Improve people's livelihood</li> </ul>	<ul style="list-style-type: none"> <li>Daily report and special report</li> <li>Investigation and visit</li> <li>Project cooperation and working meetings</li> <li>Statistical statement</li> <li>CSR Report</li> </ul>
Environment	<ul style="list-style-type: none"> <li>Energy conservation and emission reduction, tackling climate change</li> <li>Protect the ecology and reduce pollution</li> <li>Reduce noise</li> </ul>	<ul style="list-style-type: none"> <li>Carry out green flight to save energy and reduce emissions</li> <li>Promote ground environmental protection</li> <li>Apply noise reduction measures</li> <li>Public disclosure of environmental information</li> </ul>
Customer	<ul style="list-style-type: none"> <li>Provide safe and high-quality services</li> <li>Respond quickly to customer comments or complaints</li> <li>Protect customer privacy</li> </ul>	<ul style="list-style-type: none"> <li>Information disclosure</li> <li>Safety management system</li> <li>Customer relationship management, online services</li> </ul>
Employee	<ul style="list-style-type: none"> <li>Safeguard employees' rights and interests</li> <li>Establish communication channels</li> <li>Employee training and development</li> <li>Continue to improve employee compensation and benefits</li> <li>Employee care</li> </ul>	<ul style="list-style-type: none"> <li>Employees' representative meeting</li> <li>Employee training platform</li> <li>Reform of salary system</li> <li>Integrated management of employees</li> <li>Employee activities</li> </ul>
Supplier	<ul style="list-style-type: none"> <li>Honest operation</li> <li>Common development</li> <li>Open, fair and impartial procurement</li> </ul>	<ul style="list-style-type: none"> <li>Transparent procurement</li> <li>Training and technical exchange meeting</li> <li>Daily communication</li> </ul>
Financial institution	<ul style="list-style-type: none"> <li>Enhance solvency</li> <li>Reduce business risks</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen compliance management</li> <li>Improve the operation level</li> </ul>
Community	<ul style="list-style-type: none"> <li>Contribute to rural revitalization</li> <li>Carry out voluntary service</li> <li>Community communication and exchange</li> </ul>	<ul style="list-style-type: none"> <li>Carry out rural revitalization</li> <li>Charity activities</li> <li>Information disclosure</li> <li>Public communication</li> </ul>
Medium	<ul style="list-style-type: none"> <li>Establish information distribution channels</li> <li>Timely deliver the voice of China Southern</li> </ul>	<ul style="list-style-type: none"> <li>Press conference</li> <li>Journalist symposium</li> </ul>
Peer	<ul style="list-style-type: none"> <li>Fair competition and friendly cooperation</li> <li>Information communication and exchange</li> <li>Healthy and harmonious industry development</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen cooperation</li> <li>Exchange and learning</li> <li>Forum meeting</li> </ul>





# NEVER STOPPING GIVING BACK LOVE

## Supporting rural revitalization in an all-round way

Comprehensively promoting rural revitalization is an important task for building China into a powerful agricultural country in the new era. China Southern Group kept its original aspiration and mission in mind, fulfilled its social responsibility as a central enterprise, actively responded to the call of the national rural revitalization strategy, and gave full play to its advantages to create a characteristic mode of aviation assistance. We polished the brand of assistance, told stories about assistance well, continued to build the "path of air assistance", wholeheartedly and diligently promoted rural revitalization in an all-round way, and improved people's livelihood and well-being.

### Deepening the characteristic assistance mode

China Southern Group gave full play to its unique advantages in aviation, continuously enhanced the optimization of airline networks in assisted areas, and formulated the "China Southern Group Targeted Assistance Work Plan for 2023". We actively carried out cooperative research, implemented five major revitalization requirements, and consolidated the "path of air assistance".

#### Conducting cooperative research ▶

The leaders of China Southern Group personally took the lead in deploying and promoting rural revitalization together with officials at all levels. Combined with the requirements of thematic education, the targeted assistance work was regarded as one of the key topics of the research.



Leaders and team members made a total of **10** visits for research purposes to the designated assistance counties of Pishan and Moyu in Xinjiang

Government officials at the bureau level and below participated in research activities **30** times

and **2** group-level meetings were convened to discuss work related to targeted assistance

#### Strengthening all-round assistance ▶



Organizational assistance was conducted

China Southern conducted targeted training for grassroots officials, Party member representatives, and outstanding villagers, focusing on leaders of rural revitalization as a breakthrough. Efforts were made to strengthen "one-to-one assistance", actively organize village officials to participate in daily morning readings of the standard spoken and written Chinese language, and hold four sessions of night courses on the standard spoken and written Chinese language each week. In four villages of Pixina Township and Bashilangan Township, China Southern established demonstration village Mandarin classrooms and reconstructed stages of village committees, thereby successfully creating "Homes for Party Members" and ethnic unity cultural activity sites and providing villagers with their cultural stations.



Industry support was provided

China Southern continued to intensify its efforts in attracting investment. Assigned management personnel from designated counties leveraged the corporate and personal advantages to broaden investment attraction strategies, reaching out to newly attracted enterprises, facilitating Guangdong Rongchang Textile Industrial Co., Ltd., Xinjiang Hetiantang Biological Industrial Co., Ltd. and other enterprises to invest and build factories in Pishan County. Such practices significantly improved the local employment rate and increased public income and local fiscal and tax revenue, making important contributions to promoting high-quality economic and social development in Pishan County.

#### Case China Southern Supports Creation of New Signature Featured Agricultural Product



In recent years, the village-based work team of China Southern has actively adjusted the agricultural industrial structure according to local conditions. Emphasizing targeted assistance, the work team developed the "Kapok Red" sweet potato planting project into a new business card for the agricultural industry of Pixina Township. The "Kapok Red" sweet potato, a variety known as Pushu 32, is bright in color, well-shaped, and has lustrous red flesh. As a selenium-rich product, it contains low sugar and high crude fiber, green and pollution-free, thus being deeply favored by people. This variety is more storage-resistant and tastes sweeter after storing. It is of moderate softness and stickiness, without fibers or strings, and can be described as the star product among sweet potatoes.

The work team actively explored the "Kapok Red" sweet potato planting project, worked meticulously and transformed saline-alkali land into fertile land for growing sweet potatoes. Additionally, the work team gradually accumulated field management experience. For the first time, they introduced the technology of drip irrigation beneath the plastic film, greatly improving water-use efficiency and transitioning from extensive flood irrigation to green and water-saving agriculture. Nutrients and herbicides were delivered directly through drip irrigation tapes and agricultural drones, significantly enhancing the growth of sweet potato seedlings and exploring new methods for scientific cultivation and water-saving and green agriculture. In 2023, after meticulous cultivation, irrigation, and care by the work team and villagers, the total output of "Kapok Red" sweet potatoes reached 240 tons. This led to employment for nearly 60 local villagers, increasing the income of the village collective by nearly RMB 1 million. While achieving an increase in food production and income, it also boosted the double growth of the income of the village collective and villagers of the three villages targeted for assistance by China Southern, providing a solid foundation and guarantee for the realization of rural revitalization.







Educational assistance

China Southern completed the renovation project for the teaching facilities and equipment and campus environment of China Southern Pearl Second Primary School in Pishan County; promoted the optimization and enhancement of the hardware environment of China Southern Pearl Kindergarten and Pearl Primary School in Moyu County; organized Chinese public recital competitions for children in the two counties; further promoted excellent traditional cultures and strengthened the sense of community for the Chinese nation; actively carried out voluntary actions such as donating books to the "Dream Building Book Houses" and the "Aviation Knowledge Enters Campuses" program to continuously enrich the spiritual and cultural lives of students in targeted counties.



Talent assistance was facilitated

China Southern innovatively implemented three sessions of training courses for rural revitalization officials in collaboration with Zhejiang University. It organized three batches of "Revitalization" themed flights, inviting 100 grassroots officials involved in rural revitalization from the designated counties and 40 members of the China Southern village-based work team to participate in specialized rural revitalization training at Zhejiang University in stages; implemented the China Southern Pearl Rural Revitalization Leadership Quality Improvement Project and organized study tours for outstanding villagers. Additionally, it hosted training classes for grassroots officials from the civil administration and disabled persons' federation and the disabled in Pishan County.



▲ Students of the 2023 China Southern rural revitalization official training class take a group photo with crew members on the "Revitalization" themed flight

Case "Sunshine Road" Designated County Villagers Study Tour Program



In 2023, China Southern innovatively carried out three sessions of the "Sunshine Road" Designated County Villagers Study Tour Program, organizing 100 villager representatives from the designated counties to visit Guangzhou for a study tour, where they were led to listen to successful experiences, witness development changes, and learn about advanced practices. The aim was to cultivate a group of leaders capable of strengthening villages and enriching villagers in the new era, contributing to the "nurturing Xinjiang with cultures" initiative.



▲ Group Photo of "Sunshine Road" Designated County Villagers Study Tour Program



Assistance through consumption

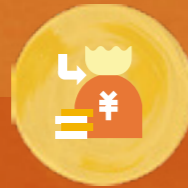
China Southern actively mobilized all staff to participate in special activities such as the "Action of Assisting through Consumption to Welcome Spring of Central State-owned Enterprises" and "Agricultural Revitalization Week". China Southern introduced a total of over 70 products from five suppliers in targeted counties to be listed on the central state-owned enterprises' consumption-based assistance platform, its member points mall, and employee mall; listed featured agricultural products from assisted counties on the GDNYMALL.COM e-commerce platform, further expanded online sales channels, diversified product offerings, conducted online live-streaming activities to promote the sales of agricultural products, and continued to facilitate cooperation between high-quality agricultural products from Hotan and airline meals.







In 2023



introduced various assistance funds of RMB **30.376** million



We achieved a total of RMB **26.08** million in consumption-based assistance, with direct purchases amounting to RMB **22.84** million and assistance in sales totaling RMB **3.24** million



We attracted a total investment amount of RMB **1.828** billion as well as the settlement and production of **28** enterprises and projects in the targeted counties  
with RMB **1.463** billion of funds already in place. We assisted in the establishment of **12** workshops of assistance creating over **1,200** new job positions

### Creating featured brands of assistance

China Southern Group continued to enhance its featured brands of assistance and combined the strategies of "going out" and "bringing in" to strengthen the foundation for rural development, boost the momentum for rural revitalization, and contribute to consolidating and expanding the achievements of poverty alleviation while effectively connecting to rural revitalization efforts.

#### Enhancing the brand of "China Southern Pearl Education"

China Southern innovatively implemented aviation-themed cultural exchange activities in targeted counties and continuously supported the improvement of conditions in an all-around way in its "Pearl" series schools. China Southern emphasized designing and investing in cultural and educational assistance programs, providing multi-faceted help in nurturing Xinjiang with cultures.

#### Innovating the brand of "China Southern Pearl Training"

China Southern expanded the coverage of training for grassroots officials in targeted counties by holding featured and practical special training sessions in each county and township and continued to strengthen the organization and implementation of research & study and visit & study groups.

#### Consolidating the brand of "China Southern Assistance Voluntary Service"

China Southern continued to mobilize young volunteers at assistance sites to carry out teaching support activities such as "Mumian Classroom" and "Pairing Assistance", actively participating in work such as rural ecological environment improvement and grassroots officials' psychological group counseling.

#### Improving the brand of "China Southern Pearl Demonstration Village"

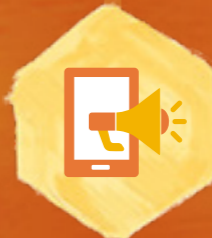
China Southern explored and summarized the typical experience of China Southern Pearl Demonstration Village construction, deepening the implementation and effects of demonstration village projects, and creating several influential "China Southern Pearl Demonstration Villages".

### Effectively implementing featured assistance publicity

China Southern Group continuously strengthened communication and publicity efforts, effectively leveraging its brand publicity role to tell its compelling stories in rural revitalization while seeking more media coverage to expand its social influence and highlight its commitment to rural revitalization.

#### Expanding external publicity

China Southern created the "Xinjiang Hotan Rural Revitalization" colored drawing-themed aircraft and developed the "Sunshine Road—Publicity Implementation Plan for the 10th Anniversary of China Southern Assistance". Through various multimedia platforms, a comprehensive series of publicity activities showcasing the entire process of China Southern's 10-year in-village assistance was conducted, recording China Southern's exploration and practice in poverty alleviation and rural revitalization from multiple perspectives. The related reports were repeatedly reprinted by mainstream media, leading to a continuous expansion of China Southern's brand influence.



#### Strengthening internal publicity

China Southern carried out the "Sunshine Road—10th Anniversary of China Southern's In-village Assistance Program" series of publicity activities, integrating internal and external publicity channels and resources to publicize the brand of China Southern assistance program's 10th anniversary in a serialized, sustained, and distinctive way. China Southern's rural revitalization-themed brief report formulation was initiated, with a total of nine issues published, focusing on reviewing the key points and highlights of the assistance work by the group as well as its branches and subsidiaries. This aimed to strengthen the work exchange between China Southern's various assistance sites, mutually promote the formation of more highlights and features, and build up greater internal synergy.

#### Case "Xinjiang Hotan Rural Revitalization" Colored Drawing-themed Aircraft Created



On July 3, 2023, the "Xinjiang Hotan Rural Revitalization"—China Southern CZ6817 flight successfully made its inaugural journey. Serving as a significant testament to China Southern's 20-year assistance efforts in Hotan, Xinjiang, the aircraft displayed a joyous scene of celebrating harvests and seeking further development through colorful paintings on its fuselage. The front section of the fuselage showed high mountains, deserts, rivers, poplar forests, camels, and ethnic dance figures, reflecting the distinctive charm of western China. The tail section of the aircraft was painted with Hotan's featured products, including red dates, thin-shelled walnuts, grapes, muskmelons, and pomegranates. Near the wing position, a group of students was depicted holding a flag-raising ceremony, with newly built school buildings standing by the sports ground, showcasing China Southern's contribution to educational assistance. The aircraft not only exhibited China Southern's achievements in poverty alleviation and rural revitalization in Hotan but also served as an important avenue to enhance Hotan's visibility.

▼ "Xinjiang Hotan Rural Revitalization" Aircraft







## CONTINUOUS COORDINATED DEVELOPMENT Promoting high-quality development in multiple fields

China Southern focused on leveraging its air transportation resource advantages to support national strategies, continuously enriching the types of combined transportation products, enhancing capabilities in jointly developing the Belt and Road Initiative, assisting Chinese brands in going global, promoting high-level opening-up to the outside world, and continuously accelerating the construction of a world-class air transportation enterprise.

### Serving the implementation of major regional strategies

China Southern concentrated on serving major regional strategies and continuously strengthened its capabilities in advancing the implementation of these strategies. We constructed the Beijing Daxing Hub with high quality and established a four-hour aviation transportation circle connecting the Guangdong-Hong Kong-Macao Greater Bay Area with major cities in China. We helped drive the comprehensive revitalization of Northeast China, playing its role as a central state-owned enterprise in promoting regional development.

### Constructing the Beijing Daxing Hub with high quality

China Southern accelerated the construction of the Beijing Daxing Hub, continued to excel in domestic and international network planning and layout, and swiftly formed the flight operational temporal system of "Four Times of Entry and Four Times of Departure". We achieved a domestically leading level in the ratio and efficiency of domestic transfer as well as domestic-international two-way transfer. China Southern fully leveraged Daxing's efficiency in domestic and international trunk line combined transportation to build a land-air combined transportation sector and an influential air-air combined transportation network. By seizing opportunities from newly opened international long routes, adopting a combination of long and short routes, and complementing well- and poorly-performing routes, we integrated various combined transportation types including domestic-to-international, international-to-domestic, and international-to-international transfers, while creating an aviation logistics transfer hub combining passengers and freight services. Meanwhile, China Southern effectively conducted operations for medium-to-high-value clients, enriched Daxing's product system, optimized the end-to-end travel experience for passengers, and strengthened Daxing's travel brand creation and publicity.

### Creating a four-hour aviation transportation circle

China Southern promoted "network integration, market integration, product integration, and service integration" in the Guangdong-Hong Kong-Macao Greater Bay Area, supported the development of the Greater Bay Area and the construction of a Pilot Demonstration Area of Socialism with Chinese Characteristics in Shenzhen, built a hub linking Guangzhou and Shenzhen, and established a four-hour aviation transportation circle connecting the Greater Bay Area with major cities in China.

#### Building high-frequency routes

China Southern developed high-frequency routes in the trunk line market, maintaining a schedule of at least eight flights per day between Guangzhou and over ten major cities such as Beijing, Shanghai, Hangzhou, Chengdu, Chongqing, and Wuhan, fully meeting the demands of both public and business travelers.

#### Tapping into potential markets

China Southern utilized incremental resources to actively explore potential markets, opening new routes from Guangzhou to destinations such as Longyan, Zhoushan, Chongqing Xiannvshan Airport, and Jishou, aiming to provide passengers with a wider range of travel options.

### Promoting the comprehensive revitalization of Northeast China

We deepened multi-sector cooperation based on local resources to comprehensively serve the country's regional development strategy of rejuvenating northeast China in an-round way. Centering around areas such as aviation transportation, logistics industry, base construction, air tours, aviation-related industries, and other business, we engaged in deep collaboration with the People's Government of Liaoning Province, to improve and enhance the layout and service level of the aviation transportation industry in the province and promote the high-quality development of the province's aviation industry and China Southern Group, thereby contributing to advancing the comprehensive revitalization of northeast China.





### Advancing the development of the Belt and Road Initiative

The year 2023 marked the 10th anniversary of the proposal of the Belt and Road Initiative. To implement this national strategy, China Southern focused on supporting the eight actions to promote its joint development with high quality. Leveraging civil aviation's advantages of advanced and prompt connectivity, China Southern continuously increased transportation capacity input to fully establish an air corridor, to support the high-quality development of the "Air Silk Road" and promote the building of a community with a shared future for mankind.

#### Accelerating the construction of the Air Silk Road

Along the Belt and Road, China Southern focused on the development of hubs. We endeavored to establish the Guangzhou hub as an influential international cooperation platform on the Maritime Silk Road and the Beijing hub as a vital cooperation platform for international exchanges along the Belt and Road. China Southern opened 241 routes, connecting 74 cities across 36 countries and regions along the Belt and Road, including Central and West Asia, the Middle East, and Africa, serving a total of more than 60 million passengers. China Southern emerged as the largest air carrier along the Belt and Road.

In 2023, China Southern accelerated the resumption of flights to the "Belt and Road" countries. We operated a total of 17 routes, an increase of seven compared with 2022. On a year-on-year basis, we resumed or opened routes connecting Guangzhou with Penang, Phuket, Bali, Sabah, and other destinations. In 2023, China Southern operated about 14,000 flights in Southeast Asia, 3.8 times that of 2022.

#### Case Opening of "Air Silk Road" Passenger Routes



On December 21, 2023, China Southern officially opened the Guangzhou-Zhengzhou-Luxembourg passenger route. This route represented not only the first direct route for passengers between China and Luxembourg but also the second intercontinental route opened by China Southern in Zhengzhou following the Zhengzhou-London route.

This air route further enhanced connectivity between China's Guangdong-Hong Kong-Macao Greater Bay Area and Henan, a province with strong economic and agricultural strength, a large population, and burgeoning emerging industries in the Central Plains, and the countries involved in the Belt and Road Initiative. It served as a critical air corridor facilitating economic, trade, and cultural exchanges between China and Luxembourg, and played a positive role in promoting regional economic development.

#### Striving to establish an aviation logistics network

China Southern made efforts to establish an aviation logistics network along the Silk Road centered around Urumqi, connecting Central and West Asia, Central and Eastern Europe and the Middle East, and reaching major cities in China. The primary goal was to advance air-truck, air-rail, and air-sea intermodal transport, improve international air cargo capacity and competitiveness, promote global connectivity, and transform the Urumqi hub into a significant cooperation platform along the Land Silk Road.

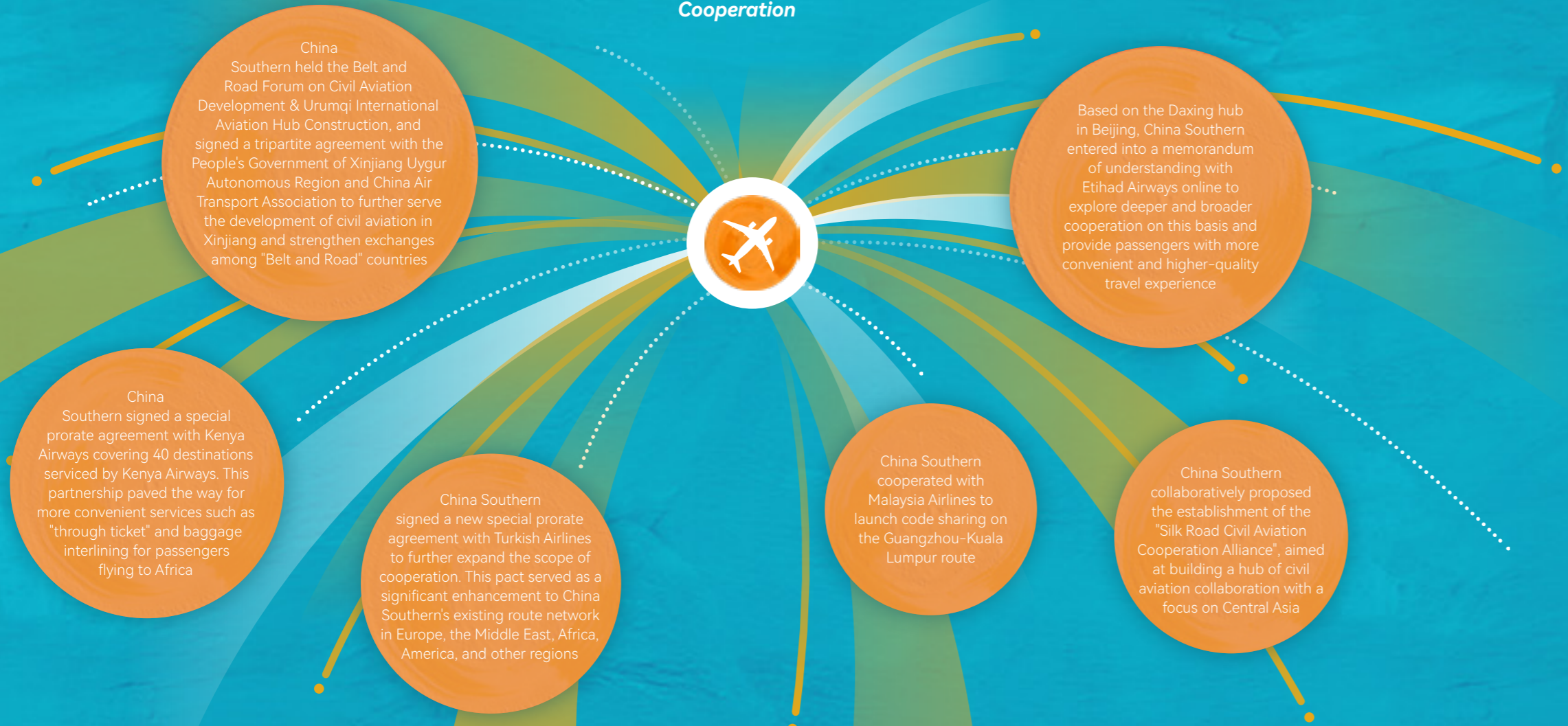
#### Case Launch of the "Silk Road Travel Map" Themed Flights to Showcase Highlights of the Belt and Road Initiative



On November 11, 2023, China Southern introduced the first "Silk Road Travel Map" themed flight, departing from Urumqi and arriving in Islamabad. Two days later, the second "Silk Road Travel Map" themed flight was launched. These flights featured an array of engaging activities, such as lively historical presentations, interactive knowledge quizzes, and heartwarming Silk Road story sharing, showcasing the fruitful achievements of the Belt and Road Initiative over the past 10 years and the local customs of Belt and Road countries.

### Joint Construction, Win-win Cooperation

#### Important achievement of Belt and Road Cooperation



*This year marks the 10th anniversary of the Belt and Road Initiative. Over the past decade, China Southern has diligently worked to establish an air corridor along the "Belt and Road".*  
— Zhang Tingting, a flight purser





# 01

## FORGING AHEAD Seeking High-quality Development

China Southern continued to improve corporate governance, strengthen the Party's leadership and Party building, adhere to legal and compliant operations, and bolster risk management efforts. We upheld the bottom line of integrity, promoted the execution of key reform tasks, and expedited the transformation into a world-class enterprise.



Responding to the UN 2030 Sustainable Development Goals:



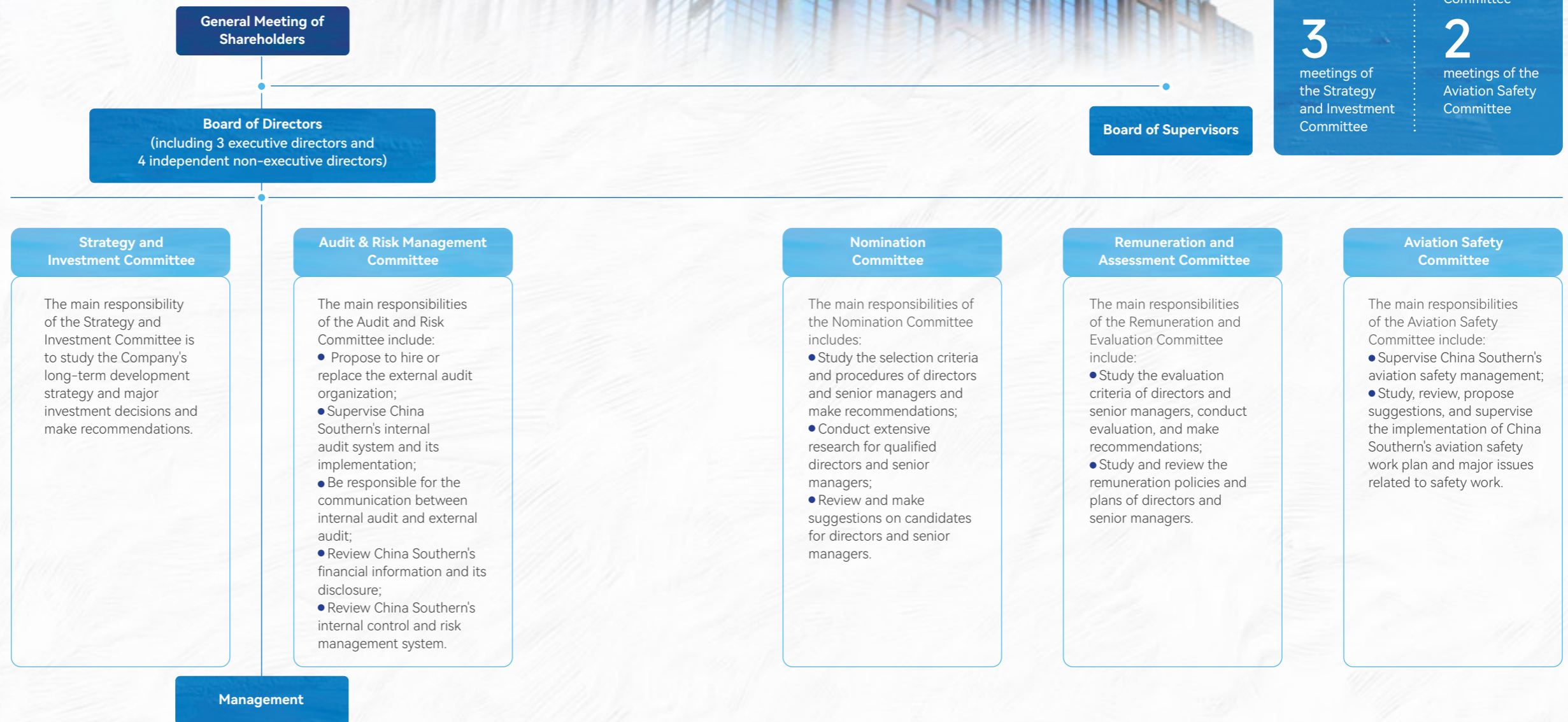


## Improving corporate governance

We diligently enforced the relevant requirements of the CPC Central Committee, State-owned Assets Supervision and Administration Commission of the State Council, China Securities Regulatory Commission, and China Southern Group on strengthening the development of the Board of Directors, increasing the proportion of direct financing, and enhancing the quality of listed companies under central state-owned enterprises. We made continuous efforts to refine the governance structure and decision-making mechanism, promote the institutionalization, standardization, and normalization of the work of the Board of Directors, maintain sound investor relation management, and establish a robust foundation for our ongoing steady operations.

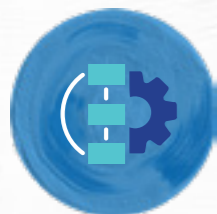
### Corporate governance structure

The Board of Directors established a "4+1+4" institutional system. Respectively, "4" refers to the rules of procedure for the meetings of the Party Leadership Group, the Board of Directors, the Chairman's Office, and the General Manager's Office; "1" refers to the management measures authorized by the Board of Directors; and "4" refers to the decision-making and preliminary research of the Party Leadership Group, the decision-making of the Board of Directors, and the list of rights and responsibilities of the Chairman, General Manager, and various governance subjects authorized by the Board of Directors. The institutional system clarifies the boundaries of rights and responsibilities of governance subjects such as the General Meeting of Shareholders, the Board of Directors, and the Management. In addition, it effectively guarantees the standardized functioning of the Board of Directors, and ensures clear rights and responsibilities, effective checks and balances, and coordinated operations of the corporate governance system.



Meetings held throughout the year

5 general meetings of shareholders	7 meetings of the Audit and Risk Management Committee
10 meetings of the Board of Directors	4 meetings of the Nomination Committee
8 meetings of the Board of Supervisors	2 meetings of the Remuneration and Appraisal Committee
3 meetings of the Strategy and Investment Committee	2 meetings of the Aviation Safety Committee





## Development of the Board of Directors

China Southern actively championed the diversification of the Board of Directors, placing a particular emphasis on endorsing outstanding female directors. We implemented a director skill matrix to evaluate independent director candidates, ensuring a holistic nomination process that evaluates the candidates in terms of their contribution to board diversity, skills complementarity with current directors, and relevance to our business development, etc. By doing so, we aimed to further enrich the structure of the Board of Directors.





**Diversity of the Board of Directors**

A Board of Directors tailored for international listed companies with diverse backgrounds was established, and Ms. He Chaoqiong was approved to serve as an independent non-executive director of China Southern following deliberation. The Board of Directors of China Southern encompassed seven members, including three executive directors and four independent non-executive directors. The Board of Directors was predominantly composed of independent directors, each of whom brought a wealth of experience and specialized expertise in areas such as enterprise management, internal audit control, risk compliance, finance, and international business.



**Capacity building of the Board of Directors**

Three sessions of "Directors' Lectures" were held. Guests including Mr. Guo Wei, an independent director of China Southern and chairman of Digital China, and Dr. Liu Wei, a Hong Kong Joint Secretary of China Southern, were invited to give lectures on site, attracting nearly 500 attendees from the headquarters' functional departments and major subsidiaries. The functional departments of the headquarters and major subsidiaries were organized to attend "corporate governance training courses" held at Peking University. Micro-courses on "three stresses" and performance training for directors, supervisors, and senior executives were developed. Moreover, equity financing experience, listing compliance concepts, and corporate governance culture were disseminated across the entire company.



**Anti-corruption training of the Board of Directors**

The Board of Directors conducted a three-hour compliance training for directors, supervisors, and senior executives. This program, which emphasized the importance of business ethics, integrity education, and anti-corruption work, among other aspects, gave an in-depth explanation of the latest laws and regulations, providing professional guidance for directors, supervisors, and senior executives to perform their duties in a compliant and responsible manner.





## Management of investor relations

### Protecting rights and interests of shareholders.

We engaged proactively with our shareholders, ensuring that their rights were exercised effectively. Our team was swift and accurate in responding to any shareholder queries, working collaboratively to furnish the required information as stipulated by law. Furthermore, we created video courses on investor relations management. We publicized regulatory policies and guidelines on investor relations management to all employees, fostering a culture dedicated to investor relations management that is characterized by an emphasis on integrity, compliance with fundamental principles, standardized operations, and a clear assumption of responsibility.

### Maintaining communication channels

We continuously strengthened the management of communication channels such as investor hotlines, emails, website columns, and SSE e-interaction. We ensured that investors' requests for consultations and suggestions were addressed promptly and effectively.



### Proactively disclosing information

We shared production data, industry information, and analysts' views tailored for investors on a monthly basis. Special sections devoted to presenting monthly production data and performance conference updates were set up within the investor relations column of our official website. To facilitate a deeper comprehension of our financial performance, we employed visual representations of financial data and provided access to both materials and videos of performance conferences. Moreover, we improved the legibility of routine reports to guarantee that investors receive timely and clear insights into our business operations.

### Conducting communication activities

We carried out reverse roadshow to enhance the capital market's understanding of our strategic development. We hosted close to 40 institutional investors, including securities and public offering fund companies, at our base at Beijing Daxing International Airport, actively conveying China Southern value and winning appreciation from institutional investors.

### Optimizing the information disclosure mechanism

We formulated the management measures for periodic reports of listed companies of China Southern Airlines. Our emphasis was on optimizing and improving the information disclosure system and process while ensuring adherence to the foundational compliance requirements for our listing status. Our objective was to achieve "zero errors" in information disclosure throughout the year.

100%

response rate to effective questions on SSE e-interaction

Holding of and participation in more than

150

press conferences, strategy meetings, and teleconferences



Recipient of the 2022 Best Small and Medium-sized Investor Interaction Award of "Panoramic Investor Relations Gold Award"

Recognized with an **A-rating** for information disclosure by Shanghai Stock Exchange for the 10th consecutive year

Recipient of the **2022 Golden Information Disclosure Award** of China Securities Journal

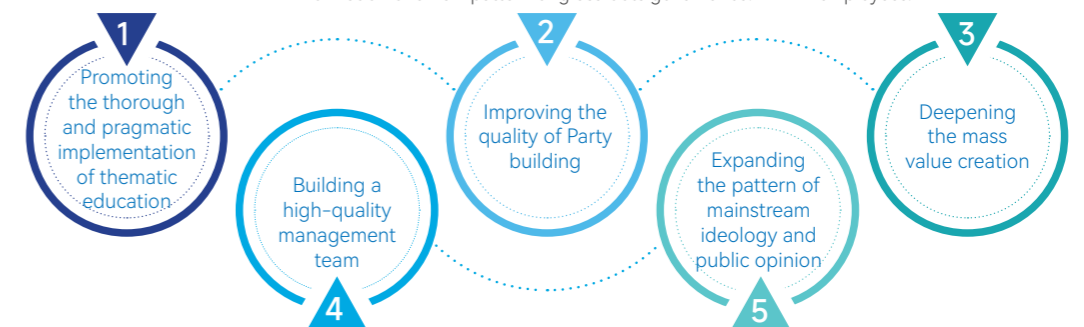
## Strengthening Party building

China Southern thoroughly studied and implemented the principles of the 20th CPC National Congress and carried out education on the theme of studying and implementing Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We concentrated on improving the organizational system that is cohesive and efficient throughout all levels and endeavored to cultivate high-quality professional management and talent. We expanded the mainstream ideological stance and influenced public discourse, leveraged the influence of mass organizations effectively, placed a high priority on the construction of party conduct and clean governance, and led and secured high-quality development through high-quality Party building. China Southern Group achieved an "A" rating for its Party building work responsibility system, as part of the assessment for central state-owned enterprises, for six consecutive years.

China Southern thoroughly studied and implemented the principles of the 20th CPC National Congress and ensured that all management-level personnel underwent comprehensive rotational training and that every Party member participated in online training. We diligently executed the deployment mandate of the Party Leadership Group, actively engaged with the Central Steering Group, and coordinated and orderly promoted theoretical learning, investigation and research, development, inspection and rectification, and establishment of rules and regulations. We conducted an in-depth study and developed an implementation plan for China Southern Group thematic education. We refined the working mechanism, promoted supervision and implementation, and generated a number of theoretical, institutional, and practical results.

The general election for the China Southern Party Committee directly under the China Southern Group was successfully completed. The Party building evaluation mechanism of "one policy and one evaluation for one enterprise" was improved, and "six characteristics" (political, leading, standard, integrated, innovative, and cohesive characteristics) of Party building evaluation were highlighted. China Southern strengthened the "Three Basics Construction" by formulating and issuing key points for Party building, enhancing the political and organizational functions of grassroots Party organizations, revising the management methods for Party fees, conducting training on institutional policies, and promoting implementation at lower levels. We conducted self-examination and rectification work for the development of Party members, steadily advanced the adjustment of Party committees at all levels, organized training courses for Party building work and new branch secretaries, and honored outstanding Party members, exemplary Party workers, and advanced community-level Party organizations within the group. We also strengthened the leadership of Party building in grassroots governance by formulating and issuing guidelines for grid management and promoting the formation of a new pattern of grassroots governance.

China Southern promoted mass innovation in the industry and shared the innovative experience of China Southern's "Five Small" initiatives (small suggestions, small innovations, small breakthroughs, small inventions, and small creations) at the Member Committee of the Civil Aviation Administration of China. We strengthened external exchanges and cooperation by organizing activities with the Hong Kong Civil Clerical and Professional Employee General Union to promote the development of patriotic forces in Hong Kong. We participated in the National Civil Aviation "Youth Vanguard, Advancing on a New Journey" May Fourth Exchange Exhibition and the "Domestic Aircraft Operation Youth Alliance" Forum, and joined the Communist Youth League Alliance of Guangzhou Aviation Hub. We also implemented the "Women's Innovation and Action Initiative" and established the first innovation studio for female employees.



China Southern continued to promote the normalization of the "flexible career ladder" of management and advance the normalization of the training and selection of outstanding young management. We increased the intensity of training in political and professional abilities for management, with a focus on practical training to enhance their skills. We also established a normalized system for secondment and training to cultivate a high-quality and professional management talent pool with the "Six Abilities" (refers to individuals who possess a sharp mind to handle tasks, a keen eye for current affairs, effective communication skills, a sense of responsibility, a comprehensive understanding of their field, and a clear direction in their work).

China Southern actively implemented and strengthened ideological and political work, organized education on the "Four Clear" situation and task education (involves clarifying the situation, attitude, tasks, and countermeasures), and promoted the institutionalization and standardization of heart-to-heart talks. We conducted internal and external publicity focusing on party-building leadership, safe production, "humanized, digitalized, refined, personalized, and convenient" services, and reform and development. Throughout the year, we published over 2,300 articles on major central media platforms such as People's Daily, Xinhua News Agency, and CCTV. We optimized the "Sunshine China Southern" culture system in the new era and carried out leading actions for the China Southern brand. We were ranked 12th in the "2022 Top 30 Central State-owned Enterprises in Brand Building Capability", placing us at the forefront of the industry.



## Operating in compliance with laws

China Southern solidified the foundation of compliance management, carried out comprehensive risk management, upheld the integrity bottom line, actively protected intellectual property rights, and ensured legal and compliant operations. We are committed to safeguarding and supporting the construction of China Southern as a world-class aviation transport enterprise with international competitiveness.

### Compliance management

China Southern Group strengthened its compliance management system by constructing a classified and graded system. We conducted special assessments on compliance management, optimized the manual platform and compliance risk management system, and further enhanced the compliance management system. The operating mechanism became more refined, contributing to the stable and compliant operation of China Southern.

#### Establishing a compliance system

China Southern formulated a comprehensive compliance management framework document titled "Compliance Management Regulations", which served as the master volume of the "Compliance Management Manual". We updated and released six separate volumes of the "Compliance Management Manual", including the Foreign Legal Risk Management, Related Party Transaction Management, Data Compliance Management, Responsibility for Violation of Investment Operation, and Anti-Bribery Compliance Management volumes. In total, we developed 29 compliance manual documents covering key areas, establishing a well-defined and classified compliance management system.

#### Conducting compliance reviews

China Southern integrated compliance review as a mandatory procedure embedded in the management process. We implemented a 100% compliance review requirement for regulations, economic contracts, and major decisions, ensuring that all necessary reviews were conducted and any violations were strictly rejected. The compliance review opinions for significant decision-making matters were signed by the Chief Compliance Officer, providing clear recommendations on the compliance of the decision-making matters.

#### Strengthening compliance control

China Southern organized the secondary units to comprehensively review the key compliance positions within the respective units. We formulated compliance risk lists and corresponding measures for these key positions. In the compliance risk management system, we opened a "Compliance Report" channel to encourage employees to report any violations or risks. We tracked and provided feedback on the handling of these reports.

#### Building a compliance center

The Compliance Center of China Southern's business middle platforms completed the capacity building in three important areas: manual structuring, electronic signature, and partner information retrieval. This enabled the provision of comprehensive solutions to various business departments, including compliance reference queries, risk identification, and compliance requirement execution.

#### Publicizing and implementing the compliance culture

China Southern utilized the platform of the Legal Standards Lecture Hall to conduct compliance training on key areas such as anti-monopoly and data protection. Compliance training was made a regular course for key personnel, including management staff, foreign employees, and new hires. We organized employees to sign the "Compliance Commitment Letter" to reinforce the business concept of operating in compliance with the law for all levels of staff.

#### Carrying out special assessment

China Southern used performance assessments to promote transparency and strengthen accountability. We conducted special assessments on compliance management for our secondary units, focusing on four dimensions: compliance system construction, mechanism operation, organizational foundation, and violation handling. This helped to reinforce the primary responsibility of compliance management within the units.

### Risk management

China Southern Group revised the "Comprehensive Risk Management Regulations" to strengthen the risk management mechanism. We promoted intelligent risk monitoring to ensure comprehensive monitoring of major operational risks. We placed importance on compliance risk prevention and control for listed companies, effectively preventing various risks.

China Southern strengthened the supervision and evaluation of legal and compliant operations. We integrated internal control evaluation and compliance evaluation to supplement internal control risk points and improve the internal control risk database. We coordinated the supervision of internal control evaluation and increased the supervision and evaluation of financial subsidiary enterprises. We provided guidance and supervision for the self-assessment of internal controls within subsidiary enterprises, promoting the improvement of internal control systems and mechanisms at all levels of subsidiary enterprises.

Building a compliance risk management system

Optimizing the internal control evaluation

Monitoring significant operational risks

Preventing and controlling listing compliance risks

Preventing financial risks

China Southern upgraded the compliance risk management system and continued to deepen the integration and optimization of compliance, legal, risk, and internal control management. We initially established a "general compliance" risk prevention system, guided by risk management, with internal control system construction and supervision as the core, legal management as the means, and various manuals as support. We established risk monitoring indicators for China Southern Group, gradually completed the integration of internal control matrices, risk databases, and compliance risk lists, and ensured smooth channels for information sharing. This enabled the monitoring and early warning of risks in important business areas and processes.

Based on the requirements of risk classification monitoring indicators from the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), China Southern supplemented and improved the indicators and threshold ranges based on the annual assessment of major risks, key work tasks, and company KPIs. This contributed to the development of a key risk indicator monitoring system that better reflects the characteristics of the civil aviation industry and the company's safe production and operation. The responsibility was further delegated to each unit, and monitoring information and corresponding measures were collected on a monthly and quarterly basis. After going through the decision-making process, the information was reported to the Company and SASAC to achieve comprehensive monitoring of major operational risks. The updated indicator system was solidified in the "Management Measures for Key Risk Indicators", providing a systematic framework for monitoring.

China Southern effectively controlled debt risks and safeguarded the bottom line of funds. We implemented integrated management of domestic and foreign currency funds, preventing risks associated with overseas funds. We strengthened tax compliance and enhanced financial and accounting supervision. Throughout the year, there were no overdue payments without any disputes.





## Business ethics

### Anti-corruption

In 2023, China Southern persisted in strengthening political supervision, promoting clean governance, and combating corruption with a strict approach, measures, and atmosphere. We organized a conference on Party building, as well as clean governance and anti-corruption efforts, to implement 50 key measures in these areas. We remained resolute in advancing the comprehensive and strict governance of the Party.



### Anti-commercial bribery

China Southern developed and released the "Compliance Management Manual" with a separate volume on anti-commercial bribery compliance management. This volume included the "Regulations on Anti-Commercial Bribery Compliance", "Guidelines on Anti-Commercial Bribery Compliance", "Guidelines on Anti-Commercial Bribery Compliance in the United States", "Guidelines on Anti-Commercial Bribery Compliance in the United Kingdom", "Guidelines on Anti-Commercial Bribery Compliance in Canada", "Guidelines on Anti-Commercial Bribery Compliance in Australia", "Guidelines on Anti-Commercial Bribery Compliance in New Zealand", "Guidelines on Anti-Commercial Bribery Compliance in the European Union", and "Guidelines on Anti-Commercial Bribery Compliance by the United Nations".

### Reporting procedures and whistleblower protection

Whistleblowers could choose to submit their reports anonymously or with their real names, either by mailing letters or personally visiting designated reception locations to report the relevant information to the Discipline Inspection and Supervision Office of China Southern Group. The Discipline Inspection and Supervision Office strictly followed the procedures and time limits required by the Rules for Handling Whistleblowing Reports by Discipline Inspection and Supervision Institutions, the Provisions on Reporting Whistleblowing Reports and Handling Clues by Second-level Units of China Southern Group, and the Several Provisions on the Implementation of the Measures for the Management of Problem Clues by Discipline Inspection and Supervision Organs, diligently handling reports and complaints submitted with real names or anonymously. The Office accepted reports and complaints within the jurisdiction of the Discipline Inspection and Supervision Office of China Southern Group forwarded by other organs, departments, and units, following the prescribed procedures, effectively addressing public concerns, and fulfilling their supervisory responsibilities.

The Discipline Inspection and Supervision institutions at all levels of China Southern Group protected the information of whistleblowers who reported with their real names, controlling the scope of knowledge and strictly prohibiting the disclosure of the whistleblower's information to the individuals or entities being reported. Upon receiving reports from whistleblowers who provided their real names, we conducted verification in accordance with regulations and disciplinary measures. After completing the investigation into the reported matter, we provided feedback on the outcome to the whistleblower who reported with their real name.

### Supplier behavior management

China Southern issued the "Supplier Code of Conduct", which required all suppliers to comply with the requirements regarding legal compliance, ethics, safety and quality, and environmental protection. We emphasized transparency and honesty in business transactions and demanded that suppliers act with integrity, prohibiting any form of corruption, extortion, bribery, blackmail, embezzlement, or other behaviors involving improper interests. Fair competition was expected from suppliers in their business operations, with no tolerance for any form of malicious competition. If suppliers identified or suspected any malicious competition or unethical behavior in their business dealings, we encouraged them to report it promptly, working together to create a fair competitive environment.

#### Strengthening the "blacklist" management of suppliers

We included 14 bribery suppliers in the "blacklist", and prohibited them from conducting any business dealings with China Southern Group. We took the lead in convening a meeting with the other two major airlines to establish a mechanism for the "blacklist" of suppliers involved in bribery. We formulated and issued the Guiding Opinions on Classifying and Handling Suppliers Involved in Violations and Crimes, ensuring joint punishment for individuals who bribe employees of any airline within the three major airlines.

#### Strengthening the education of Party rules and disciplines

China Southern conducted Party discipline education on Party rules and regulations during 40 training sessions, training a total of 2,789 Party members.

China Southern achieved a **100%** disposal rate for handling reported clues and complaints

#### Deepening the rectification of "Four Malfeasances"

We revised and issued the "Implementation Rules of the Party Group of China Southern Group on Further Strengthening Work Style Construction to Deeply Implement the Spirit of the Central Eight-point Regulations". We emphasized the rectification of formalism and bureaucratism and issued the 2023 Work Goals and Measures to Eliminate Formalism and Bureaucratism and Reduce Burden at the Grassroots Level. We continued to streamline and standardize coordinating institutions, reducing them by 28.85%. We carried out special improvement work on meeting management and continuously improved the meeting atmosphere. We deeply rectified the trends of hedonism and extravagance, focusing on important occasions like holidays, and resolutely investigated and dealt with violations such as irregularities in dining and drinking and the improper giving and receiving of gifts and money.

#### Deepening the construction of an integrity culture

China Southern integrated the integrity culture into the "Sunshine China Southern" culture system of the new era. We continued to run the "Weekly Integrity" column in the E · Vision and introduced the "Integrity Stories" and "Interpreting Integrity Through Words" columns in the China Southern Newspaper. We organized a touring exhibition of calligraphy and paintings on integrity culture to enhance the integrity aspect of our corporate culture.

#### Improving the supervision system

China Southern developed 35 institutional regulations, including the regulations on recording and reporting instances of leading management violations in interfering with supervisory inspections, selection and appointment of management, implementation of procurement, and infrastructure projects.





## Intellectual property protection

As an important intangible asset for China Southern, intellectual property serves as a crucial source for promoting sci-tech innovation and enhancing core competitiveness. China Southern continuously improved its intellectual property management, strengthening awareness of intellectual property protection, and dedicating efforts to safeguard intellectual property.

China Southern possessed **1,017** trademark intellectual properties.....

In 2023, there were **0** cases of trademark infringement incidents reported at China Southern

### Improving the intellectual property management system

China Southern revised the "General Volume of Intellectual Property Management Manual" and made corresponding refinements and revisions to the "Trademark Management Volume", "Patent Management Volume", and "Software Copyright Management Volume". Additionally, we completed the compilation of the "Copyright Management Volume for Works".

### Carrying out intellectual property protection planning

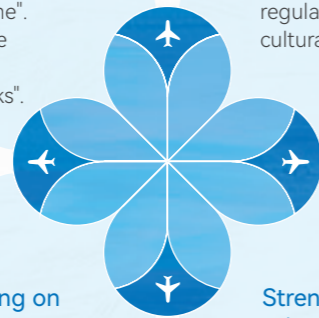
We drafted the "Mid-term Plan for Intellectual Property of China Southern Group (2024-2030)" to comprehensively enhance the intellectual property management capabilities and levels in areas such as system construction, management regulations, talent development, and cultural development.

### Holding special training on intellectual property

China Southern organized a series of specialized training sessions on intellectual property for the first time, covering the entire company. Experts were invited to deliver lectures on topics such as intellectual property management systems, trademark and brand protection, copyright laws and regulations, patent applications, and the use of trade secrets. The training aimed to promote awareness and understanding of intellectual property among employees, while also highlighting China Southern's policies and measures to strengthen the creation, utilization, and protection of intellectual property. Additionally, emphasis was placed on raising awareness of intellectual property risks in international contexts.

### Strengthening the application of intellectual property patents

China Southern strengthened the intellectual property protection for existing teaching materials such as outlines, courseware, videos, question banks, and textbooks. Courseware that met the criteria was promptly registered for copyright, and textbooks that met the criteria were promptly reported and assigned publication numbers. Intellectual property management for sci-tech innovation projects was also enhanced, and when conditions were ripe, utility model patents were promptly registered for eligible sci-tech products.



## Deepening reform and development

China Southern successfully completed the three-year action plan for state-owned enterprise reform and launched the implementation of the deepening and enhancing reform action. The focus was establishing and improving the system and mechanisms for sci-tech innovation, developing strategic emerging industries, enhancing modern corporate governance with Chinese characteristics for state-owned enterprises, and optimizing market-oriented operating mechanisms. China Southern pushed reforms forward in-depth, actively integrating itself into the new development pattern. We considered reform as the fundamental driving force for high-quality development to accelerate the construction of a world-class aviation transportation enterprise with global competitiveness.

China Southern achieved **Grade A** in the three-year evaluation of state-owned enterprise reform

Additionally **two "double hundred enterprises"** (logistics and general aviation companies) were chosen as benchmarks

### Accelerating the layout of strategic emerging industries

China Southern planned its development in strategic emerging industries closely related to civil aviation. We also vigorously developed flight training with China's characteristics, high-end aviation equipment manufacturing, a domestic civil aircraft community, and industries such as IT as well as emerging general aviation. These initiatives were to promote the adjustment and optimization of the industrial structure while accelerating the cultivation and growth of new momentum. Zhuhai Xiangyi Aviation Technology Co., Ltd., one of China Southern's subsidiaries, was recognized as a national-level specialized, sophisticated, distinctive, and innovative "little giant" enterprise.

### Making breakthroughs in key areas

China Southern made breakthroughs in key core technologies, including the final assembly and software/hardware design of domestic simulators. We independently developed the "Sky Eye System", the world's first aircraft health diagnosis system compatible with mainstream models from Airbus, Boeing, and Commercial Aircraft Corporation of China, Ltd. China Southern achieved breakthroughs in building comprehensive maintenance capabilities for ARJ-21 aircraft's APU parts, which reduced China Southern's reliance on foreign support and reduced the maintenance cost per aircraft by more than 30%. In 2023, China Southern secured 115 new state-authorized patents, bringing the total number of valid patents to over 500.

### Improving the supporting system for scientific and technological innovation

China Southern developed a list management system for special matters concerning total remuneration. This system includes issues that significantly impact reform, development, and scientific and technological innovation. China Southern streamlined and enhanced the separate listing mechanism for total remuneration. We integrated key strategic tasks, high-level science and technology talents, and key scientific research projects into the separate listing mechanism.

### Enhancing modern corporate governance

China Southern dynamically optimized the pre-list, strengthened the construction of its external director team, and enhanced its differentiated evaluation system. We built the "six-capability" model and conducted maturity assessments for the boards of directors of our subsidiaries. These measures established a solid foundation for the optimization and adjustment of authorization powers of subsidiaries' boards of directors.

### Promoting the tenure system and contractual management

China Southern included the main aviation branches and business operation units of non-subsidiary enterprises in the reform to achieve 100% contract signing. We strengthened the effective integration of assessment, distribution, and withdrawal processes of the tenure system and contractual management.

### Deepening the reform in three systems

China Southern enhanced the supporting mechanism of "manager promotion and demotion, employee employment and dismissal, and salary increase and reduction", strengthened the management after demotion, and established explicit guidelines for the promotion and demotion of managers. Since 2021, the proportion of middle-level and above managers who have been adjusted to the lowest level or identified incompetent in China Southern has reached 18.4%. China Southern conducted flexible employment for nearly 12,000 individuals, solved 28% of the staffing needs for ground positions, and reduced 1,500 new contract labor.





# 02

## SAFE FLIGHT Safe Journey

The civil aviation industry regards safety as its fundamental lifeline. China Southern consistently adhered to the philosophy of "People First, Life First", focused on identifying and mitigating safety risks, continuously improved safety standards, and developed a "great security" concept. We ensured the absolute safety of aviation operations and human life, thus supporting a new development pattern with a renewed emphasis on safety.

Responding to the UN 2030 Sustainable Development Goals:





## Strengthening safety management

China Southern strictly abided by laws and regulations such as the *Civil Aviation Law of the People's Republic of China* and the *Law of the People's Republic of China on Work Safety*. We were committed to achieving work safety from a strategic perspective, continuously enhancing the development of safety systems, strengthening the prevention of safety risks, and constantly improving the scientific and refined level of safety management.

### Developing safety strategies

China Southern insisted on work safety from a strategic viewpoint, diligently studied and implemented the spirit of General Secretary Xi Jinping's important instructions on civil aviation safety. We maintained the ideological foundation of "Safety First", solidly established the value orientation of the "Safety First" concept, and integrated safety into our values and actions.

China Southern continued to maintain the **best safety record of domestic civil aviation** in 2023

**Safety management strategy**  
China Southern firmly prioritized safety in its adherence to the "five developments" concept, establishing a comprehensive safety management strategy of "two grasps and one defense". We were committed to properly balancing the relationship between safety and development, profitability, operations, and services, and integrated safety development in every process and aspect of our operations.

**Linking work safety with performance**  
China Southern built a specific annual reporting mechanism on safety for the principal accountable individuals of secondary units. Work safety was considered a crucial indicator for the comprehensive performance evaluation of Party members and management personnel. At the same time, China Southern established a weekly work safety evaluation meeting system to focus more on safety-related matters and further enhance the timeliness and effectiveness of the implementation of safety management measures.

**Safety management mechanism**  
China Southern clarified the important role of the Party organizations in directing and overseeing the overall situation in work safety, put the study of safety issues on the important agenda of Party organizations at all levels, and incorporated major work safety matters into the "Three Majors and One Large" decision-making mechanism (the system of collective decision-making on key decisions, personnel appointment and dismissal, investment on key projects, and arrangement of large sums of money) in its "Aviation Safety Management Manual". Meanwhile, we implemented five mechanisms to carry out the key safety decisions and plans issued by the Leading Party Members Group of China Southern Group. These mechanisms were designed to facilitate the step-by-step transition of critical directives from the CPC Central Committee and the Civil Aviation Administration of China regarding safety into China Southern's safety strategies, departmental management systems, and job-specific operational procedures, which ensured that these safety requirements were implemented at the grassroots.

China Southern achieved a safe flight time of **2.842** million hours (including Xiamen Airlines)

and served **142** million passengers (including Xiamen Airlines) throughout the year

We ensured flight safety for **290** consecutive months (excluding Xiamen Airlines)

and air defense security for **355** months (excluding Xiamen Airlines)

### Building a safety system

China Southern continued to deepen the development of seven characteristic safety systems and officially published the construction standards and audit criteria for these systems: safety responsibility, risk management and control, process control, rules and regulations manual, training, safety culture, and scientific and technological innovation. We adopted an integrated approach to safety monitoring, combining individual, organizational, and systemic scrutiny to enhance systematic thinking in its safety practices. This integrated approach facilitated the establishment of a distinctive safety management system featuring clear functions, a reasonable structure, and the capability for quick dynamic responses.

#### Improving the supporting mechanism and process

China Southern issued system audit management regulations and auditor management regulations, selected 117 company-level safety auditors, and conducted three sessions of specialized training. As a result, the seven safety systems basically met the requirements for in-depth promotion and development.

#### Strengthening the construction of a responsibility system

China Southern reinforced the work plan for managing safety responsibility lists at various job positions. We organized the formulation of template safety responsibility lists for company leaders, team members of secondary units, safety management personnel, and front-line key positions. Chongqing and Guizhou Airlines were selected as pilot cities for the digitization of responsibility lists.

#### Promoting safety management practices

China Southern implemented the initiative of "sharing and promotion of advanced safety management practices", extensively gathered exemplary experience and strategies from grassroots units in advancing system construction, and encouraged constructive interaction between top-level planning and grassroots exploration.

#### Organizing safety system audit

China Southern explored and promoted the seamless integration of seven safety systems with SMS audit, developed an online audit function, and ensured full correspondence between safety inspection items and statutory self-inspection items through the ESMS system. We organized system audits by combining company audits with each unit's self-audits to facilitate development.

### Preventing safety risks

China Southern continued to strengthen risk prevention and control. We systematically carried out risk assessments focused on "human, aircraft, environment, and management", formulated risk prevention and control measures, vigilantly monitored flight risks, and intensified the identification and rectification of potential hazards to ensure that operational safety risks in critical areas and processes were under control.

#### Strictly preventing flight safety risks

##### Keeping a close eye on low-fuel risks

China Southern established an evaluation mechanism for fuel decision points and formulated the "Aircraft Low Fuel Management Checklist". It integrated alarm reminders, fuel measurement, ACARS (Aircraft Communications Addressing and Reporting System)-based decision-making fuel quantity information transmission, and the checklist through the operation monitoring system. China Southern improved the efficiency of low-fuel management and reduced the core risks associated with low-fuel operations. Additionally, China Southern enhanced its awareness of low-fuel risks and improved its capabilities for handling such situations through evaluations and case analyses.

##### Reducing the risk of stray entry

China Southern upgraded the Electronic Flight Bag (EFB) chart module to achieve a superimposed display of intelligence, meteorological and terrain data in the route chart. By establishing an information collection and data maintenance system for restricted zones, we implemented an alarm function for restricted zones and border lines based on equipment location in the route chart. We assisted aircrew in building better situational awareness and helped to reduce the risks of inadvertently entering restricted, dangerous, prohibited, and firing zones, or crossing border lines.

##### Controlling cabin door risks

China Southern enhanced the monitoring measures for each cabin door during the take-off and descent phases, aiming to achieve quick identification, prompt reporting, expedited resolution, and immediate control of issues and ensure the safety and normal operations of flights. Moreover, China Southern intensified the recognition of passengers' abnormal behaviors during cabin inspections and was committed to decisively intervening in any cabin door-related unsafe acts.





China Southern carried out  
**528** special risk assessments

China Southern identified  
**564** general hidden dangers

China Southern provided  
**22** risk warnings

Team 1 and Team 2 from China Southern won the **"Top Team Award in the Transportation Industry"** at the 5th National Network and Information Security Information Notification Mechanism Central State-owned Enterprise Cybersecurity Competition

China Southern's "Flight Data Analysis and Simulation Playback" won the **third prize** in the user service category of the First State-owned Enterprise Digital Scenario Innovation Professional Competition

### Applying digital methods to identify risks

**Identifying risks**  
Focusing on mitigating core risks such as controlled flight into terrain, loss of control in-flight, and runway incursion, China Southern set up a system of indicators and an early warning model. China Southern detected and precisely forecasted early signs of risks through comprehensive data gathering and evaluation, enabling risks to be identified, quantified, and managed effectively.

**Quantifying risks**  
CSA developed the Airport Flight Operation Risk System (AFORS), which employs three-dimensional dynamic simulation videos that are produced based on factors such as the climate environment, terrain features, flight procedures, air traffic services, Quick Access Recorder (QAR) monitoring events, ground operation characteristics, and airport support capabilities. By integrating the operational experience of airlines with resources such as relevant flight data from China Civil Aviation Flight Quality Monitoring Base and civil aviation safety information, CSA provided real-time alerts, performed quantitative analyses, and offered visual representations of risks related to airport flight operations.

### Improving the team level

**Strengthening qualification capacity building**  
China Southern carried out categorized management for technical restoration of its professionals and provided targeted support measures for individuals with slower recovery progress or lacked sufficient qualifications. Besides, China Southern conducted an ability assessment of pilots who were in training, introduced tiered management strategies, implemented centralized training for newly graduated co-pilots, and established specialized curriculum systems. This ensured that China Southern could monitor and cultivate the technical skills of its personnel from the outset.

**Strengthening mental health management**  
China Southern provided proactive psychological assessments at each occupational tier and promoted the in-depth application of assessment results across entire careers of employees. At the same time, China Southern implemented specialized management strategies for improving employees' mental health. We cooperated with the Party organization, government, labor union, and youth league to carry out targeted ideological and political work of professional teams in specific business areas and contexts. These efforts included conducting candid and supportive discussions.

## Fostering safety culture



China Southern strove to foster a safety culture in the new era guided by the principles of "Life First, Safety First, Compliance with Rules and Devotion to Obligations, and Commitment to Rigor and Integrity". We persistently conducted various safety education activities to enhance employees' safety awareness and their commitment to safety in their thoughts and actions.

### Strengthening safety education

By organizing various publicity and education activities on safe production that are popular among employees, such as safety forums and discussions to enhance the ideological understanding of "great safety", China Southern continuously enhanced the safety awareness of all employees and built a sound atmosphere of "everyone prioritizes safety and knows how to respond to emergencies". It embodied a sense of responsibility in the assurance of "always rest assured" and an implementation capability focused on "putting everything into place". These initiatives were part of China Southern's ongoing process to advance the modernization of its safety governance system and enhance its governance capabilities.

### Promoting culture publicity

China Southern innovatively set up a local safety culture publicity team, appointing 95 core individuals to lead the effort. We launched a campaign comprising 100 safety culture-related lectures and established cultural brands such as "I provide safety recommendations" and "I find defects in the manual". The objective was to raise employees' sense of engagement and identity for the safety culture.

### Building a "community" for voluntary report and sharing

China Southern developed new functions such as social interaction, task system, operation system, point growth, message reminder, and personal center in the I-CARE Voluntary Report app to benefit all China Southern employees. China Southern ensured that employees could complete information reporting with one click on the mobile app, know the processing progress at any time, and evaluate and interact with the processing situation. This gradually formed a positive environment for all employees to care about and implement work safety. In 2023, the I-CARE Voluntary Reporting app collected more than 36,900 pieces of reported information.





## Consolidating aviation safety

Prioritizing safety, China Southern insisted that safety best represents a brand's image, shows its service quality, and brings it the most profits. We adopted an overall strategy for the development of a safety system, safety training, safety ideology, and safety culture. By continuously reinforcing aviation safety, China Southern strove to develop a sustainable and high-quality aviation safety environment.



Winning the "Three-Star Flight Safety Diamond Award" of CAAC

China Southern won **first place** in the "Safe Civil Aviation" assessment of 37 air transportation service companies in central and southern China, maintaining a leader in the region for six consecutive years



China Southern conducted standardized training for all  
**413** examiners

We employed  
**392** core instructors after rounds of selection

We organized  
**11** flight lectures

Achieving full coverage of CRM recurrent training

**98.2%** of trainees being satisfied with the training quality

**Optimizing the management system:** China Southern developed the "Work Plan for Flight System to Promote Integrated Operation" and made corresponding proactive efforts. We conducted studies and formulated the "Flight System Efficiency Assessment Scheme" and "Reward Distribution Scheme for Operation Efficiency" to ensure a more scientific and rational operation assessment indicator framework while enhancing the motivation of each flight unit. China Southern also standardized the submission processes of operation information, including flight time and extended duty periods, refined the management of backup crews, and clarified the responsibilities, authorities, and workflows associated with the non-production tasks of the aircrew, thus advancing the operation system's construction.

**Publicizing ideological and political education:** China Southern continuously consolidated the results of "one company, one strategy" and promoted five systems of ideological and political education for aircrew and seven systems of safety. We organized specialized research on aspects such as employee stability, team leader's team construction, young pilot team construction, and trainee pilot training. We provided more positive guidance for employees and maintained the pilot team's stability and vitality, ensuring aviation safety.

**Improving safety-ensuring capabilities:** Prioritizing the main objectives of advancing reform, enhancing "overall management", and improving qualifications, China Southern made concentrated efforts to overhaul training methods. The approach integrated flight lectures with small-scale sessions led by chief engineers, evidence-based training with monthly safety assessments, and technical workshops with seasonal learning opportunities and CRM training. China Southern increased its training efficiency, enhanced the qualifications of the aircrew, and offered robust support for its production, operations, and flight safety.

**Improving the conduct:** China Southern revised its long-term mechanisms for conduct improvement, such as the "Training Program of Flight Conduct" and "Implementation Plan for Quantitative Management of Pilot's Conduct", and detailed the application methods of the "four forms of strict public security" and the "list of negative behaviors of safety personnel". We also developed a management system to identify negative signs and shortcomings by summarizing and analyzing quantitative data of conduct.



## Ensuring information security

China Southern attached great importance to network security. We established a network security system featuring "point-plane combination, internal and external linkage, horizontal coordination, and defense-in-depth architecture" and formulated the "Management Regulations on 'Four Unifications' for Informationization Construction". Besides, we clarified the information security organization and division of responsibilities, carried out publicity and exchange activities on security awareness, and established a unified consensus on network security construction and development to build a solid network security defense line.

By formulating such systems as the "Regulation on Compliance Management of Data Processing", "Guidelines for Processing Data Subject Rights", and "Guidelines for the Life Cycle of Personal Information", China Southern explicitly required that personal information protection impact assessment be conducted in collaboration with third parties in the entrusted collection, entrusted processing, exchanges, sharing, and transmission of personal information, and that personal information protection agreements be signed, the "minimum and necessary" principle for data collection be implemented, transmission and storage security be ensured, and information be used and shared under the "Guidelines for Compliance Protection of Personal Information" and relevant regulations on contract management. Besides, the provision of data must follow signed agreements, with specific data desensitized. Relevant data must be retained or destroyed in strict accordance with national requirements, and a full-life-cycle guarantee of data security must be implemented.



China Southern built a Network Security and Digitalization Committee headed by its General Manager. The Committee is responsible for making major decisions on data security and guiding and participating in work related to privacy protection and data security. Besides, we set up a data protection and compliance officer, a post currently served by its Deputy Chief Information Engineer. The officer is responsible for personal privacy protection and attends regular work safety meetings of information systems to guide network security work. The data protection and compliance officer takes the lead in setting up a working personal information protection group responsible for promoting personal information protection in specific work.



**Information security audit:** China Southern employs external accounting firms and professional network security agencies to carry out independent security audits every year, including information system audits, and covering content such as information security policies and system security. Following the requirements for classified protection, China Southern employs authoritative evaluation agencies yearly to evaluate key information systems and management processes, identify hidden risks, and handle them in time. Meanwhile, China Southern cooperated with China's national cyberspace administrations, the State-owned Assets Supervision and Administration Commission, the Civil Aviation Administration of China, public security organizations, and authoritative evaluation centers in technical security testing to comprehensively assess system risks and screen out potential security hazards.

**Information security certification:** China Southern passed the ISO27001 information security management system certification, Payment Card Industry (PCI) data security standard certification, Data Management Capability Maturity Assessment Model (DCMM) certification (Level 4), national network security level protection evaluation certification, and IATA Operational Safety Audit (IOSA), and undergoes certification review every year to ensure the effectiveness of information security management.



By organizing internal network security attack-defense confrontation drills in actual scenarios, China Southern checked the omission of defense boundaries, the status of asset security reinforcement, and the effectiveness of protection strategies for security equipment through high-level drills. Besides, China Southern carried out phishing email drills to improve internal employees' network security capabilities. We completed network security attack-defense confrontation drills for the Spring Festival travel rush, the two sessions, and national network security attack-defense exercises, obtaining "Excellent" results. In 2023, China Southern's information system operated safely and smoothly, without any major network security incidents throughout the year.



China Southern formulated the "Work Plan for Customer Personal Information Protection". Focusing on customer information collection, customer label management, and customer information use, we achieved the compliant collection and use of customer personal information by launching functions such as unified collection and search of customer information in the user center and through features such as SMS reach and cloud call reach in the contact center. Besides, we completed the systematic connection of the user center and contact center with six business scenarios, including ground service reach, customer service outbound call, and cabin service, realizing that customer data was available but processed for privacy protection and made inaccessible after use.

In case of any leakage of passenger information, China Southern comprehensively carried out investigations to identify risks related to passenger information leakage. Specifically, we sorted out the data flow and key nodes of sensitive information such as user travel and contact information in the internal system and connected external systems, and checked links such as passenger contact information and passenger travel information to identify and analyze potential risks and work out corresponding monitoring and optimization schemes.

China Southern formulated systems, such as "Management Measures for Network Security", "Special Plan for Emergency Response to Network Information Security Emergencies", "Detailed Rules for Emergency Response to Network Security Incidents in Information Center", and "Guidelines for Defense against Ransomware and Cyberattack". In these systems, China Southern clarified the handling and reporting processes and methods of major incidents, such as data leakage and network security accidents, to achieve pre-prevention, in-process control, and post-retrospection and give prompt emergency responses to leakage events while protecting the related scene and evidence.

Meanwhile, China Southern regularly backed up critical system data off-site and conducted recovery tests to ensure the information system's proper recovery after failures. We also strengthened the construction of the network security protection system and improved safety protection, monitoring, and audit measures to eliminate potential safety hazards in time and enhance accident investigation capabilities.







More than  
**76,700** people  
participated in the Network  
Security Publicity Week activity

More than  
**2,000** people  
participated in the exhibition  
on network security

Nearly  
**70,000** people  
participated in the ilearning  
information classes



China Southern organized various information security training activities, making network security courses available to all concerned and fostering a strong atmosphere of all-people involvement, responsibility, and sharing regarding network security. Through these efforts, we helped all employees enhance their awareness of network security and obtain relevant common knowledge and techniques.

**Online knowledge popularization**



China Southern thoroughly popularized network security knowledge by releasing graphics, texts, and news, such as "Understanding the Data Security Law in One Picture" and "13 Prohibitions of Information Security", on its internal platforms, WeChat official account, the E · Vision, Weibo, and other channels. This allowed its employees to acquire knowledge more efficiently in their free time. We also carried out online training sessions on security awareness about high-risk behaviors concerning network security to strengthen the security awareness and techniques of technicians.

**Offline study visits**



Through "on-site exhibition + interactive experience", China Southern held the Network Security Publicity Week activity on the theme of "Underpinning the Solid Network Security Defense Line, Boosting the High-quality Development of China Southern Airlines". During the event, we organized special lectures and on-site interactive activities on office security, mail security, and personal information protection. Besides, an exhibition was held in the China Southern Airlines Building, to interpret the recently released laws, regulations, and enterprise network security management systems. Under the theme of mail security, office security, personal information protection, confidentiality security, and others, network security education was conducted through case analyses and introductions to potential safety hazards and protection skills. Interesting interactive games on network security were also organized to attract employees' participation in learning to enhance their awareness of network security.



## Care for passenger safety

China Southern spared no effort to ensure the safety of in-flight meals and cabins, providing passengers with a healthy and safe environment, and creating secured and considerate travel.

### Ensuring the safety of in-flight meals

#### Supervising food safety and hygiene

The Guangzhou headquarters conducted five rounds of hygiene inspections to in-flight meals, issued eight food safety risk warnings and four notifications, and conducted three special training sessions on food safety. The overall safety risks of in-flight meals were controllable.

#### Monitoring in-flight drinking water safety

The Guangzhou headquarters carried out hygiene risk assessments on the supply chain of its in-flight drinking water. In the assessments, 193 water samples were collected from 58 aircraft and eight water vehicles for microbiological indicator testing. Aircraft water quality sampling and testing were carried out, with a total of 19 flights randomly inspected.

### Ensuring cabin safety

#### Core risk prevention and control

China Southern fulfilled the cabin crew's primary responsibility of ensuring safety and took prevention measures against turbulence, cabin doors, lithium batteries, air defense, and other core cabin risks. Throughout the year, no major issues such as turbulence, cabin doors, and other safety incidents occurred. The cabin department succeeded in handling 243 instances of cabin disturbances, which involved 1,032 passenger injuries and illnesses, creating a safe and comfortable environment for passengers.

#### Enhancing safety skills

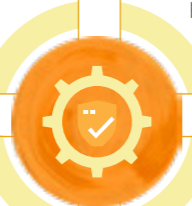
China Southern introduced the Clear Air Turbulence (CAT) cabin turbulence alert management system to quantify turbulence intensity in real-time and provide cabin crew with a powerful tool to assess turbulence levels and adjust service processes, thereby ensuring passenger safety. We promoted the VRTT multiplayer collaboration firefighting training system to strengthen virtual-scenario-based training and enhance cabin crew's responses to emergencies. In addition, we optimized the standards of the cabin crew manual, conducted safety theory training covering all staff, and performed crew joint emergency drills covering the entire operational process.

#### Vector control

China Southern regularly conducted assessments on aircraft cockroach infestations, ensuring good control throughout the year. This continuous effort ensured a comfortable and hygienic cabin environment for passengers.

#### Offering health consultation

China Southern participated in the formulation of the *Guidelines for Passenger Airworthiness Assessment and Risk Control* (draft for comments) issued by the Civil Aviation Administration of China, showing care and consideration for special passengers by offering in-flight health consultation services. In 2023, a total of 3,119 passengers received healthy flying advice.



### SPECIAL PROJECT



## Building the "Shared Dream" Together A Case of Taxing Back before Flight Demonstrates China Southern's Boundless Compassion and Prioritization of Lives

On August 2, 2023, after a flight from Guangzhou to Xining was taxied, a 12-year-old passenger felt unwell unexpectedly, with symptoms of full-body shaking and foaming at the mouth. The cabin crew responded quickly and collaborated in emergency rescue. The aircraft then taxied back to the apron, and an ambulance was called immediately to transport the passenger to a hospital for further examination. During the treatment, more than 170 passengers on board cooperated without complaints, quietly waiting for the plane's return. The young passenger eventually returned home safe and sound. This incident exemplifies China Southern's unwavering commitment to the principle of "people first, life first", and China Southern itself has consistently demonstrated boundless compassion and prioritization of lives.





# 03

## GREEN FLIGHT Practicing Low-carbon Development

China Southern adhered to the concept of being "Green, Harmonious and Innovative", integrated sustainable development into its overall production and operation, and actively served China's "dual carbon" goals. We actively responded to and mitigated the impact of climate change, reduced pollution emissions, promoted the green and low-carbon concept, highlighted biodiversity protection, and worked to minimize the impact of operations on the environment. Through these efforts, we endeavored to be a practitioner of the green development concept, an advocate of green travel for passengers, a leader in flight energy conservation and emission reduction, and an innovator of green and low-carbon technologies.

Responding to the UN 2030 Sustainable Development Goals:



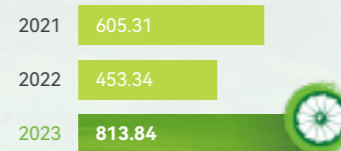


## Responding to climate change

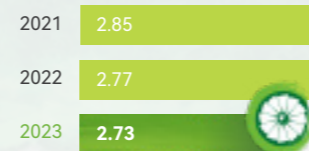
Deeply aware of the far-reaching impact of climate change on its development, we formulated plans and action guidelines, such as the "Peaking Carbon Dioxide Emissions Action Plan", to tap the potential of aviation emission reduction, promote green full-journey services, and continuously explore new paths for low-carbon development in the aviation industry.

### "Dual carbon" strategic action

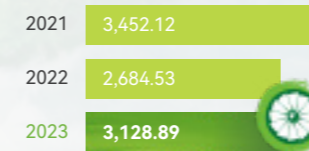
In strict accordance with the *Energy Conservation Law of the People's Republic of China* and the *Environmental Protection Law of the People's Republic of China*, we formulated system documents, such as the "Peaking Carbon Dioxide Emissions Action Plan", "Implementation Rules for Assessment of Special Work on Energy Conservation and Ecological Environment Protection", "Green Development Work Plan of China Southern Group", "Indicator Targets and Implementation Plan for Green Development of China Southern Group (2023-2025)", and "Notice on Strengthening Information Reporting of Environmental Emergency Events". In these system documents, we clarified the goals of energy conservation, emission reduction, and environmental protection and actively carried out the "dual carbon" strategic actions to address and mitigate the impact of climate change.



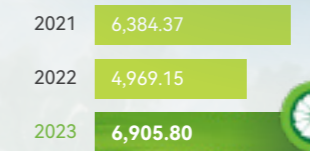
Aviation fuel consumption (10,000t)



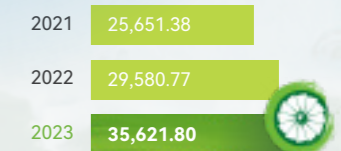
Fuel consumed per ton-kilometer (Tons/10,000 ton-kilometers)



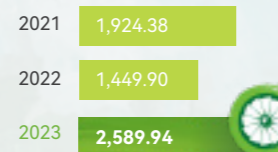
Gasoline (Ton)



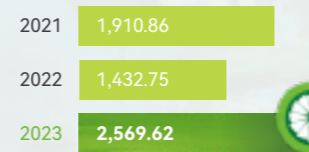
Diesel (Ton)



Electricity (10,000 kWh)



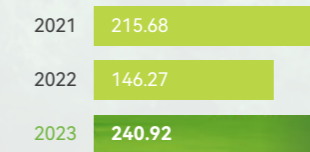
CO<sub>2</sub> emissions (10,000 tCO<sub>2</sub>e)



Category I CO<sub>2</sub> emissions (10,000t)



Natural gas (10,000 m<sup>3</sup>)



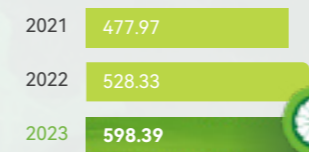
Liquefied gas (Ton)



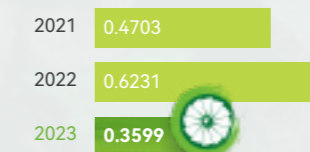
Category II CO<sub>2</sub> emissions (10,000t)



CO<sub>2</sub> emissions per ton-kilometer (Tons/10,000 ton-kilometers)



Total water consumption (10,000t)



Water consumption intensity (m<sup>3</sup>/RMB 10,000)

1. The relevant data disclosure scope is China Southern Airlines Group, which remains consistent with the 2022 data caliber.





"Dual carbon" goals setting

China Southern conducted whole-industry chain carbon reduction response scenario mapping studies to achieve carbon peak and neutrality goals, improved our green operation and management standard system, optimized aircraft weight reduction and fuel-saving measures, strengthened energy-saving technological reserves, advanced the utilization of recyclable resources and application of clean energy, and continuously reduced fuel consumption and carbon emissions per ton-kilometer. We sought to implement green and low-carbon actions in seven major fields of transportation, aiming to keep our fuel consumption per ton-kilometer no higher than 0.28 kg by the end of the 14th Five-Year Plan period.

"Dual carbon" strategic actions

Closely integrating with the realities of civil aviation, China Southern focused on aircraft energy saving and carbon reduction, reduced ground energy consumption, and promoted green travel for passengers. We continued to carry out actions combining "digital precision operation + whole chain energy-saving innovation". We innovated in our aviation fuel-saving management model, developed an intelligent monitoring system for airfield vehicles, and became the first airline in the country to independently develop a big data management system for aviation fuel. At the same time, we compiled quarterly reports on energy consumption and green development dynamics, inspected key energy-consuming units within the company for their energy usage, and continuously promoted overall corporate energy-saving and emissions reduction capabilities and efficiency to support China Southern's green development.

Implementing aviation emission reduction

China Southern adhered to the philosophy of "effectively managing every drop of fuel efficiently, making the best use of every drop," insisting on refined operations and lean flights. Through digitization and intelligent means, China Southern solidified its fuel-saving achievements and intensified efforts in aviation emission reduction.

Digging deeper into digital fuel saving

China Southern continuously deepened fuel-saving innovation, improved models such as continuous climb and APU digital monitoring, and cumulatively promoted over 30 fuel-saving points such as direct flight, cruising altitude, and route optimization design. We established an aviation fuel cost management system, clarified the work deployment of institutional mechanisms, technological innovation, and cultural construction, and accelerated the advancement of whole-process digital fuel saving.

Further Reading

Why Do We Carry out Sharklet Retrofitting?

Among various types of drag experienced during flight, one kind of drag, called induced drag, occurs at the wingtips due to vortices. For subsonic aircraft, such as our commercial airliners, induced drag accounts for up to 50%. Therefore, reducing induced drag has always been a focus in aircraft design. The latest research has found a better shape for wingtip that more effectively reduces induced drag. Airbus has named this type of winglet "SHARKLET."

The physical characteristics of this winglet are a total height of 2.43 meters, an increase in wing span by 6%, and an increase in wing area by 2%. Its performance characteristics include improved aircraft climb performance which reduces fuel consumption by 2%, equivalent to extending the range by 50 nautical miles or increasing the payload by 200 kilograms, and reducing CO<sub>2</sub> emissions by more than 500 tons annually.

In 2023, the fuel consumption per ton-kilometer decreased by **7.68%** compared to 2019, ranking among the top in the civil aviation industry



A total annual fuel saving of **175,100 tons** reducing carbon emissions by **551,600 tons**

Enhancing aircraft performance

China Southern conducted sharklet retrofitting for 48 A320CEO series aircraft. The retrofit work was all completed by June 26, 2023. This retrofit project can reduce carbon dioxide emissions by about 23,000 tons per year and save costs up to RMB 44.932 million annually.





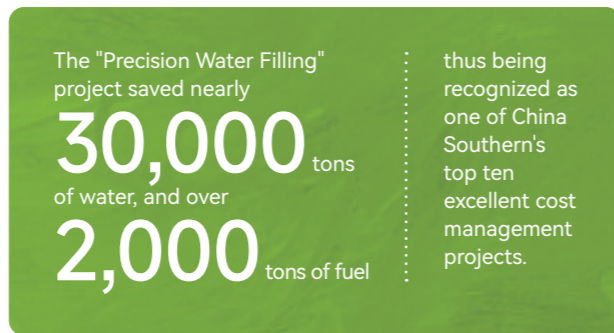
### Optimizing E-cloud

China Southern promoted the application of the precise refueling function, reducing the probability of excess refueling by the crew, moving the refueling point forward, and improving safety and efficiency. We launched and optimized the aircraft fuel usage profile feature of the Aviation Fuel E-cloud to achieve real-time monitoring of the entire fuel chain, making it practical, visual, and convenient to manage every drop of fuel.



### Implementing precision water filling

China Southern developed a water filling scheme that progressed from point to area, from a single aircraft model to multiple models, and from uniform standards to precise standards. This further refined the management of aircraft water filling, reduced aircraft load, and achieved the effect of saving fuel and reducing carbon emissions.

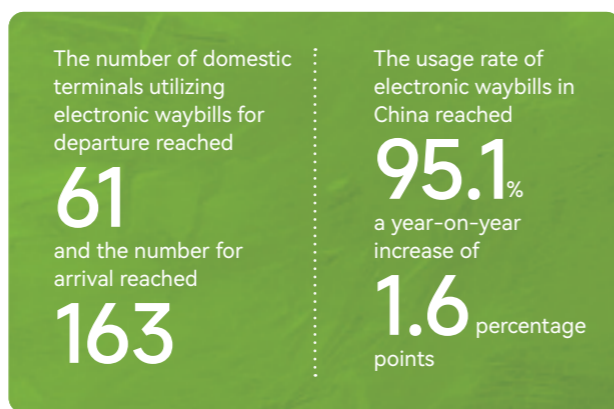


**Case** Precise Water Filling on China Southern Aircraft Reduces Carbon Emissions by 6,000 Tons Annually 

On May 20, 2023, the "precision water filling" program was implemented across all China Southern flights. While ensuring that the passenger experience remains unaffected, China Southern comprehensively considered the operational characteristics of different routes in different regions. After careful calculations, an optimal method for calculating the water-filling amount for flights was determined. Additionally, an information system developed specifically for "precision water filling" can calculate the required amount of water based on parameters such as the number of passengers on the flight and the distance of the journey, automatically sending the information to the mobile devices of the chief purser and the ground maintenance water filler for that flight.

### Promoting electronic waybills

China Southern actively applied internet and barcode scanning technologies and promoted paperless operations of online sales platforms and cargo stations. Data integration with such airports as Pudong and Hongqiao, as well as with airlines like Sichuan Airlines were realized, reducing carbon emissions and further increasing the usage rate of electronic waybills.



### Promoting green travel

China Southern continuously enriched its "Green Flight" products, encouraging more passengers to integrate environmental protection into their behaviors, to raise their awareness of environmental protection and further promote a green travel lifestyle among passengers.

#### Introducing on-demand meal services

Through innovative products and service models, China Southern offered mileage awards to passengers to encourage their use of on-demand meal services. In this way, more passengers could integrate the concept of green development into their behaviors and raise their awareness of environmental protection. Passengers could opt out of in-flight meals via the China Southern Airlines App, WeChat, customer service hotline, and other channels up to 6 hours before the flight. We would record the resulting reduction in carbon emissions from canceled meals, electronic check-in, and electronic itineraries in passengers' carbon accounts, and passengers could also receive a certain amount of China Southern mileage rewards. In 2023, the "Green Flight" on-demand meal service initiative was utilized more than 4,863,500 times by passengers, reducing meal waste by approximately 5,512 tons and effectively decreasing food wastage.

Over the year, the "Green Flight" on-demand meal service attracted more than **4,863,500** times of passenger use

The "Green Flight" On-demand Meal Service Project was awarded **Case of the Year 2023** at the 15th China Corporate Social Responsibility Annual Meeting

### Implementing carbon offset service

The "Green Flight-Passenger Carbon Offset Service" was officially launched, and a one-stop carbon offset platform was established to provide passengers with a voluntary pathway to fulfill social responsibilities. Passengers could reduce the environmental impact of their aviation carbon emissions through this voluntary carbon offset service, which offered a new experience for passengers aiming for a personal "carbon-neutral" flight. As of December 31, 2023, the Green Flight-Passenger Carbon Offset Service had been used by 1,419 people, offsetting 250 tons of CO<sub>2</sub>.





SPECIAL PROJECT



## Building the "Shared Dream" Together "Green Flight, Low-carbon Travel"— China Southern's "Social Responsibility" Flight Takes Off

April 22, 2023 marked World Earth Day, and it was also China Southern's Social Responsibility Day. At 7:32 in the morning, the China Southern "Social Responsibility" themed flight CZ3603 from Guangzhou to Dalian took off smoothly, with 12 passengers on board opting for "Green Flight".

On the theme flight, the purser conducted low-carbon knowledge quizzes and interactions with passengers, who actively participated in this "Green Flight, Low-carbon Travel" activity to learn more about green travel options such as paperless boarding and meals-on-demand. The flight also featured a custom stamp with social responsibility elements for enthusiastic participants to stamp their passports as a keepsake. Additionally, a signature board was set up to encourage passengers to share their environmental protection philosophies. Messages like "Thumbs up for China Southern" and "Wishing Green Flights continue to improve" added significance to the event and contributed to the advancement toward a beautiful China.

"I've chosen China Southern Airlines' green flight many times. Today's activity makes me feel more deeply that our small actions contribute to protecting our planet."

—Mr. Liu, passenger



## Strengthening pollution control

China Southern adhered strictly to the *Water Pollution Prevention and Control Law of the People's Republic of China*, *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, and *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste*, and other related laws and regulations. We have intensified our efforts in dealing with wastewater, waste gases, and solid waste disposal, aiming to minimize our environmental impact.

### Enhancing wastewater treatment

A total of  
**102,800**  
tons of wastewater generated in the production process of aviation food were treated throughout the year, with a wastewater treatment rate of  
**100%**

A total of  
**10,993.2**  
tons of industrial wastewater were treated during aircraft maintenance throughout the year

The annual consumption of circulating water was  
**3,725** tons,  
accounting for  
**0.0623%**  
of the total water consumption



#### For production wastewater

An integrated wastewater treatment plant utilizing biochemical treatment processes was adopted to primarily treat paint-stripping wastes from aircraft, parts cleaning, and wastewater from various workshops. After being biologically degraded to meet the national discharge standards, the water was discharged into the airport's sewage system and directed to the airport's sewage treatment plant. In 2023, all wastewater was discharged in compliance with standards.



#### For washing sewage

China Southern transformed each functional pool of the existing treatment system to form an integrated system for treating production wastewater from blanket washing on aircraft, replaced rusted steam pipes with galvanized pipes to prevent "dripping, leakage, and venting" in steam pipes, ensured the normal operation of the integrated system, and monitored the sewage treatment in real-time.



#### For aviation food wastewater

China Southern set up an independent and standardized production wastewater discharge outlet, adopted a sewage treatment system with oil separation + air flotation + sedimentation for treatment, installed flowmeters on the production wastewater treatment equipment, and arranged dedicated personnel to take charge and operate to ensure the normal operation of environmental protection treatment facilities in the sewage treatment station and tracking of the sewage treatment capacity in real-time.



### Strengthening exhaust gas treatment

With exhaust gas treatment facilities, China Southern adsorbed the organic exhaust gas generated by aircraft painting through activated carbon adsorption technology, regularly replaced adsorption consumables, and received real-time monitoring from environmental protection departments through an online exhaust gas monitoring system. In 2023, the exhaust gas was discharged in compliance with the standards.

A total of **302.4** million cubic meters of exhaust gas were treated during aircraft maintenance throughout the year

### Standardizing solid waste disposal

According to the *Law of the People's Republic of China on the Prevention and Control of the Environmental Pollution by Solid Waste, Technical Policies for the Prevention and Control of Hazardous Waste Pollution*, and other laws and regulations, China Southern formulated the "Maintenance Waste Management System" to fully implement the maintenance waste working policy of "safety first, prevention prioritized, and comprehensive management", further standardize the collection, storage, transfer, and disposal of maintenance waste at each base, and effectively control and reduce the pollution of maintenance waste.

**For the wastes generated from maintenance:** China Southern established a full-process management system for aircraft maintenance wastes, strictly carried out harmful/harmless classification, assigned dedicated personnel to collect and collate waste every day, and signed disposal contracts with multiple units that had the recycling and disposal qualifications, so that the waste could be transferred and disposed of frequently, achieving timely disposal without long-term accumulation, improving the standardized management level of hazardous waste, and reducing potential environmental hazards of China Southern. The annual processing rate was 100% in 2023.

**Realizing the recycling of waste:** Pearl Hotel transformed idle containers into a new highlight in Food Street. Waste steel pipes and old angle irons were used to complete the production and installation of limit rods in basements and parking lots to solve the problem of missing limit rods in some parking spots. Recyclable items in guest rooms were disassembled and recycled, and available components from scrapped TVs, printers, telephones, and other equipment were used as spare parts, enriching the departments' parts library, with a total material recovery of about RMB 539,000.

**For plastic waste:** China Southern carried out the overall plan for plastic pollution control, improved the substitution standards for disposable non-degradable plastic products, continuously updated the prohibition and restriction management standards for plastic products, strictly implemented the standards in production and procurement links for control, effectively dealt with separate recycling and disposal, and promoted the establishment of industry standards.

The treatment capacity of hazardous waste from aircraft maintenance was

**2,451.4** tons  
with a disposal rate of

**100%**

The treatment capacity of non-hazardous waste generated by in-flight services was

**180,000** tons

Classification of Hazardous Waste	Treatment Capacity (t)
Waste kerosene	339.61
Waste oil	1244.21
Waste organic solvent	394.49
Used lubricating grease	1.79
Waste emulsion	7.37
Waste paint, paint slag, dyes and coatings	52.11
Chromium-containing waste	3.82
Lead-containing waste	5.46
Waste organic resin	10.01
Waste light pipes	0.04
Waste activated carbon	0.36
Waste packages and containers	119.25
Used batteries	0.002
Liquid waste from surface treatment	135.13
Photosensitive material waste	1.06
Mercury-containing waste	0.35
Other hazardous wastes	136.35





## Advocating green environmental protection

China Southern encouraged employees to practice the concept of green and low-carbon office and life, carried out rich and colorful environmental protection publicity activities, and constantly spread a green and low-carbon lifestyle among the public.

### Promoting green office

China Southern advocated, among employees, working in a thrifty, low-carbon, and environment-friendly way, carried out standardized and green management of air conditioners, lighting, printers, and other office equipment in the office area, further regulated employees' water and electricity consumption behaviors, encouraged employees to adopt green travel and consumption, and created a green and low-carbon office environment.



#### Case Paperless "Dispatch Standards" manual



On March 1, 2023, China Southern succeeded in building a diversified electronic manual inquiry platform, officially entering a new era of paperless "Dispatch Standards". Paperless means reduced paper printing and saved fuel consumption, thereby contributing to the realization of green and low-carbon development in a tangible way. According to statistics, China Southern has a fleet of nearly 900 aircraft, and the total weight of the "Release Standards" manual is about 8.5 tons. The additional fuel consumption was reduced by approximately 400 tons throughout the year.

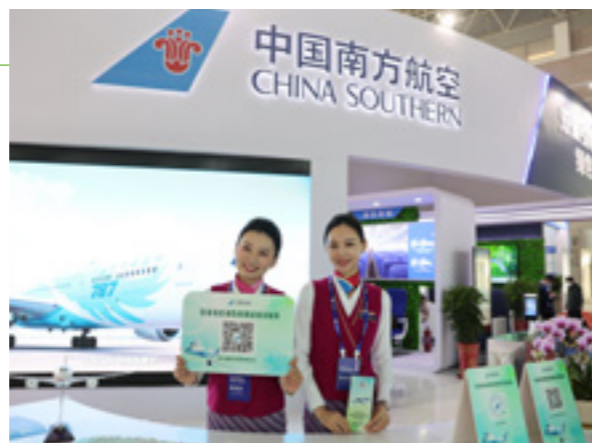
### Delivering the concept of environmental protection

Through various forms of environmental protection publicity activities, China Southern vigorously promoted the concept of environmental protection, called on the public to start low-carbon and emission reduction efforts from themselves, and continuously enhanced the awareness of carbon reduction among all people.

#### Case Joining Green Flight to Create a Better Future Together



From March 30 to April 1, 2023, China Southern participated in the first Civil Aviation Green Development Forum and Civil Aviation Green Development Facility and Equipment Exhibition held in Weihai, Shandong Province. Through "Green Travel", "Green Cabin", and "Green Operation" sections, China Southern showcased its products and services highlighting the concept of green development throughout the passenger journey, calling on everyone to "join in green flight for a better future together".



#### Case Carrying out Marine Ecological Environment Protection and Jointly Building a Green and Beautiful Zhuhai



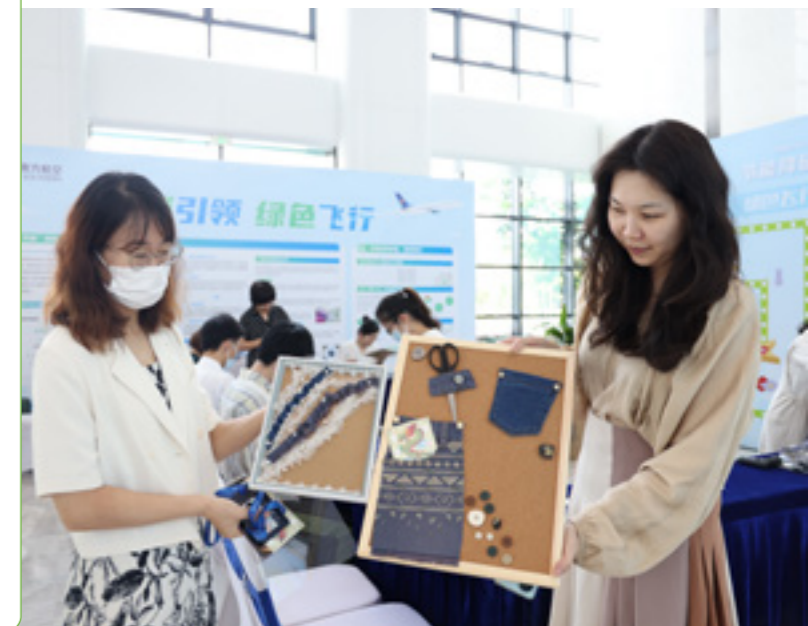
On March 4, 2023, China Southern organized the Youth Volunteer Service Activity for Marine Ecological Environment Protection in 2023 with the theme of "Youth Volunteer Action for Green and Beautiful Zhuhai". During the activity, China Southern actively invited citizens and tourists to participate in an interactive quiz on waste sorting and environmental protection knowledge and take photos with environmental protection theme KT boards. In addition, China Southern prepared souvenirs with China Southern characteristics for those who participated in the voluntary quiz, which shortened the distance between China Southern and Zhuhai citizens and created a strong atmosphere of jointly implementing the concept of environmental protection.



#### Case "Joint Hands towards Energy Conservation and Carbon Reduction"



On July 13, 2023, China Southern held activities for the National Energy Conservation Week 2023. Focusing on the publicity theme of "Joint Hands towards Energy Conservation and Carbon Reduction", China Southern carried out online carbon account + offline manual activities, promoted the concept of low-carbon development among passengers and employees, popularized knowledge about tackling climate change, carried out energy conservation and carbon reduction publicity and education, and vigorously advocated green and low-carbon production and lifestyles. In the activity, DIY activities, such as transforming old bottles into new products and renovating old clothes, enabled employees to realize that an empty plastic bottle could be turned into a decorative green plant on the desk, and a pair of unworn old jeans could also be turned into a fashionable single-shoulder bag, thus helping them continuously improve their awareness of energy conservation and low carbon.





# 04

## JOYFUL FLIGHT EXPERIENCES Affinity and Refinement Service

China Southern consistently adhered to the original aspiration and mission of serving the people, practiced the service philosophy of affinity and refinement, strengthened service quality management, continuously optimized "humanized, digitalized, refined, personalized, and convenient" services, attached importance to passengers' needs, and provided passengers with a more considerate and satisfactory travel experience.

Responding to the UN 2030 Sustainable Development Goals:





## Service quality management

Adhering to the principle of being "customer-centered", China Southern further improved its service quality management system, promoted the implementation of "humanized, digitalized, refined, personalized, and convenient" services, and continuously improved its service level and quality.

### Improving the service quality management system

China Southern actively carried out an internal review of the service quality system, continuously improved relevant systems for service quality management, added and revised 34 manuals and systems in 2023, and refined the work related to service quality improvement in various systems to help improve service quality in an all-around way. The key work of each department in improving service quality after the manual revision mainly included:

- 1 Establishing a product risk management mechanism for the marketing system to standardize the assessment of product "design, operation and after-sales" risks;
- 2 Improving the loading and unloading business standards for the ground service system, establishing an outstation management center and apron service branch, and strengthening outstation management assistance;
- 3 Establishing a standard optimization mechanism for the cabin system and revising 101 standard procedures of cabin service;
- 4 Implementing the outstation hierarchical management system for the air catering system to strengthen air-ground coordination;
- 5 Enhancing the flight punctuality for the transport command system, and improving the flight punctuality management mechanism;
- 6 Carrying out special actions of on-board cleaning for the maintenance system to promote standardization construction;
- 7 Refining the delay broadcast script of each scenario for the flight system to create a "warm" cockpit broadcast;
- 8 Strengthening the concept of performing duties in accordance with laws and regulations for the security system, and solidly carrying out a special action to rectify "plane disturbance";
- 9 Continuing to promote the construction of a business middle platform for the information center and strongly supporting the development of various business systems;
- 10 Improving the guarantee capability for resources such as flight delay hotels and vehicles for the flight service system, and establishing a rapid response mechanism;
- 11 Establishing a talent pool of service skills for the training center;
- 12 Promoting the digital transmission of entertainment programs for cultural media companies;
- 13 Strengthening pre-service control for logistics companies and carrying out whole-process monitoring of service quality.



### Promoting the construction of a responsibility system

China Southern established a customer satisfaction-oriented performance indicator system in the Marketing Committee and the System Operations Control Center, sorted out key positions from the dimensions of customer rights and interests, service standards, product operation, and flight operation, and added service quality-related assessment indicators for more than 50 positions.

### Improving the risk management and control mechanism

China Southern continued to build a service quality management and control platform, fully displayed the whole-process data of passengers and realized risk threshold monitoring; upgraded the service risk source database and correlated service events; relying on the I-CARE platform, China Southern established a voluntary service reporting mechanism with full participation and opened up a "bottom-up" feedback path.

### Promoting the implementation of "humanized, digitalized, refined, personalized, and convenient" services

Focusing on flight stability, travel efficiency, convenient process, product supply, and humanistic care, China Southern improved the "humanized, digitalized, refined, personalized, and convenient" services. By strengthening humanistic care for special passengers, upgrading and optimizing the app service function points, enriching serialized product contents, and creating "China Southern Air Shuttle", China Southern further promoted the implementation of "humanized, digitalized, refined, personalized, and convenient" services to help enhance passengers' travel experience.

China Southern won "Best Airline Awards 2022" and "Civil Aviation Innovation Pioneer Award" by CAPSE

China Southern was awarded the AAA certification of the highest market quality credit level by China Association for Quality

"China Southern APP Service Experience Upgrade" was selected as the Excellent Case by the Ministry of Industry and Information Technology

China Southern's "Easy Luggage Pass" project won the second prize in the production and operation section in the First State-owned Enterprise Digital Scenario Innovation Professional Competition

"China Southern's Cabin Service Quality Improvement Action in Spring Festival Travel Rush" project won the Excellence Award of the CAPSE Civil Aviation Quality Improvement Practice Competition



## Ensuring flight punctuality

By optimizing operation management, China Southern strengthened flight guarantee, improved the early warning and handling mechanism of flight delays, and enhanced the efficiency of on-site service for flight delays to meet people's travel needs in an all-around way.

### Optimizing operation management

#### Taking actions to improve flight punctuality

China Southern invited industry experts to carry out research on the flight punctuality rate from the perspective of customers and established a customer-perspective punctuality rate index system consisting of flight formation rate, operation punctuality rate and planned stability rate from the flight dimension.

China Southern established a monthly evaluation and notification mechanism, optimized the assessment scheme, added service indicators such as customer-perspective punctuality rate and flight execution rate in the performance contract of on-duty managers, and strengthened assessment-oriented control.



#### Establishing a voluntary reporting mechanism for integrated operation

Through channels such as the I-CARE voluntary reporting platform, and China Southern Airlines Zhixing app, China Southern established a special module called "I have something to say about integrated operation" to broaden the ways to identify operational problems, handle them in time for optimization, and improve operational efficiency.

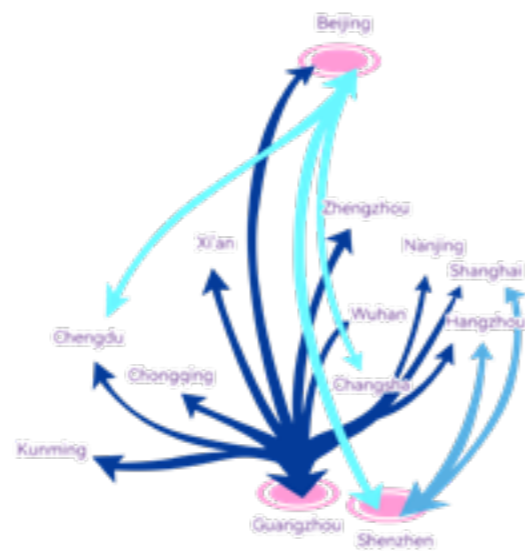
#### Improving the operational efficiency of "China Southern Air Shuttle"

China Southern established a shuttle operation guarantee system and introduced 15 measures from four aspects of flight scheduling, on-site operation guarantee, abnormal situation handling and emergency response to improve the operational efficiency of China Southern Air Shuttle.

#### Case Launch of the Brand-new "China Southern Air Shuttle"



On March 23, 2023, China Southern Airlines held the "China Southern Air Shuttle" brand conference in Guangzhou with the theme of "Free and Enjoyable Flight", announcing the launch of the brand-new upgraded "China Southern Air Shuttle" brand service, including flight scheduling, ticketing services, ground services, passenger rights and interests, on-board meals, and other travel services. In 2023, China Southern built a total of 16 "China Southern Air Shuttles" and 19 self-operated stations to shorten the flight cutoff time to 40 minutes. It realized "one-code access" at 41 ten-million-passenger airports, optimized the MCT of domestic transfer between two hubs to 50 minutes—representing the best in the industry, and launched full-process luggage tracking services at 52 domestic and foreign airports and "luggage door-to-door" services at 26 self-operated ten-million-passenger airports. "China Southern Air Shuttle" gives passengers more sense of gain and happiness in air travel, creating a new experience of a "free and enjoyable flight".



▲ China Southern Air Shuttle

## Strengthening flight guarantee



#### Improving the early warning and response mechanisms

China Southern formulated the Disposal Plan for Large-scale Flight Delays at Guangzhou Base of China Southern Airlines, which added an early warning mechanism and improved the response mechanism. The early warning mechanism was based on the "five-early" disposal requirements of the Civil Aviation Administration of China while the response mechanism optimized the initiation standard and coordination process to thoroughly reduce flight backlog and passenger stranding and prevent risks associated with safety, service and public opinion.



#### Improving the efficiency of linkage and coordination

China Southern refined the joint disposal process and time nodes of extreme weather, improved the decision-making consultation procedures, and formulated dynamic flight adjustment strategies; promoted the integrated operation of small and medium-sized airports, and clearly defined the responsibilities and cooperation processes; established a cabin target closing time mechanism, refined the guarantee time limit node, revised the start standard for fast transit, optimized the internal process at multiple nodes to save coordination time, and provided flight punctuality guarantee throughout the chain.



#### Improving the flight delay service guarantee

In case of emergencies such as large-scale flight delays, China Southern properly handled the delays and provided passenger services, continued to focus on satisfying the service needs of special passengers, opened "green channels", deployed pioneer volunteers among Party members, comprehensively sorted out the service guarantee process, and took multiple measures to ensure better travel experience for passengers.

Flight punctuality rate  
**88.82%**  
China Southern handled  
**201**  
company-wide cases of large-scale delay early warning and response





## Optimizing the construction of an ecological circle

Based on the main business of aviation, China Southern followed the path of "building platforms, forging partnerships, increasing customer flow, implementing flexible incentives, and integrating services", enriched its product system with a focus on air travel, deepened cooperation in various industrial sectors internally, actively introduced cooperative resources externally, and continuously optimized the ecosystem to support the development of its main business.

### Enriching the product system in multiple fields

#### Onboard service

China Southern upgraded the in-flight "kapok series" products, designed "Kapok Seasonal Memory" series products based on the characteristics of 24 solar terms, and launched activities such as solar-term broadcasting, solar-term meals, themed bookmarks, and special flights; innovatively developed "cloud series" products, and launched a series of products such as "cloud chartered plane", "cloud voice" and "cloud children's fun"; and diversified the types of online meals, with 60 new products for first-class and business-class meal selection and 11 new products for economy-class meal selection.



▲ Winter Solstice Themed Flight

#### Mobility services

China Southern developed a series of plane+X product brands such as "Perfect Holiday" and "Encounter the World", increased the deployment of its products in domestic and international markets, enriched hotel benefit packages, vehicle vouchers, and other products, and made an initial attempt to operate crowdfunded flights.

#### Case Initial Attempt to Operate Crowdfunded Flights



From September 30 to October 1, 2023, China Southern made an initial attempt to operate crowdfunded flights, with the National Day skiing theme in Fuyun, Xinjiang as a pilot project, during which the first batch of 600 passengers were transported. The series of flights not only launched the first-phase Fuyun ski crowdfunded products but also carried out crowdfunded product design and sales for popular ski destinations such as Kanas and Changbai Mountain to continuously meet passengers' customized travel needs and bring fresh travel experiences to the passengers.

#### Luggage services

Focusing on the travel needs of passengers, China Southern improved the efficiency of ground services, built a premium reception for baggage service, and upgraded pet check-in services.



#### Case Building a Premium Reception for Baggage Services



On May 1, 2023, China Southern's first premium reception for baggage service in the arrival hall of Terminal T2 at Guangzhou Baiyun International Airport was officially put into use. The premium reception has multiple functions such as passenger inquiry, luggage query, abnormal luggage handling, and high-end passenger luggage services, helping enhance passengers' experience in luggage transportation services and providing more affinity and refinement service for passengers.

◀ Premium Reception for Baggage Service

#### Case Upgrading Pet Check-in Service



In 2023, in response to the personalization and convenience needs of passengers traveling with pets, China Southern upgraded its pet check-in service from a "passenger's perspective" by providing "one-stop" services such as dedicated pet check-in counters, free pet protective net covers, full-process status query of pet transportation, pet transportation photo query, basic pet transportation insurance, and delivery of pet to home, so as to further improve the quality of China Southern's pet check-in service and provide more convenient and assured pet check-in service.

Pet Check-in Service ▶



#### Insurance services

China Southern enhanced its ability to meet the differentiated needs of passengers in different scenarios through air tickets + insurance, X+ insurance, etc., successively solved key service problems for passengers such as display of insurance in the travel itinerary, issuance of enterprise invoices, and change of passive claim settlement to active claim settlement, and improved passengers' experience in all-round purchase and claim settlement.





### Improving internal and external supply chains

China Southern continued to expand the cooperative ecosystem, completed the overall planning of the supply chain management system, determined the catalog list of products in the ecosystem and the priority of each category demand, drafted the General Provisions of China Southern Airlines' Ecosystem Supply Chain Management Measures and several category access standards, formulated internal supply chain management processes, and launched mall order and commodity standards based on the brand flagship store model of China Southern Mall.

### Strengthening the internal and external circulation of mileage

China Southern diversified the mileage application scenarios to enhance user experience. It developed mileage purchase packages for merchants and sold them to mall suppliers through marketing windows such as e-commerce festivals. After purchasing mileage, the suppliers could use mileage to carry out store marketing activities. China Southern accelerated the renewal of non-aviation cooperation mileage agreements and the signing of new non-aviation cooperation mileage agreements, expanded mileage sales scenarios, and continuously enhanced customers' perceived value of mileage.

### Realizing the whole-process service of products

China Southern established a product service team and set up a special line for product services to support the launch of various service products, financial products and package ticket benefits by providing customers with professional, fast and reliable product after-sales services. For the whole-chain service of the mall products, China Southern established a feedback handling process for special events to provide passengers with a considerate, comfortable and satisfactory shopping experience.

#### Case Building a New Version of China Southern Mall



China Southern Mall is an important part of China Southern's ecosystem strategy. It implements the strategic policy of "building platforms". In 2022, China Southern built the first mall with the platform entry model. In 2023, based on the "middle platform + front-end" model, China Southern created a unified display front end for products in the ecosystem and built a new version of China Southern Mall. The new version of China Southern Mall opened up middle platform modules such as the order center and product center, launched the product sales flow and the refund and change flow, simultaneously planned to build a mall platform model based on "content + product service", improved consumption and service conversion at the member end, combined activity resources such as Double 11 promotion, one-station and three-area marketing competition, carried out multi-touch promotion on the main station of China Southern Mall through internal and external channels, and increased visits with the assistance of precision marketing, resulting in an 11% year-on-year increase in overall mall visits compared to 2022.

## Providing exclusive services

China Southern continued to optimize the marketing service standards for special passengers, focused on meeting special passengers' needs, and provided personalized services based on upgraded services for special passengers and special transportation, so as to bring customers a delightful experience in all aspects.

### First-time passengers

China Southern formulated ground service specifications for first-time passengers, promoted the "worry-free first-time fly with China Southern" service in 20 self-operated stations, and provided numerous services such as one-stop processing, travel guidance, airport check-in, and exclusive experience for first-time passengers.



▲ Worry-free First-time Fly Service

### Child passengers

In line with the national three-child policy and in consideration of market demand, China Southern increased the allowed number of unaccompanied minors and teenagers according to aircraft types. It also increased the allowed number of infants and children traveling with each adult to 8 and extended the unaccompanied service to business class, thus realizing unaccompanied services for all classes. At the same time, China Southern optimized the system functions to achieve automatic unaccompanied sales for all classes on domestic flights.



▲ Services for Unaccompanied Minors



### Sick and disabled passengers

China Southern optimized the procedures for sick and disabled passengers to apply for ticket refund and change due to sickness, streamlined ticket refund and change documentation for sickness-related cases by only requiring submission of medical invoices, realized the electronic review of supporting documents so that it could be handled before and after flight departure without limitation. At the same time, China Southern increased the number of accompanying personnel allowed to apply for free refund and change from 2 to 5, so that the tickets could be refunded and changed free of charge together with the sick passenger, thereby effectively alleviating passengers' travel concerns.



### Pregnant passengers

China Southern optimized the ticket purchase and boarding process for pregnant passengers, no longer requiring them to show their medical certificates during ticket purchase and reminding them to carry the certificates for future reference during boarding.



### Elderly passengers

China Southern innovatively introduced personalized service products for unaccompanied elderly passengers, launched travel products for the elderly, packaged tickets, lounges, priority boarding and guidance services, continuously optimized China Southern's official website, and transformed its app to make it more senior-friendly, thus ensuring continuous convenience for elderly passengers during air travel.



#### Case China Southern APP Service Experience Upgrade

China Southern's app is a mobile client software that provides passengers with one-stop digital services throughout the process of air travel. In recent years, China Southern has continuously upgraded its app to better meet the needs of special groups. It has built a special area for the elder version of the app for elderly passengers. Focusing on the main business, related auxiliary functions and main interface of the app, China Southern has completed a senior-friendly transformation, providing a one-click switching mode for the elder version. Through means such as simplifying the interface, optimizing the spacing between font lines, removing redundant functions, making information such as text and pictures accessible, and adding intelligent functions, it has made the app convenient for the elderly to complete travel operations such as air ticket booking alone, so that they can better adapt to and integrate into the smart society, thus comprehensively improving elderly users' operation experience and service experience during air travel.

In addition, China Southern's app has also been upgraded to make it accessible to visually impaired users and compatible with screen reading tools, so that visually impaired users can easily operate and browse the information.



▲ Senior-friendly Transformation—Adding Intelligent Functions

▲ Accessible Renovation—Achieving Screen Reading Tool Compatibility





## Special transportation

China Southern improved the transportation guarantee of donated human organs, streamlined the process of organ transportation by aircrews, and specified the transportation rules for hematopoietic stem cells. China Southern properly handled the special situation on board and rescued 859 passengers with sudden illnesses during flights.

## Premium passengers

Focusing on China Southern's first class, business class, platinum card, gold card, silver card, partner super elite members, elite members, etc., China Southern promoted the construction of "Pearl Better Life Hall" at 23 self-operated lounges to meet passengers' personalized needs for better travel experience, thus bringing joyful flying experience to more.

▼ Artworks such as Sculpture Displayed in the Lounge

### Case Pioneering the Pearl Lounge Art Space



On January 1, 2023, China Southern Airlines Pearl Lounge Art Space officially opened at Terminal T2 of Guangzhou Baiyun International Airport. Together with artworks containing traditional Chinese culture, it was the first in the industry to integrate relaxation with artistic appreciation, carrying forward the spirit of the times, industry culture, and regional characteristics. This marks a new upgrade in lounge services, providing passengers with a fresh airport waiting experience.



## Optimizing customer experience

China Southern adhered to the principle of passenger first, improved its service management capabilities throughout the chain, insisted on responsible marketing, and optimized passenger feedback mechanisms to make passengers more assured during travel.

### Responsible marketing

Comprehensively optimizing the ticket refund and change rules. China Southern improved the rules and regulations according to passenger demands and market changes, introduced new refund and change rules of China Southern Airlines, expanded the scope of free ticket refund and change, increased the number of times of free ticket change, strengthened passenger satisfaction and complaint monitoring, formed closed-loop management, continuously improved passengers' travel experience, and made passengers more comfortable during travel.

Adding the flight change warning function. China Southern added the customer involuntary flight change warning function in the user center system so that customer managers could promptly get to know and view the flight changes of local customers and prepare complaint plans and service remedies in advance, thus helping improve customer service efficiency and quality.

### Optimizing the feedback mechanism

Passenger Satisfaction in 2023:  
**4.638**  
(out of 5); net promoter score:

**80.98%**

Customer complaint rate in 2023:  
**0.589%**  
complaint handling rate:

**99.98%**

#### Optimizing customer satisfaction indicators

The customer satisfaction survey includes two indicators: the company's overall service quality and net promoter score. According to different customer groups, China Southern investigated the full-chain service scenarios and service nodes, synchronously designed differentiated evaluation questionnaires, and flexibly carried out special evaluations on lounges, luggage, meals, and marketing products. Focusing on monitoring and improving weak points, it aimed to further improve customer experience.

#### Establishing channels for on-site service evaluation

China Southern established channels for on-site service evaluation in key service places such as airport ground lounges, with satisfaction callbacks set up for key service links such as customer service hotlines and complaint handling.

#### Taking actions to improve the complaint handling system

China Southern established a complaint analysis and evaluation system, improved the process of complaint and public opinion handling, and implemented the accountability mechanism. It strengthened the rectification of key problems and solved 42 problems of various kinds. It effectively reduced the complaint rate by 58.48% on a year-on-year basis.

#### Ensuring smooth communication through customer service hotlines

China Southern established a flexible scheduling mechanism for customer service personnel to enhance their ability to deal with telephone traffic; increased the authorization of front-line customer service personnel and established an authorization list for 35 common ticketing issues; built a global service support center, increasing the one-time issue resolution rate from 60% to 84%.



# 05

## SHARED WARMTH Building a Beautiful Home Together

China Southern gave full play to its platform strengths, helped employees realize their personal values, actively engaged in public welfare undertakings, strove to create a responsible supply chain, enthusiastically participated in industry exchanges, and collaborated with all stakeholders to build a more beautiful homeland.

Responding to the UN 2030 Sustainable Development Goals:





## Facilitating employees' achievement of value

China Southern effectively protected employees' legitimate rights and interests, opened channels to facilitate their development, cared for their physical and mental health, and created a more inclusive and open working environment.

### Protecting employees' rights and interests

Advocating diversification and equal employment, China Southern continuously improved salary and welfare guarantees, smoothed democratic communication channels for employees, and comprehensively protected the legitimate rights and interests of employees.

### Diversified and equal employment

China Southern implemented diversified employment and integrated management. China Southern specified that in recruitment, assessment, promotion, career advancement, evaluation and appointment for professional technical positions, enjoyment of welfare benefits, and implementation of the national retirement system, the principle of gender equality was upheld, and the legal rights and interests of female employees were resolutely defended. China Southern perfected its anti-discrimination policies to respect and protect the rights of foreign and minority employees in accordance with the law.

China Southern avoided forced labor and prohibited child labor. China Southern strictly adhered to the relevant provisions of the Labor Law of the People's Republic of China, protected the legitimate rights and interests of employees with disabilities, and forbade the use of child labor. It was made clear that if China Southern were to force employees to work by means of violence, threats, or illegal restriction of personal freedom, or if China Southern were to command employees to undertake dangerous operations that jeopardize their safety, employees would have the right to terminate their labor contracts immediately without prior notice.

### Salary and welfare

#### Improving salary structure

China Southern realized equal pay and benefits for equal work, and offered competitive remuneration within the industry, basing compensation mainly on the value of the position, contribution to performance, and the conditions of the labor market. The compensation consists of basic salary, performance bonuses, and other benefits. At the same time, an employee stock ownership plan was implemented. Through implementing employee shareholding in Logistics and General Aviation companies, China Southern achieved diversified shareholding and institutional innovation, effectively attracting, motivating, and retaining key talents that match China Southern's long-term strategic objectives and business development needs.

#### Comprehensive performance appraisal

Emphasizing positive incentives for talents, China Southern set up a compensation distribution and salary adjustment mechanism closely linked to organizational performance, individual performance, and labor efficiency. It reasonably widened the income gap between employees with different performance outcomes, allowing for the "flexibility" of salary; China Southern strengthened the value contribution orientation in salary distribution, highlighted the precision and effectiveness of salary incentives, and explored medium- and long-term incentive modes suitable for various sectors.

#### Enriching holidays and benefits

China Southern paid the statutory national insurance in full for employees, established supplementary insurance and paid the "seven social insurances and two funds" (including basic endowment insurance, basic medical insurance, employment injury insurance, maternity insurance, unemployment insurance, housing provident fund and enterprise annuity) in full; At the same time, China Southern established supplementary insurance plans, including employee life insurance, supplementary medical insurance, special personal insurance of aircrew, pilot's safe flight insurance. In addition to the public holidays and statutory holidays stipulated by law, employees also enjoyed numerous other leave options such as marriage leave, maternity leave, family visit leave and birthday leave.



### Democratic management

China Southern improved its democratic management system, and actively implemented grassroots democratic consultation systems to promote scientific decision-making within the company. By conducting in-depth front-line surveys and implementing the "addressing the real needs of employees" series events, regularly organizing corporate democratic management training sessions, periodically convening the Congress of Workers and Staff, establishing platforms for employees to voice their concerns and submit proposals, as well as establishing a human resources evaluation system, China Southern continued to pay attention to employee demands and evaluations, addressed the concerns of employees, and improved employee satisfaction.

China Southern gave full play to the supervisory role of the trade union, respected and supported the union in protecting the legitimate rights and interests of employees, and facilitated the handling and rectification of identified issues. Contracts such as the *Collective Contract*, the *Special Collective Contract for the Protection of Female Employees' Rights and Interests* and the *Special Collective Contract for Labor Safety and Health* were signed with the union regularly, and have been reviewed and filed by the Ministry of Human Resources and Social Security.

#### Case "Direct Communication" Platform



The "Direct Communication" platform is a mobile-based, one-stop solution offering a 24/7, comprehensive consultation and interaction platform specifically designed for frontline crew. With the philosophy of "immediate resolution on the first ask", this service allows employees to raise questions via mobile devices and receive quick and convenient answers. In 2023, the "Direct Communication" platform replied and handled 5,897 questions from employees. It resolved issues related to employees' necessities such as "clothing, food, housing, transportation and documentation" and optimized certain policies based on employees' feedback. Examples include the construction of a new parking lot near the South Comprehensive Building, the placement of clothes steamers in collaboration rooms, the resolution of issues concerning the "Card Pass" for new crew, and the optimization of FAT grading rules. Initially sparking curiosity and anxiety, the platform has now established trust and brought order. It has alleviated the worries of the crew, enabling them to dedicate themselves to their operational duties with increased ease and assurance.

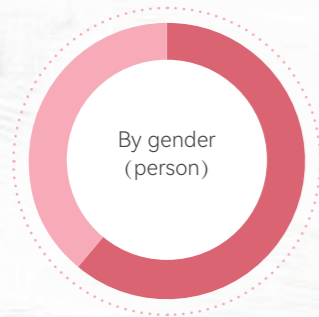
A total of  
**1,200**  
employee  
representatives were  
organized to participate  
in **167** large-scale,  
systematic inspections,  
in which  
**206** issues  
have been identified and  
solved

The Employee's Voice  
Platform collected over  
**3,200**  
employee feedback  
submissions, with a  
response rate of  
**100%**

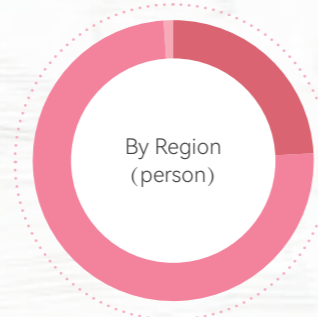


Key Employee Data

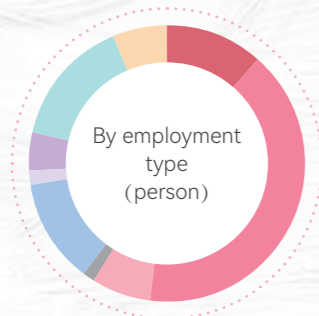
Total number of employees **99468**



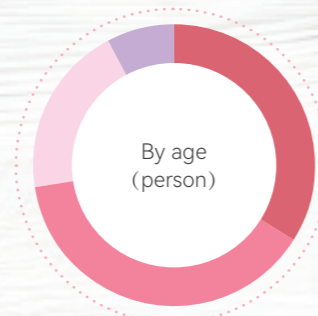
Male: 60564  
Female: 38904



Guangzhou: 24064  
Domestic (excluding Guangzhou): 74500  
International: 904



Flight: 11590  
Service: 40314  
Management: 6809  
Flight operation: 1414  
Aircraft maintenance: 12080  
Information: 1640  
Marketing: 4620  
General administration: 14853  
Function: 6148

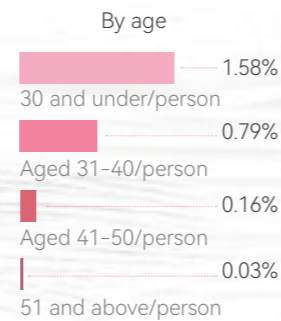
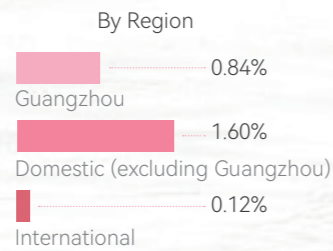
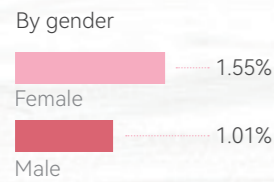


30 and under: 33917  
Aged 31-40: 38386  
Aged 41-50: 19515  
51 and above: 7650



Employee Turnover Rate Data

Total employee turnover rate **2.56%**



Note: (The total employee turnover rate data is based on the annual report of China Southern Airlines, excluding Xiamen Airlines and only including contract workers.)

Key Employee Data

Labor contract signing rate

**100%**

Social insurance coverage rate for employees

**100%**

Performance incentive pay coverage rate

**100%**

Non-remuneration benefit coverage rate (including pensions and retirement benefits):

**100%**

Number of new employees

**5821** person

Number of foreign employees

**559** person

Labor dispute

**29** case

Proportion of female managers at the middle level and above

**11.73%**

Average employees' leave

**22.6** days

Average working hours per person

**227.4** days

Lost days due to work injury

**1096** day

Work-related deaths

**2** persons

Note: Both individuals died of sudden death. Improvement measures: 1. Advise employees to pay attention to personal health management and establish health awareness; 2. Provide employees with health and safety lectures to improve health and safety knowledge; 3. Provide annual physical examinations for employees; 4. Encourage employees to take their full leave entitlements to achieve a balance between work and rest.



## Propelling employees' individual development

China Southern continuously smoothed staff promotion channels, improved the training system, optimized the faculty, innovated training courses, and provided employees with sustainable development channels and long-term career planning.

Employee training data		Training coverage/ person	Average training hours per person/hour
By gender	Male	43201	150.55
	Female	34515	148.62
By employment type	Flight	10346	109.28
	Service	35546	277.55
	Management	4639	56.43
	Flight operation	6999	251.71
	Aircraft maintenance	8105	57.56
	Information	1548	5.25
	Marketing	6162	6.93
	General administration	837	23.06
	Function	3633	37.57

## Improving training management

### Formulating scientific training plans

According to China Southern's "14th Five-Year Plan" and production plan for that year, taking into account changes in the internal and external environment, China Southern scientifically prepared its annual employment plan around three types of employment demands: "production guarantee, strategic reserve and structural improvement", thus ensuring a sufficient number and reasonable structure of talent team.

### Improving the position management system

According to China Southern's business needs and talent development plan, China Southern carried out career development evaluations for each position, focused on key positions such as flight, marketing and functional posts, further improved the position management system of a "flexible career ladder", broadened career development channels, implemented the selection mode of "open competition mechanism for best candidates" and strengthened performance orientation; At the same time, China Southern provided diversified training and learning opportunities, including Tsinghua training courses for excellent team leaders, employee academic improvement projects, thereby smoothing the internal promotion channels for employees.

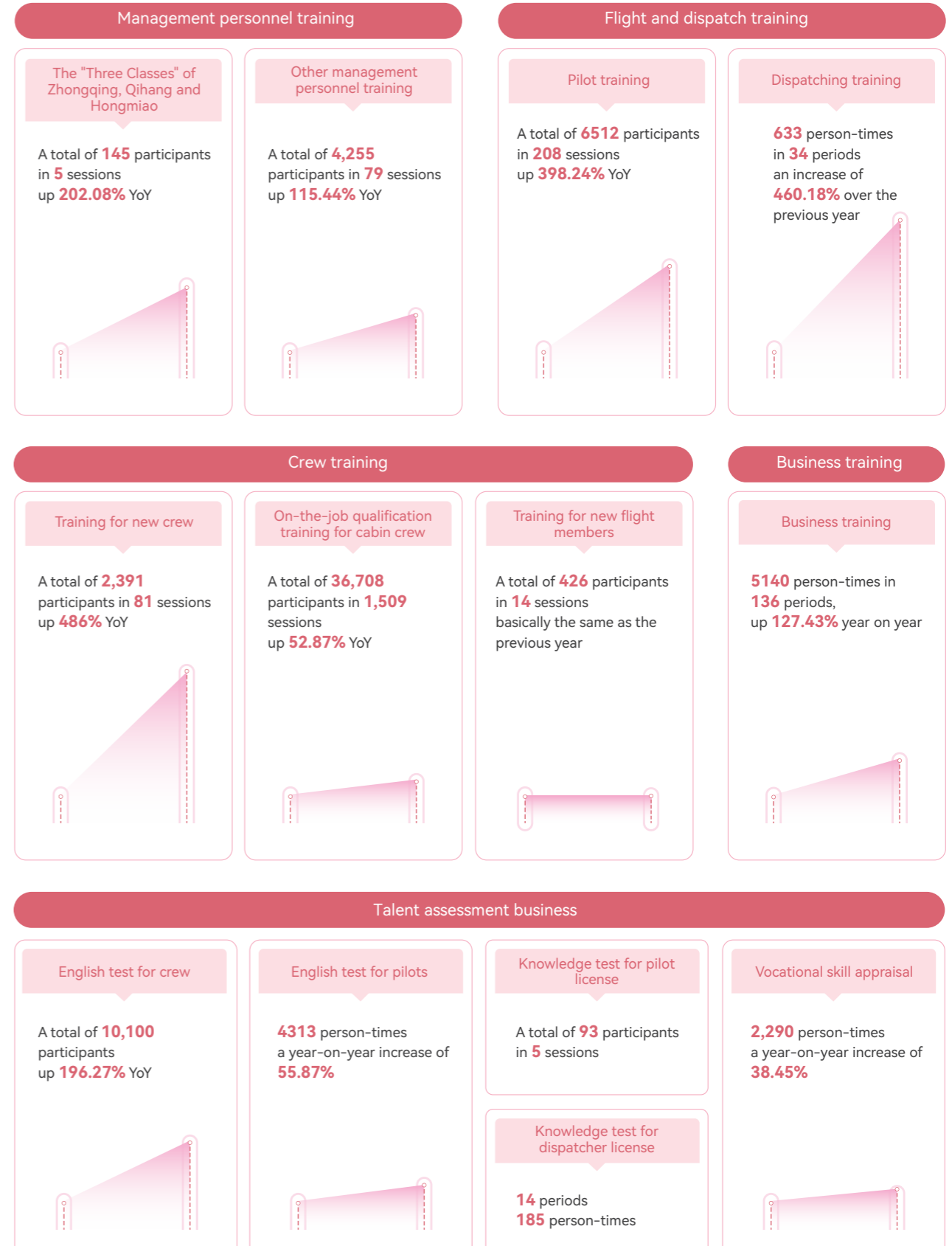
### Promoting the transformation of training platforms

China Southern improved relevant system procedures, formulated systems such as *Course Management Regulations*, *Course Authorization Management Regulations*, *Internal Instructor Management Regulations* and *Platform Management Regulations*, and vigorously facilitated the standardization and explicitness of the process; China Southern improved the operational efficiency of the platform and elevated the input-output efficiency of training resources; China Southern improved the system functions, realized the transformation of curriculum management and teacher management statistical reports, and achieved the closed-loop management of the whole process of training projects; China Southern strengthened the operation of digital learning, optimized the construction of online classrooms, and added special courses such as "Purchasing Classroom".

## Improving the curriculum system

China Southern implemented its action strategies and the needs of functional departments, organizing course approval and course review; undertook the compilation of CAAC dispatching practice application cases; organized key instructors to compile and revise 11 series courses on air transport services for the disabled; built a safety training course system; The CRM training course obtained the recognition of CAAC, making China Southern the first domestic airline that has passed the supplementary qualification certification of CRM training.

## Training Performance by Course





**Strengthening the construction of faculty**

**Promoting skills certification.** China Southern organized and implemented 48 sessions of part-time instructor certification training, and recruited more than 270 new instructors of various types, continuously enhancing its faculty.

**Encouraging training through competition.** China Southern organized its employees to participate in competitions at various levels, ranging from internal competitions to provincial, city, and district events, thereby promoting training through competition and enhancing skills through contests. This also led to China Southern securing multiple collective and individual honors.

The China Southern team won the **second prize** in the Guangdong Red Cross First Aid Competition

China Southern's "Employee Mental Health Care" project won the **first prize** as an Excellent Demonstration Project for Employee Mental Health Services of Guangdong Trade Union



▲ CSA's Shenzhen Base took the lead in carrying out skill certification

**Case Establishment of China Southern Maintenance Skill Certification Center**

On May 31, 2023, China Southern Maintenance Skill Certification Center was officially established in the Guangzhou Industry-Education Integration Training Base. It is the first maintenance skills certification institution of civil aviation in China. In the future, the Center will continue to refine its certification methods. According to the characteristics of each maintenance organization, it will develop a certification scheme that meets the actual situation, promote the full implementation of skill certification in the maintenance system, and provide a solid talent guarantee for the high-quality development of China Southern's maintenance operations!

**SPECIAL PROJECT**

**Building the "Shared Dream" Together — A National May Day Female Pacesetter's Journey in Pursuing Aircraft Maintenance Dream**

She is a 2023 National May Day Female Pacesetter, and has won many honors such as "Technical Expert of China Southern Group", 2022 National Civil Aviation May Day Labor Medal, "Young Transportation Science and Technology Talent" and "National Transportation Technical Expert". She is Wang Lulu, deputy manager of the Accessory Repair Department at the Shenyang Base of China Southern's Technology Branch, head of the Power Plant Maintenance Technology and Reliability Management Research Office of CAAC Maintenance Engineering Technology Center, and head of the workshop party member innovation studio.



Wang Lulu at Work ▶

**About her dream.** Wang Lulu has been striving and exploring the dream of establishing APU repair capability since 2006. She studied together with her comrades and completed the deep maintenance of the first APU in the history of the base. In 2008, the APU workshop of Shenyang Base was established. Wang Lulu and her colleagues completed the first A320 aircraft APU renovation and obtained the renovation qualification from both CAAC and FAA.

**About her family.** In balancing the "big family" and the "small family", Wang Lulu's partner has been very supportive and helped to alleviate many burdens at home. For her daughter's upbringing, Wang Lulu taught by example, not only providing her with a conducive environment for growth but also hoping to instill in her the concept of lifelong learning from a young age.

**About the challenge.** It was difficult to achieve breakthroughs in aircraft maintenance, so Wang Lulu made continuous attempts. She not only proposed a plan to rapidly improve production capacity and shorten the repair cycle, but also went beyond the existing mode and opened a new door for the international APU repair business. In the APU maintenance market, Wang Lulu's friendly and refined service spirit deeply impressed other colleagues.

**About the honor.** Wang Lulu said, "It is just a title. The most important factor for winning this honor is the platform of China Southern. I am an employee of China Southern." Additionally, this would not be possible without the trust and support of leaders and colleagues. This is a collective effort of our entire team, and I am their representative, a representative of the grassroots staff at China Southern."



## Caring for the physical and mental health of employees

China Southern adhered to a people-oriented philosophy, caring for the physical and mental health of employees. China Southern showed special care for key groups such as female employees, drivers, and staff facing difficulties, and carried out a rich array of cultural and sports activities to help employees balance work and life.

### Paying attention to the mental health of employees

Improving the psychological care mechanism

China Southern provided dedicated psychological counseling services for all employees, set up psychological care studios, and continued to do a good job in EAP. All departments innovatively trained EAP specialists to encourage managers to properly apply psychological concepts and methods to daily management.

Enriching psychological empowerment activities

Various activities were carried out for employees, such as EAP online lectures on "Positive Attitude and Happy Life", offline psychological knowledge experience courses on "Psychological Awareness and Self-Growth Journey", psychological empowerment themed "Nourishment of Sound" and one-to-one expert consultation in the "Psychological Examination Month".

Deepening care project brands

China Southern comprehensively deepened the brand power of the "Flying Together, Heartfelt Connections" care project for double-aircrew families and built a platform for aircrew families and working couples to enhance emotional exchanges through psychological courses, group coaching, and seminars, so as to promote the construction of happy families in China Southern.

### Paying attention to the health of employees

+

#### Carrying out special health activities

During the peak production season, China Southern conducted blood pressure measurements for key groups such as drivers on the apron and equipped them with health bracelets. Through a combination of online and offline formats, China Southern provided employees with lectures on the prevention of cardiovascular and cerebrovascular diseases, ensuring the health of the drivers. Aircrew sports and health improvement activities were launched in Guangzhou, and aircrew fitness competitions were organized around major aircrew units such as the Flying Corps, Cabin Department and Aviation Security Department to improve the physical fitness of key groups.

+

#### Providing free medical services

During the Spring Festival, China Southern cooperated with the School of Traditional Chinese Medicine to carry out free TCM treatment activities for employees; during the peak season of the summer travel rush, experts on common diseases in the hospital were invited to provide health consultation and publicize medical insurance policies for employees. Free Sanfutie service was also provided for employees.

A total of **15** innovative EAP specialist courses were held, and a total of **1,179** EAP specialists were trained

China Southern organized a total of **56** activities such as "Double-aircrew Family Care Camp" and "Double-aircrew Family · Happy Family Atmosphere", with

**772** households participating

China Southern provided a total of **742** hours of professional psychological counseling services, with a cumulative total of

**677** consultations for employees

## Caring for female employees

China Southern launched a series of activities themed "Female Employees' Innovation Action Month", publicized and popularized knowledge about labor safety and health of female employees, carried out knowledge competitions on the protection of rights and interests of female employees, conducted special inspections on labor protection of female employees, provided special gynecological physical examinations for female employees of childbearing age, organized a series of recreational and sports activities for female employees on March 8, smoothed communication and feedback channels for female employees, and comprehensively safeguarded their legitimate rights and interests and special interests.



▲ China Southern employees attend the 13th National Women's Congress

## Carrying out rich recreational and sports activities

China Southern continuously organized employees to participate in cultural and sports activities, and successively held recreational and sports competitions such as basketball games, badminton games, football matches and intellectual competitions to promote the physical and mental health of employees, enrich their cultural life and improve their happiness.



▲ Basketball Tournament of 2023 China Southern Staff Cultural and Sports Season



▲ "China Southern Omnimedia Cup" Staff Hosting Competition

## Providing assistance for employees with financial difficulties

China Southern actively fulfilled the duty of caring for employees in difficulty, carried out targeted assistance and relief work for employees in difficulty, paid special attention to employees in difficulty when providing warmth and cold relief, and did a good job in mutual assistance for employees with major illnesses and the compassionate aid for laborer workers. China Southern continued to implement the "two funds" support and achieved a reduction in the number of employees with difficulties.





## Dedicating to social responsibility

China Southern engaged in a variety of social responsibility activities, leveraging its foundations dedicated to public welfare, brand strength, and industry position to provide educational aid, promote cultural heritage, support community development, and continuously express its compassion and commitment to society.



China Southern Airlines was awarded the **Corporate Social Responsibility Brand of the Year** at CAAC Inflight Magazine's China Sky Choice-2023 Air Travel Awards

The Volunteer Association of China Southern Airlines Dalian received the 14th Chinese Youth Volunteer Service **Outstanding Organization Prize** from the Central Committee of the Communist Youth League and the Chinese Young Volunteers Association.

▲ 湖南分公司前往帮扶村开展航空知识进校园活动

## Cooperating in public welfare initiatives

China Southern Airlines "Ten-Cent" Caring Foundation pursued diverse collaborative efforts and expanded external exchanges and communication, enhancing the brand's influential commitment to societal responsibilities and expanding the reach of its welfare initiatives.

Partnering with the Beijing Dekang Foundation, the "Ten-Cent" Caring Foundation allocated RMB 3.574 million of its own funds and sourced RMB 9.38 million through donations to acquire 13 imported medical devices amounting to RMB 12.954 million. These devices were donated to the Pishan Maternity and Child Healthcare Station in Xinjiang Uygur Autonomous Region to boost local healthcare service standards.

The Foundation joined forces with the Guangdong Charity Federation by contributing RMB 1 million to bolster an aid program in Shaoguan City, managed by the Guangdong Foreign Affairs Office and its affiliated entities.

The Foundation collaborated with the Xinjiang Public Security Martyrs Foundation to donate RMB 1 million, primarily assisting civilian police assistants who suffered or fell in the line of duty while fighting crime and enforcing policies and their families, thus contributing to stability region and societal progression in this border region.

The Foundation responded to the needs of the State Administration of Taxation by donating RMB 300,000 to their rural revitalization project in Dingbao Township, Xinyi City, Guangdong Province.

## Educational support activities

China Southern supported students in selected regions in their aspirations with regard to university entrance examinations, conducting regular "Education for Rural Revitalization" initiatives.

### Case Empowering 56 Students to Pursue Higher Education Dreams



On August 25, 2023, through the "Interviewing, Benefiting, Garnering" program, China Southern focused on educational aid and student support and organized a send-off event "Live Up to Your Dreams and Build the Future" for college-bound students in a village in Pixina Township, Pishan County. China Southern seized the opportunity to actively know students' family information and inform students and their families about national educational support policies, such as scholarships, student subsidies, the Dewdrop Project, and loans. At the same time, China Southern presented them with celebratory items including a large red flower, a backpack, and luggage, arranged a celebratory cake, and offered students interested in volunteering positions within the village committee. These holistic and heartfelt supports aim to facilitate students' transition into higher education, providing them the impetus to pursue their university aspirations.

"I want to express gratitude on behalf of all the 2023 graduates to the China Southern "Interviewing, Benefiting, Garnering" team for arranging our farewell party. We are inspired to become valuable contributors to our country, society, and families."

—A student admitted to Xinjiang Normal University



"My child's university acceptance is a testament to the nurturing by the Party and nation, and we are deeply thankful. To my child, I say this: embark on this new chapter of life with gratitude and study hard to give back to society and our hometown."

—A parent representative



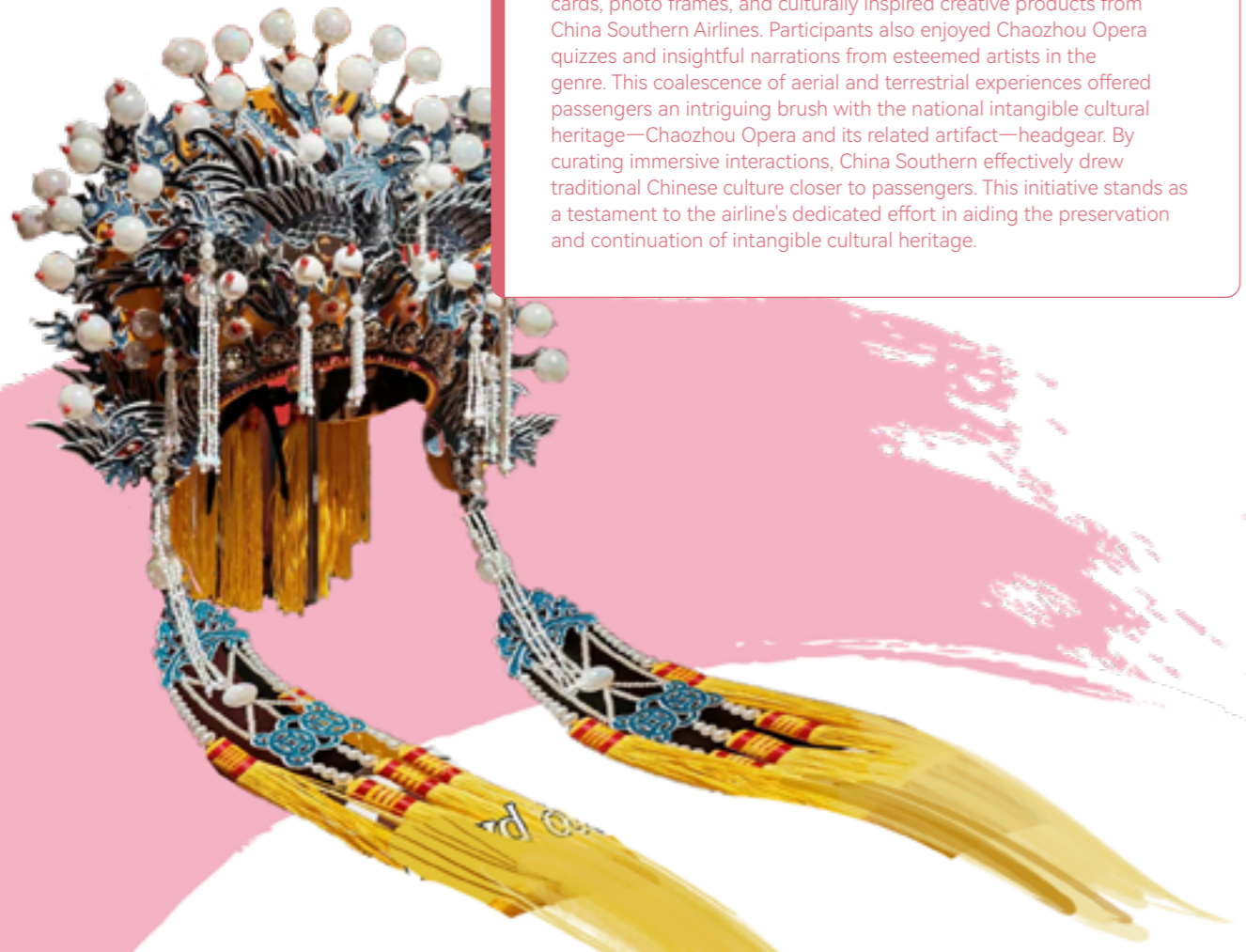
▼ Celebration for University-Bound Students





## Enhancing traditional culture awareness

China Southern crafted thematic experiences centered on traditional culture and festive occasions, initiating series such as "Poetic Captain," "Mid-Autumn Festival on the Plane," and "Chaozhou Opera on the Flight" to foster an appreciation for traditional culture. Moreover, China Southern adorned aircraft with vibrant liveries, showcasing the "China-ASEAN Expo" and the "Hainan Island International Film Festival," as mediums to disseminate Chinese culture far and wide.



### Case Collaborating on Intangible Cultural Heritage-themed Activities



On June 7, 2023, coinciding with the "Cultural and Natural Heritage Day," China Southern Airlines Shanto, together with the Shantou Culture Museum, orchestrated a distinctive intangible cultural heritage event titled "Intangible Cultural Heritage Aloft - Chaozhou Opera." On the first floor of China Southern Pearl Lounge, passengers were offered the chance to try Chaozhou Opera headgear. Inside the cabins enlivened with posters featuring quintessential Chaozhou Opera characters: Sheng, Dan, Jing, and Chou, passengers were gifted with informational cards, photo frames, and culturally inspired creative products from China Southern Airlines. Participants also enjoyed Chaozhou Opera quizzes and insightful narrations from esteemed artists in the genre. This coalescence of aerial and terrestrial experiences offered passengers an intriguing brush with the national intangible cultural heritage—Chaozhou Opera and its related artifact—headgear. By curating immersive interactions, China Southern effectively drew traditional Chinese culture closer to passengers. This initiative stands as a testament to the airline's dedicated effort in aiding the preservation and continuation of intangible cultural heritage.

## Engaging with overseas communities



### Fostering cross-cultural synergy abroad

China Southern strategically facilitated over 200 interactive events across overseas offices, deeply integrating cultures in regions such as New Zealand and Australia. China Southern's commitment to sharing the narratives of both China and China Southern has garnered appreciation from customers, enhancing the airline's social responsibility and brand reputation.

### Case Nurturing Cultural Roots for Chinese-Australian Youth



The Sydney office recognized the strong interest amongst the Chinese-Australian youth in exploring and experiencing the heritage and customs of their ancestral lands. However, as raised in Australia, their access to such cultural explorations was quite limited. As a central enterprise, China Southern should be not only committed to connecting cities between China and Australia but also forging cultural and amicable ties. Therefore, from July 3 to 14, 2023, the Sydney office, in collaboration with the local Yucai Chinese School and the Returned Overseas Chinese Association of Chongqing Yuzhong District, organized a summer camp that enabled young Chinese-Australians to embark on a voyage to China to reconnect with their heritage. There, they visited Chongqing and Chengdu,

along with landmarks like the Dujiangyan Irrigation System, Leshan Giant Buddha, Wuhou Temple, Jiezi Ancient Town, Hongyadong, Yangtze River Cableway, Chongqing Three Gorges Museum, and Chongqing Science and Technology Museum. These sites showcased the rich local historical culture and China's swift modern advancements, instilling a sense of pride in their ancestral country. Post-camp, the Sydney office leveraged social media platforms such as Xiaohongshu, Instagram, and Facebook for the promotion, while the Chinese school posted 11 consecutive articles on its WeChat official account, bolstering the social impact and attracting inquiries from locals keen on future participation.







### Engaging in volunteering abroad

China Southern actively engaged in overseas public welfare projects and organized charity teams of employees to participate in local public welfare activities, contributing to the construction of local communities.

#### Case Contributing to China-Cambodian Friendship Through Voluntary Service



On November 4, 2023, China Southern Airlines Phnom Penh office extended its social responsibility as a multinational business by working with the Yilu Public Welfare Foundation and the China Medical Aid to Cambodia Team in visiting the Arek Thort Elementary School in the Steung Trang District, Kampong Cham Province, Cambodia. Together, this volunteer team delivered donations such as backpacks, water cups, stationery, and aircraft models, alongside furnishing the villagers with complimentary health services, allowing the friendship between China and Cambodia to flourish alongside the smiles of the children.

▼ Volunteer Team and Local Students

#### Case Supporting Ronald McDonald House Charities



China Southern committed itself to the Ronald McDonald House Charities New Zealand, having sponsored the "China Southern Room" for three years in a row, providing a comforting haven only a few minutes away from the hospital for families with unwell children who need to travel for medical care. At the same time, China Southern's staff also dedicated their time to cooking meals at Ronald McDonald House for such families voluntarily, inviting such children's siblings to participate, thereby offering warmth and companionship to children displaced by illness.



## Working with partners for win-win results

China Southern diligently cultivated a responsible supply chain, actively refining supplier management practices, bolstering industry growth across various sectors, and collaborating with stakeholders toward a shared, prosperous future.

### Building a responsible supply chain

China Southern was dedicated to reinforcing supplier management, mitigating supply chain risks, engaging in responsible procurement, and enhancing supply chain management competencies, aiming to develop a responsible supply chain in concert with stakeholders.

China Southern suspended dealings with **4** suppliers with serious breaches and discredit

**1** supplier going out of business

delisted **10** deregistered suppliers

updated the list of restricted trading suppliers to include violating **64** suppliers

### Mitigating supply chain risks

Emphasizing responsibility awareness

During procurement processes, China Southern mandated that suppliers maintain commendable business integrity and a robust financial accounting framework, without any orders to cease operations, or histories of asset confiscation, seizure, detention or bankruptcy, and they must demonstrate solid performance and capacity for accountability. China Southern encouraged suppliers to execute their social responsibilities and avoid inclusion in any "list of companies with serious breaches and discredit (blacklist)" in operations.

China Southern adjusted the on-site assessment method; during project evaluations, the staff and procurement owner's representatives did not enter the site, preventing any potential influence on the jury's independent decision-making and mitigating integrity risks in procurement. China Southern improved the on-site management process by systematizing 33 norms for the on-site operations in the procurement process, persistently overseeing and rectifying adherence, thus delivering efficient and compliant procurement operations and professional, dependable services to all divisions.

Refining assessment process

Bolstering integrity instruction

China Southern enhanced individuals' ethical consciousness via education on the importance of integrity to mitigate supply chain risks. China Southern thoroughly reviewed the entire business workflow to identify potential integrity risk areas. In addition, China Southern developed and determined strategies for risk prevention and control, incorporated these measures into documented procedures and business operations, and established a sustainable mechanism for ongoing risk management. In 2023, 48 risk points were identified.



**Adhering to responsible procurement**

**Accelerating the development of specialized talent.** China Southern placed a strong emphasis on nurturing special talents for supply chain and improved their prowess in supply chain management through online courses and targeted training programs. In April 2023, 37 employees of China Southern achieved certification as Supply Chain Management Professionals (SCMP). They are the first group of supply chain management experts at China Southern.

**Enhancing green procurement process.** The *Procurement Management Regulations* were updated to include new clauses that favor environmental sustainability and encourage the purchase of green products. In alignment with the requirements within the civil aviation industry and cognizant of the current use of plastic products, China Southern amended and implemented the *Management Standard for Prohibition and Restriction of China Southern Airlines Disposable Plastic Products*, aiming to establish a green supplier network in the future.

**Supplier management**

**Refining rules and regulations.** The *Supplier Management Measures* serve as a foundational manual for executing supplier oversight at China Southern, paired with a comprehensive procurement handbook comprising the overarching *Procurement Management Policy* and three specific procedures: *Procurement Management*, *Procurement Implementation*, and *Procurement Risk Control*. China Southern continuously focused on fortifying the supplier management system, standardizing management procedures, and defining entry criteria, categorization, application, assessments, and ratings for suppliers to mitigate supply chain risks while fostering a stable and proficient supply chain and a well-functioning supplier network.

**Improving the category management framework.** In 2023, leveraging category management as a key starting point to construct a category management framework centered on "scientific management, innovation-driven value creation, green and low-carbon operations, and collaborative growth," China Southern comprehensively drafted and finalized management strategy reports for 17 distinct categories including rice, noodles, oil, air conditioning units, and office essentials and courier services in accordance with the characteristics of existing centralized procurement categories. With the approval of the Procurement Management Committee, 11 categories were selected for pilot implementation, propelling forward the transformation of our corporate procurement and supply chain management.

**Perfecting supplier selection criteria.** China Southern developed and refined the supplier selection criteria for each category of supplies, conducted inspections in three stages—factory inspections, optimization processes, and delivery for production to achieve circular quality management, and carried out supplier evaluations based on inspection results.

**Implementing supplier performance evaluations.** With a clear focus on "business, technology, delivery, quality, and service," China Southern dynamically evaluated suppliers across different project implementation stages—contract execution, acceptance check, payments, and after-sales service—leveraging informational technologies for a thorough assessment to reinforce the supplier "quality profile."



**Instituting supplier tiered governance.** Balancing supplier grievances, incentive and penalty management, restricted supplier management, and supplier activity and performance management, suppliers were categorized into tiers: excellent suppliers, qualified suppliers, registered suppliers, restricted suppliers, and prohibited suppliers, encouraging collaboration with outstanding suppliers.

**Facilitating supplier capability enhancement.** Through diverse communication methods like on-site meetings, web presentations, online surveys, and text messaging, China Southern engaged with suppliers. China Southern's procurement and tendering website released an advisory piece titled "Bid Misrepresentation, What Penalties Apply," while in-person sessions meticulously delineated the registration steps and precautions for suppliers, aiming to boost their response efficiency, foster their awareness of integrity in collaboration, and advocate for their continuous development of supplier competency, all towards the objective of establishing an open, equitable, and just transactional atmosphere.

**Case Participating in the National Supply Chain Competition**



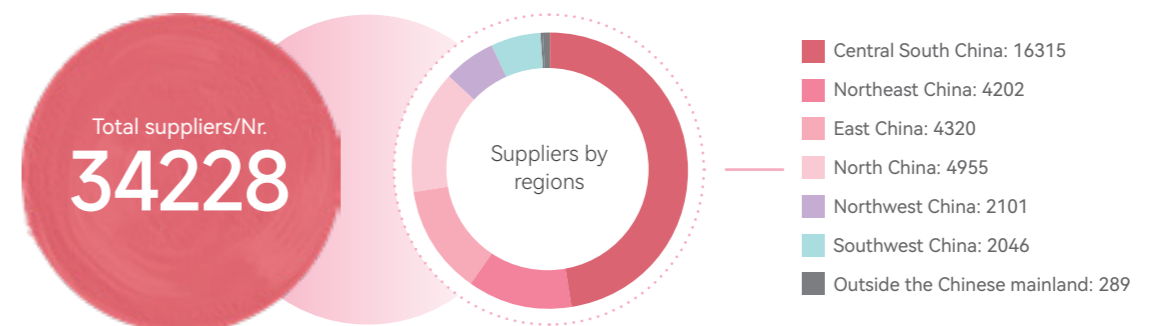
On September 26, 2023, China Southern proudly debuted four teams at the finals of the 4th National Supply Chain Competition (Business Group) held in Xiamen, where a hundred teams competed. These teams, comprised entirely of our certified supply chain management professionals, underwent rigorous preparation prior to the competition and exuded confidence throughout the competition, demonstrating not only the professional poise of China Southern's staff but also the solidarity inherent in teams. Their performance is indicative of the robust talent available to support China Southern Group's ongoing evolution in supply chain management.

▼ The 4th National Supply Chain Competition (Business Group)

China Southern dispatched four teams totaling sixteen individuals

the third team clinched the first prize

while our first, second, and fourth teams each secured a second prize





## Facilitating industry development

China Southern was involved in widespread collaborations, taking a participatory role in industry dialogue, promoting the fusion of industry with education, and establishing vital strategic alliances with third parties to collectively propel the industry forward.

## Engaging in industry dialogues

China Southern was zealous in contributing to various industry events and proactively initiated platforms for dialogue to bolster intersectoral exchange and cooperation.

### Case Involvement in the 15th International Exhibition on Transport Technology & Equipment



Concurrently with the First Global Sustainable Transport Forum from September 25 to 26, 2023, at the China National Convention Center in Beijing, the 15th International Exhibition on Transport Technology & Equipment took place. China Southern was a prominent participant, featuring a separate booth with the "Dual Carbon Goals-driven, Green Flight" theme, segmented into four zones focusing on green development, smart maintenance, smart operations, and flight technology. The exhibition highlighted over ten exhibits representing green development and technological innovations, fully showcasing China Southern's green, low-carbon, and innovation-driven development concepts.



▲ Visitors Engaging with Our Exhibition

### ▼ China Southern Area at the CATA Aviation Conference



### Case Presence at the First CATA Aviation Conference



From November 3 to 5, 2023, the first "CATA Aviation Conference" guided by CAAC and hosted by China Air Transport Association (CATA) was held at China National Convention Center. China Southern was invited to participate in all units of the conference. Booths were set up to showcase our achievements in scientific and technological innovation, safety management, brand service, green development, marketing, and various industrial sectors in recent years. Visual systems, VR training, smart workshops, etc. were set up at the event site. A series of activities such as tea art performances, uniform shows, and joint uniform shows were also carried out to comprehensively display our brand image and vivid practices that contribute to the high-quality development of civil aviation.

### Case Hosting the First Zhuhai-Macao Air Travel Ecosystem Construction Summit Forum



Hosted by China Southern Airlines Zhuhai, the First Zhuhai-Macao Air Travel Ecosystem Construction Summit Forum was held at the Zhuhai International Convention & Exhibition Center on March 31, 2023. Themed "Discussing Air Travel Ecosystem and Crafting Zhuhai and Macao Narrative Together," the forum concentrated on the core topic "Revitalizing Air Travel in Zhuhai and Macao and Developing the Ecosystem." An invitation was extended to build the Zhuhai-Macao air travel ecosystem collectively. Representatives from universities, industry associations, and businesses engaged in discussions on leveraging Zhuhai's geographical assets to strengthen the city's aviation and tourism industries.



▼ Zhuhai-Macao Air Travel Ecosystem Construction Summit Forum

## Deepening the integration of industry and education

China Southern completed **2** workshops for MoE's practice-based training program for vocational teachers

**2** CATA training sessions

practical lessons to **800** students from Zhengzhou University of Aeronautics in **3** sessions

**Releasing product manuals.** By organizing training materials and standardizing product offerings, China Southern assembled a product directory in three sections: branded courses, branded programs, and other services.

**Broadening industry-focused training.** Capitalizing on the strengths of the aviation professional skills training regime, China Southern broadened the clientele within the industry, forging enduring collaborative bonds with corporate entities like SF Airlines, Air Central, 9Air, Air Travel, and China Postal Airlines.

**Fostering varied cooperation.** China Southern advanced the development of the training base and improved its usage rate. The training base has been recognized as a model for industry-education integration training bases in Guangzhou. By routinely assigning instructors to engage in professional seminars at colleges and universities under joint programs, China Southern facilitated resource sharing, co-development of programs, and a mutually prosperous partnership.

**Commencing featured training courses.** China Southern arranged and conducted general aviation education study tours, offered distinctive training to entities such as China Southern Power Grid, Guangzhou Tobacco, China Merchants Bank, and China Construction Bank, rolled out an array of "training + advisory" services, and delivered a comprehensive "training + mentoring + evaluation" package for the Beijing Branch of China Merchants Bank.

## Securing strategic collaborations

### Case Entering into Strategic Cooperation Agreement with Jiayou Exp



On February 23, 2023, China Southern Air Logistics signed a strategic cooperation contract with Jiayou Exp. The agreement commits both organizations to intensify their strategic partnership and together supply consumers with bespoke, direct logistics and transport solutions from China to all regions across Canada, thereby enhancing China-Canadian trade relations. This partnership signifies an active effort by China Southern Air Logistics to align with the goals outlined in CAAC's 14th Five-Year Special Plan for Air Logistics Development and a significant move towards boosting international air freight capabilities and facilitating domestic and international circulations.



▲ Signing Ceremony for Strategic Cooperation



## Outlook

Looking ahead to 2024, China Southern will unite more closely around the CPC Central Committee with Comrade Xi Jinping at its core. China Southern will share the same goal, undertake responsibilities with resolve, forge ahead, overcome seven challenges, and complete all objectives and tasks throughout the year. China Southern will firmly hold the bottom line of safety, enhance market core competitiveness, consolidate and improve leading advantages in operation, improve operation quality, and build a first-class service brand. In addition, China Southern will practice the concept of green and low-carbon development, actively contribute to society, continuously pursue high-quality development, and steadily become a world-class enterprise. Through these efforts, China Southern will strive to significantly contribute to advancing the nation's strength and supporting the grand vision of national revitalization in the modernization process!





# List of Policies and Regulations

ESG indicator	Internal Policies of 2023	Compliance with Laws and Regulations in 2023
A1 Emissions	Management Measures for China Southern Flight Carbon Emission Data Monitoring, Reporting and Verification Pollution Prevention and Control Work Plan of China Southern Group	
A2 Use of resources	Energy Conservation and Emission Reduction Management Manual Business Process of Energy and Environmental Protection Management Work Plan for Plastic Pollution Control of China Southern Group from 2021 to 2025 Management Standard for Prohibition and Restriction of China Southern Airlines Disposable Plastic Products China Southern Group Emergency Management Plan for Environmental Emergencies	Water Pollution Prevention and Control Law of the People's Republic of China Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste Interim Measures for the Administration of Monitoring, Reporting and Verification of Carbon Dioxide Emissions from Civil Aviation Flight Activities Work Plan for Control of Plastic Pollution in the Civil Aviation Industry (2021-2025)
A3 The environment and natural resources	Guidance on Comprehensively Strengthening Ecological and Environmental Protection Work Plan for Green Development of China Southern Group	
A4 Climate change	Notice on Strengthening Charging Management of New Energy Vehicles Emergency Response Plan for Accidents of New Energy Vehicles Notice on Further Controlling of APU Service Time Notice on Promoting the Implementation of the Work Flow of Optimization and Guarantee of Ground Power Supply and Air Conditioning Equipment Work Plan for Green Development of China Southern Group Report on China Southern Group's Carbon Peak, Carbon Neutralization Goal and Realization Path Detailed Rules for the Implementation of Special Work Assessment on Energy Conservation and Ecological Environment Protection Green Development Targets and Implementation Plan of China Southern Group (2023-2025)	
B1 Employment	Regulations on Labor Contract Management Regulations on Labor Dispatch Management	Labor Law of the People's Republic of China Labor Contract Law of the People's Republic of China Regulation on the Implementation of the Labor Contract Law of the People's Republic of China
B2 Health and safety	General Emergency Management Plan of China Southern Air Holding Company Ltd. Guidance on Style Construction of Safety Practitioners of China Southern Airlines Standard Code of Conduct for Pilots of China Southern Airlines (Flight Operation)	Labor Law of the People's Republic of China Law of the People's Republic of China on Prevention and Control of Occupational Diseases Civil Aviation Law of the People's Republic of China Law of the People's Republic of China on Work Safety Emergency Response Law of the People's Republic of China Anti-Terrorism Law of the People's Republic of China Fire Control Law of the People's Republic of China
B3 Development and training	China Southern Airlines Training Master Plan (2018-2025)	
B4 Labor code	Special Collective Agreement for the Protection of the Rights and Interests of Female Employees Regulations on Honor Recognition Management Employee Punishment Regulations List of Typical Negative Behaviors of Employees Management Measures for Employees' Sick Leave Management Measures for Employees' Leave Management Measures for Employees' Post-waiting Internal Talent Market Management Measures	Labor Law of the People's Republic of China Provisions on the Prohibition of Using Child Labor Law of the People's Republic of China on the Protection of Minors

ESG indicator	Internal Policies of 2023	Compliance with Laws and Regulations in 2023
B5 Supply chain management	Supplier Management Measures Management Measures for Video and Audio Data of Bidding Monitoring Procurement Management Manual Implementation Rules for Confidentiality of Procurement Information Code for Practice with Integrity of Employees Manual of Procurement Management Department (Import and Export Trading Company) Notification on the System of Restricted List of Suppliers Honest Cooperation Agreement Integrity Commitment of the Bidder Procurement Risk and Internal Control Management Provisions	Bidding Law of the People's Republic of China Regulation on the Implementation of the Bidding Law of the People's Republic of China Government Procurement Law of the People's Republic of China
B6 Product responsibility	Security Audit Manual Regulations on Management of Dishonesty Regulations on Supervision and Management of Cockpit Sound Regulations on the Administration of Comprehensive Smoking Ban on Aircraft Flight Technology Management Manual Pilot Training Program Operation Manual Aviation Health Management Manual Aircraft Public Health Manual Emergency Control Plan for Public Health Emergencies	Civil Aviation Law of the People's Republic of China Operations Certification: Large Airplanes Air Carrier Rules for Certification of Civil Aircraft Pilots
B7 Anti-corruption	Regulations on Regulating Weddings and Funerals of Leading Cadres in China Southern Group Administrative Measures for Incorruptible Government Archives of Leading Cadres of China Southern Group Notice on Publishing the Reporting Methods of Letters and Visits Objectives and Measures for Avoiding Formalism and Bureaucracy to Alleviate Burden on Grassroots in 2021 Work Arrangement for Reducing Burdens at the Grassroots Level by Further Solving the Problem of Formalism Opinions on the Steps of Cleaning up and Standardizing the Company's Discussion and Coordination Organs Provisions on the Establishment of the Group's Discussion and Coordination Organs Supervision Measures for the Group's Implementation of the Spirit of the Party's Eight-point Frugality Code Management Measures for the List of Actions for Exemption Notice on the Change of the Acceptance Channel of Disciplinary Inspection, Supervision and Letters, Visits and Whistle-blowing of China Southern Group Regulations on Discipline Inspection Suggestions and Supervision Suggestions of China Southern Group Measures to Strengthen the Construction of Integrity Culture in China Southern Group Guidance on Fault Tolerance and Exemption of Discipline Inspection and Supervision Institutions of China Southern Group Procurement Supervision Measures of China Southern Group Implementation Rules for the Commission for Discipline Inspection to Carry out the Responsibility of Supervising the Construction of Party Conduct and Clean Government Code for Practice with Integrity of Employees Integrity Risk Prevention and Control Process Regulations on Anti-commercial Bribery Compliance Management Guidelines on Anti-commercial Bribery Compliance Guidelines on Anti-commercial Bribery Compliance of the United States Guidelines on Anti-commercial Bribery Compliance of the United Kingdom Guidelines on Anti-commercial Bribery Compliance of Canada Guidelines on Anti-commercial Bribery Compliance of Australia Guidelines on Anti-commercial Bribery Compliance of New Zealand Guidelines on Anti-commercial Bribery Compliance of the European Union Guidelines on Anti-commercial Bribery Compliance of the United Nations	Criminal Law of the People's Republic of China Company Law of the People's Republic of China Law of the People's Republic of China on Anti-money Laundering Law of the People's Republic of China Against Unfair Competition Interim Provisions on Prohibition of Commercial Bribery Anti-Monopoly Law of the People's Republic of China Regulation on the Implementation of the Bidding Law of the People's Republic of China Supervision Law of the People's Republic of China
B8 Community Investment	Implementation Opinions on Further Strengthening Voluntary Services of China Southern Notice on the Establishment of China Southern Group Volunteer Service Steering Committee China Southern Voluntary Service Management Measures Constitution of China Southern Airlines 'Ten-Cent' Caring Foundation	Charity Law of the People's Republic of China



## Performance Data

ESG indicators	Unit	2021	2022	2023	
<b>A. Environmental</b>					
A1 Emissions					
A1.2	CO <sub>2</sub> emissions (Scope I) <sup>1, 2</sup>	10,000 tons	1910.86	1432.75	2569.62
	CO <sub>2</sub> emissions (Scope II) <sup>1, 2</sup>	10,000 tons	13.52	17.19	20.32
	CO <sub>2</sub> emissions <sup>1, 2</sup>	10,000 tons	1924.38	1449.90	2589.94
	CO <sub>2</sub> emissions per ton-kilometer	Ton/10,000 ton-kilometers	8.98	8.72	8.61
A1.3	Hazardous waste (maintenance)	Ton	704.903	916.73	2451.4
	Waste gas treatment (maintenance)	10,000 m <sup>3</sup>	26080	36000	30240
	Industrial wastewater treatment (maintenance)	Ton	12987.0	10881	10993.2
A1.6	Treatment of aviation food production wastewater	10,000 tons	9.3	6.64	10.28
	Treatment rate of aviation food production wastewater	%	100	100	100
	Hazardous waste treatment rate (maintenance)	%	100	100	100
	Non-hazardous waste treatment rate (onboard service)	%	100	100	100
A2. Resource consumption					
	Aviation fuel consumption	10,000 tons	605.31	453.34	813.84
	Fuel consumed per ton-kilometer	Ton/10,000 ton-kilometers	2.85	2.77	2.73
A2.1	Gasoline	Ton	3452.12	2684.53	3128.89
	Diesel	Ton	6384.37	4969.15	6905.80
	Electricity	10,000 kWh	25651.38	29580.77	35621.80
	Natural gas	10,000 m <sup>3</sup>	930.83	1064.829	1310.581
	Liquefied gas	Ton	215.68	146.27	240.92
	A2.2	Total water consumption	10,000 tons	477.97	528.33

ESG indicators	Unit	2021	2022	2023	
A2.2	Water consumption intensity <sup>3</sup>	m <sup>3</sup> /RMB 10,000	0.4703	0.6231	0.3599
<b>B. Social</b>					
B1. Number of Employees: by gender, type of employment, age group, and region					
B1.1	Total workforce	Person	98098	97899	99468
Gender	Male	Person	58893	59160	60564
	Female	Person	39205	38739	38904
Region	Guangzhou	Person	25167	23658	24064
	Domestic (excluding Guangzhou)	Person	72029	73472	74500
	International	Person	902	769	904
Education background	Master's degree and above	Person	4283	4361	4795
	Bachelor's degree	Person	52160	52296	55102
	Junior college	Person	28201	26982	26304
	Senior high school and below	Person	13454	14260	13267
Age	<30	Person	38941	35226	33917
	31-40	Person	35113	37015	38386
	41-50	Person	17985	18684	19515
	>50	Person	6059	6974	7650
B1.2	Employee turnover rate	%	4.58	3.62	2.56
Gender	Female	%	/	/	1.55
	Male	%	/	/	1.01
Region	Guangzhou	%	/	/	0.84
	Domestic (excluding Guangzhou)	%	/	/	1.60
	International	%	/	/	0.12



ESG indicators	Unit	2021	2022	2023	
Age	<30	%	/	/	1.58
	31-40	%	/	/	0.79
	41-50	%	/	/	0.16
	>50	%	/	/	0.03
<b>B2. Health and safety</b>					
B2.1	Work-related deaths <sup>4</sup>	Person	1	3	2
	Proportion of employees died at work	%	0.0010	0.00306	0.00201
B2.2	Lost days due to work injury	Working day	12839	12839.5	1096
<b>B3. Development and training</b>					
B3.1	Proportion of trainees: by gender				
	Total number of trainees	Person	81253	78362	77716
	Male	Person	46879	44682	43201
	Female	Person	34374	33680	34515
B3.2	Average training hours of employees: by gender				
	Average training hours of employees	Hours	74.57	219.12	149.48
	Male	Hours	81.65	284.10	150.55
	Female	Hours	63.54	132.91	148.62
<b>B5. Supply chain management</b>					
B5.1	Number of suppliers: by region				
	Total number of suppliers	Nr.	21636	29270	34228
	Central South China	Nr.	10368	11898	16315
	Northeast China	Nr.	2315	3690	4202
	East China	Nr.	3130	4668	4320

ESG indicators	Unit	2021	2022	2023	
B5.1	North China	Nr.	3248	3799	4955
	Northwest China	Nr.	1271	3059	2101
	Southwest China	Nr.	1082	1915	2046
	Outside the Chinese mainland	Nr.	222	241	289
<b>B6. Product responsibility</b>					
B6.2	Number of complaints received about products and services				
	Complaint rate	%	0.4394	2.65	0.589
<b>B8. Community investment</b>					
B8.2	Resources used in the focus area				
	Number of volunteer service participants	Person-time	18000	25000	13000
	Working time	10,000 hours	1.8	7.7	4

Note: Unless otherwise specified, the data coverage of this report is consistent with that of the 2023 financial report of China Southern.

1. Carbon dioxide emission factors and calculation methods refer to "Comprehensive Statistical Reporting Form System on Civil Aviation" (average carbon dioxide emission factors of China's regional power grid in 2011 and 2012);

2. Scope I carbon dioxide emissions are direct emissions from aviation kerosene, gasoline, diesel oil, coal, natural gas, and liquefied gas; Scope II carbon dioxide emissions are indirect emissions from the generation of purchased energy. Carbon dioxide emissions = Scope I carbon dioxide emissions + Scope II carbon dioxide emissions;

3. Water consumption intensity = total water consumption/operating revenue.

4. Both of them died suddenly. We have made a deep reflection on such incidents. We will avoid such incidents by reminding employees to pay attention to personal health management, establishing employees' health awareness, providing employees with annual physical examinations, encouraging employees to finish their holidays, and achieving a proper balance between work and rest.



# Index of Indicators

## ESG Index of Indicators

Main Category	Content	Location
<b>A. Environmental</b>		
Aspect A1: Emissions	General Disclosure Information on: (a) policies on ; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to exhaust and greenhouse gas emissions, pollution to discharges into water and land, and generation of hazardous and non-hazardous wastes, etc.; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	P58, P65-67, P108
	A1.1 The types of Emissions and Related Emission Datarespective emissions data	P58-59, P65-67, P110
	A1.2 Direct (scope 1) and energy indirect (scope 2) GHG emissions (in tons) and (if applicable) density (e.g. per unit of production, per facility)	P110
	A1.3 Total amount of hazardous waste generatedproduced (in tonnes) and (if applicable) density, where appropriate, intensity (e.g. per unit of production volume, per facility).	P110
	A1.4 Total amount of non-hazardous waste generatedproduced (in tonnes) and, if applicablewhere appropriate, intensity (e.g. per unit of production unitvolume, per facility).	P110
	A1.5 Description of emission targettarget(s) set and the steps taken to achieve them.	P60
Aspect A2: Use of resources	A1.6 Description of how hazardous and non-hazardous wastewastes are handled, and the wasta description of reduction goaltarget(s) set and the steps taken to achieve these goalsthem.	P15, P66-67
	General Disclosure Policies foron the efficient use of resources (, including energy, water and other raw materials).	P58
	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) (by type) consumption (calculated in thousands of kilowatt hourtotal (kWh in '000s) and dintensity (e.g. per unit of production volume, per facility).	P110
	A2.2 Water consumption in total and dintensity (e.g. per unit of production volume, per facility).	P110-111
	A2.3 Description of energy use efficiency goaltarget(s) set and the steps taken to achieve them.	P60
Aspect A3: The environment and natural resources	A2.4 Description of whether there is any issues that may ariseissue in obtaining the applicablesourcing water sources, thethat is fit for purpose, water use efficiency objectivestarget(s) set and the steps taken to achieve these objectivesthem.	P62
	A2.5 Total packaging materials used in thefor finished products (in tonnes) and, if applicable, the percentagewith reference to per production unit produced.	N/A
	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	P65-67
A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P61-67	

Main Category	Content	Location
Aspect A4: Climate change	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P58
	A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P60-61
<b>B. Social</b>		
<b>Employment and labor practices</b>		
Aspect B1: Employment	General Disclosure Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare	P86, P108
	B1.1 Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region	P88, P111
	B1.2 Employee turnover rate by gender, age group and geographical region.	P88, P111
Aspect B2: Health and Safety	General Disclosure Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to providing a safe working environment and protecting employees from occupational hazards	P108
	B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P112
	B2.2 Lost days due to work injury	P89, P112
Aspect B3: Development and Training	B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P47-49
	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P90-91, P108
	B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P90, P112
Aspect B4: Labor Standards	B3.2 The average training hours completed per employee by gender and employee category.	P90, P112
	General Disclosure Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to preventing child and forced labor	P86, P108
	B4.1 Description of measures to review employment practices to avoid child and forced labour.	P86, P108
B4.2 Description of steps taken to eliminate such practices when discovered.	P86	



Main Category	Content	Location	
Operating practices			
Aspect B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	P109
	B5.1	Number of suppliers by geographical region	P103, P112
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	P103
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P101-103
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P101-103
Aspect B6: Product Responsibility	General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P83, P109
	B6.1	Percentage of the total number of products sold or delivered that need shipped subject to be recovered/recalls for safety and health reasons.	N/A
	B6.2	Number of products and service related complaints received about products and services and how they are dealt with them.	P83, P113
	B6.3	Description of practices relating to the maintenance/observing and protection of protecting intellectual property rights.	P40
	B6.4	Description of quality verification/assurance process and product recovery procedure/recall procedures.	N/A
B6.5	Description of consumer data protection and privacy policy, as well as the relevant implementation/policies, and monitoring method/show they are implemented and monitored.	P50-53	
Aspect B7: Anti-corruption	General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to bribery, extortion, fraud and money laundering.	P109
	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P38-39
	B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P38-39
B7.3	Description of anti-corruption training provided to directors and staff	P33, P38	
Aspect B8: Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P109
	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P96-100
	B8.2	Resources contributed (e.g. money or time) to the focus area.	P96, P113

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## Report Verification



验证声明书编号: CN-202403-CSR-08

### 企业社会责任报告审验声明书

#### Verification Statement of Corporate Sustainability Report

TÜV NORD (Hangzhou) Co., Ltd. (hereinafter referred to as TÜV NORD) is awarded by China Southern Airlines Co., Ltd. (to Entrusted by "China Southern Airlines" or "Company"), the Social Responsibility Report of China Southern Airlines in 2023 (hereinafter referred to as the Report) Independent third-party verification work was carried out. China Southern Airlines is responsible for collecting, analyzing, summarizing and disclosing the information mentioned in the report. TÜV NORD is in agreement with China Southern Airlines Carry out this work within the terms of reference approved in the terms of reference (report verification). China Southern Airlines is the designated user of this statement. This statement is based on China Southern Airlines' 2023 Social Responsibility Report, and China Southern Airlines' completeness of the information and data in the report and Responsible for authenticity.

#### Assurance Scope

The certification declaration is based on the following contents:

- The economy involved in the period from January 1, 2023 to December 31, 2023 disclosed in the Sustainable Development Report, Environmental and social indicators;
- Verification place: China Southern Airlines Building, No.68 Qixin Road, Baiyun District, Guangzhou, where China Southern Airlines Headquarters is located, did not visit its molecular companies and other project locations;
- Data, cases and management related information related to the company's sustainable development/social responsibility/ESG performance;
- Evaluate the management process of data and information collection, analysis and inspection involved in the report;
- As the economic data is audited by a third party, no repeated audit will be done in this verification.

The on-site inspection time is from March 14th to 15th, 2024.

#### Assurance Methodology

Assurance process including following activities:

- Review the document information provided by China Southern Airlines;
- Interview with China Southern Airlines report information collectors;
- Consult the public information published by relevant websites and media, and verify the relevant data and information in the report by sampling method;
- Evaluate the report according to the requirements of the Environmental, Social and Governance Reporting Guidelines (HK-ESG) of the Stock Exchange of Hong Kong in terms of importance, quantification, balance and consistency;
- The verification activities are carried out in accordance with TÜV NORD's Implementation Rules for Reporting Verification.

#### Assurance Conclusion

The report objectively reflects the development status and performance of the company in China Southern Airlines in 2023. The data in the report are reliable and objective, and no systematic or substantive errors have been found in TÜV NORD.

- Importance: China Southern Airlines Co., Ltd. evaluates substantive issues, and discloses the important objective performance of China Southern Airlines Co., Ltd. in the fields of safety, environment, service, employees, society and economy in 2023 from 20 substantive issues such as "ensuring safe flight", "passenger health and safety" and



## TÜV NORD

验证声明书编号: CN-202403-CSR-08

"innovative development", and responds to the expectations of investors and other stakeholders in a timely manner;

- Quantitative: The report discloses the three-year performance data in the environmental, economic and social fields such as jet fuel consumption, emissions, resource use, number of employees, development and training, supply chain management, energy consumption and carbon dioxide emissions in various forms such as appendix "performance data" and chapter "key performance", which is quantitative and comparable to some extent;
- Balance: The report discloses the number of complaints received about products and services, staff turnover rate and other data, which has a certain balance;
- Consistency: The Strategic Planning and Investment Department of China Southern Airlines Co., Ltd. is responsible for collecting, recording, arranging and analyzing the information and process used in preparing the report. The relevant departments of the sampled data in the verification process can provide traceability and have good consistency.

### Suggestion for improvement

Through the verification and evaluation activities, we have the following suggestions for improving the practice and management of sustainable development of China Southern Airlines:

- It is suggested to strengthen the monitoring of some pollutants, so as to provide a more accurate basis for the organization's environmental management;
- All relevant departments should keep the original evidence of data collection, so as to facilitate the traceability of the verification process more efficiently.

### Special statement

This statement excluding:

- The activity outside information reveal;
- The position, idea, faith, object, future developing direction, and promise which stated by China Southern Airlines;

### Statement of Independence and Competence

TÜV NORD Group is the world's leader certification authority in inspection, testing and verification, operating in more than 100 countries throughout the world and providing services which includes management systems and product certification; quality, environmental, social and ethical auditing and training; environmental; social responsibility and sustainability report assurance.

As one of the global branches of TÜV NORD Group, TÜV NORD (Hangzhou) Co., Ltd affirms its' independence from China Southern Airlines and confirms that there are no conflicts of interest with the organization or any of its subsidiaries and stakeholders when conducting the assurance of the Report. TÜV NORD was not involved in any manner with China Southern Airlines, when the latter was preparing the Report.

TÜV NORD (Hangzhou) Co., Ltd.



Audit team leader: Ms. Hao Lihong  
Date : 25.03.2024



The Authorized person: Mr. Song, Haining  
Date: 25.03.2024

注: 当声明的中文和英文版本有冲突时, 请以中文为准

## Feedback Form

Dear readers,

Thank you for reading this report. To further improve our work and make the next report more in line with your expectations, we would appreciate your feedback and suggestions.

Your identity:

- Customers
- Investors
- Governments
- Employees
- Partners
- Environmental Protection Agencies
- Communities
- Media
- Peers
- Others

### Optional questions:

1. Are you satisfied with the report as a whole?

Yes  No  General

2. Is the information you are concerned about reflected in the report?

Yes  No  General

3. Do you think the report truthfully reflects the contents of China Southern's social responsibility work and its impact on stakeholders?

Yes  No  General

4. In the report, can you easily find the information you are interested in?

Yes  No  General

5. Are you satisfied with the layout design of the report?

Yes  No  General

### Open questions:

6. What do you think are the shortcomings of this report?

7. What do you wish to disclose on a regular basis in this report?

8. What opinions and suggestions do you have on our future social responsibility work and reports?

Please send your suggestions (if any) to  
Contact: Chen Cheng  
E-mail: chen\_cheng@csair.com



## About the Report



This report is the 17<sup>th</sup> social responsibility report issued by China Southern Airlines Co., Ltd. It systematically discloses the company's practice and achievements in the fields of economic, environmental and social responsibility. Hope you can learn more about China Southern through this report and grow together with China Southern.

### Reliability Guarantee

The board of directors and all directors of the company undertake that there are no false records, misleading statements or major omissions in the contents of this report, and are responsible for the authenticity, accuracy and completeness of the contents.

### Report Time Frame

The reporting time range is from January 1 to December 31, 2023, and is appropriately extended to enhance the comparability of the report.

### Reporting Boundaries

The disclosure boundary of the data indicators in this report is mainly based on China Southern Airlines Co., Ltd., and individual indicators are extended to China Southern Air Holding Co., Ltd. The scope of data disclosure has been specified in the report.

### Data Statement

The financial data in this report comes from the audited annual report of China Southern, and other data comes from the public data of government departments, official documents of the company and relevant statistics. The financial data in this report is calculated in RMB, unless otherwise stated. For more economic data, refer to the company's 2023 annual report.

### Compilation Basis

The State-owned Assets Supervision and Administration Commission of the State Council of the State Council "Guiding Opinions on the Fulfillment of Social Responsibility by Central Enterprises";

Hong Kong Stock Exchange Environmental, Social and Governance Reporting Guidelines;

Guidelines for the preparation of the "Report on Corporate Social Responsibility" issued by the Shanghai Stock Exchange and the Guidelines for Environmental Information Disclosure of Listed Companies on the Shanghai Stock Exchange;

Global Sustainability Standards Council GRI Sustainability Reporting Standards (GRI Standards);

GB/T 36001-2015 Guidelines for Compilation of Social Responsibility Reports

### Appellation Description

For the convenience of expression and reading, "China Southern Airlines Co., Ltd." is also represented by "China Southern", "the Company" or "We", "China Southern Air Holding Company Ltd." is also represented by "China Southern Group" or "the Group", "Xiamen Airlines Co., Ltd." is also represented by "Xiamen Airlines", local branches are represented by "region name + branch", "China Southern Air Logistics Company Limited" is also represented by "Logistics Company", "China Southern Airlines General Aviation Company Limited" is also represented by "General Aviation Company" and "General Aviation", and "Civil Aviation Administration of China" is also represented by "CAAC".

### Report Acquisition

This report includes both Chinese and English versions, and is published in both paper and electronic formats. You can log in to the official website of China Southern Airlines to browse or download this report online.

### Contact Information

If you have any questions or suggestions about this report, please write to China Southern Airlines Co., Ltd.

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