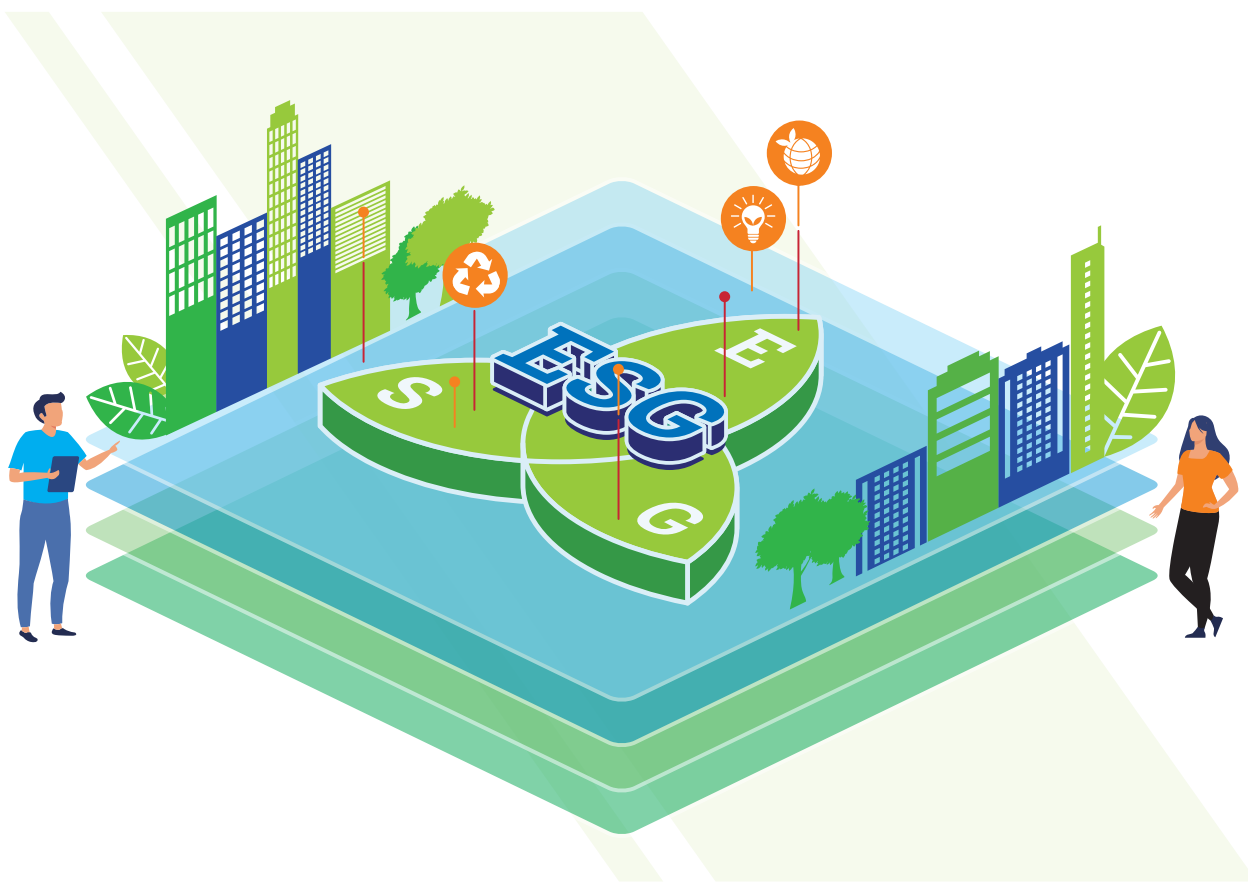


## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



This report is prepared pursuant to the Environmental, Social and Governance (“ESG”) Reporting Guide (the “Guide”) in Appendix 27 to the Rules Governing the Listing of Securities (the “Listing Rules”) on The Stock Exchange of Hong Kong Limited (the “Stock Exchange”). This report covered the period from 1 January 2022 to 31 December 2022, and the relevant key performance indicators were mainly from the Group and most of its subsidiaries. There is no significant change in the scope of this report from that of the 2021 ESG Report. This report has complied with all the “comply or explain” provisions as set out in the Guide. We did not disclose certain key performance indicators which are required to be disclosed by the Stock Exchange but not directly related to the business of the Group or have minimal influence.

## PHILOSOPHY OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE

As a leading service provider in the informatization sector in the PRC, the Group adheres to its position as a “New Generation Integrated Smart Service Provider” and commits to “Building Smart Society, Boosting Digital Economy, Serving a Good Life”, providing integrated comprehensive smart solutions in the informatization and digitalization sectors.

### Sustainable Development

The Group places a strong emphasis on the concept of scientific development, actively responds to the United Nations Sustainable Development Goals (SDGs) initiative and adheres to the sustainable development principle of “customer prioritization, efficient resources allocation, talent orientation, and responsibility”. On the back of our fundamental missions of serving our customers, bringing returns to our shareholders, caring about our employees and giving back to society, we are committed to providing innovative, high-quality, efficient and secure integrated services including telecommunications infrastructure services, business process outsourcing services, applications, content and other services, while delivering value to our customers and the society, promoting healthy and sustainable development of itself, and aligning our corporate development with society and environment.

#### Customer prioritization



Remaining customer-centric with a focus on their needs; ensuring the quality of our customers' products and delivery on the basis of high-quality products, solutions and services, ensuring prompt response to customer concerns, and continuously improving their satisfaction

#### Efficient resources allocation



Gradually improving the synergistic and professional operation of our internal resources to achieve eco-friendly and efficient utilisation of resources through scientific management and innovative application of new technologies; helping our partners achieve low-carbon and intelligent operation leveraging the integration of new technologies and innovation

#### Talent orientation

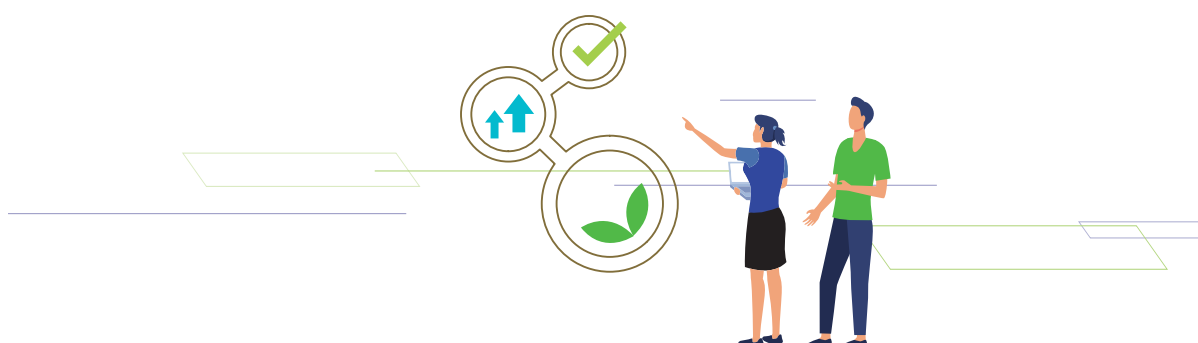


Caring about the development of our employees in various aspects, striving to provide them with adequate space for development, a comprehensive training system, competitive salary and welfare packages and incentive mechanism while creating a safe and enjoyable working environment for them

#### Responsibility



Striving to give back to society by fulfilling our responsibilities as a state-owned enterprise in emergency rescue and disaster relief, etc., actively participating in projects for rural revitalization and improvement of people's livelihood, and encouraging our employees to actively participate in social welfare activities



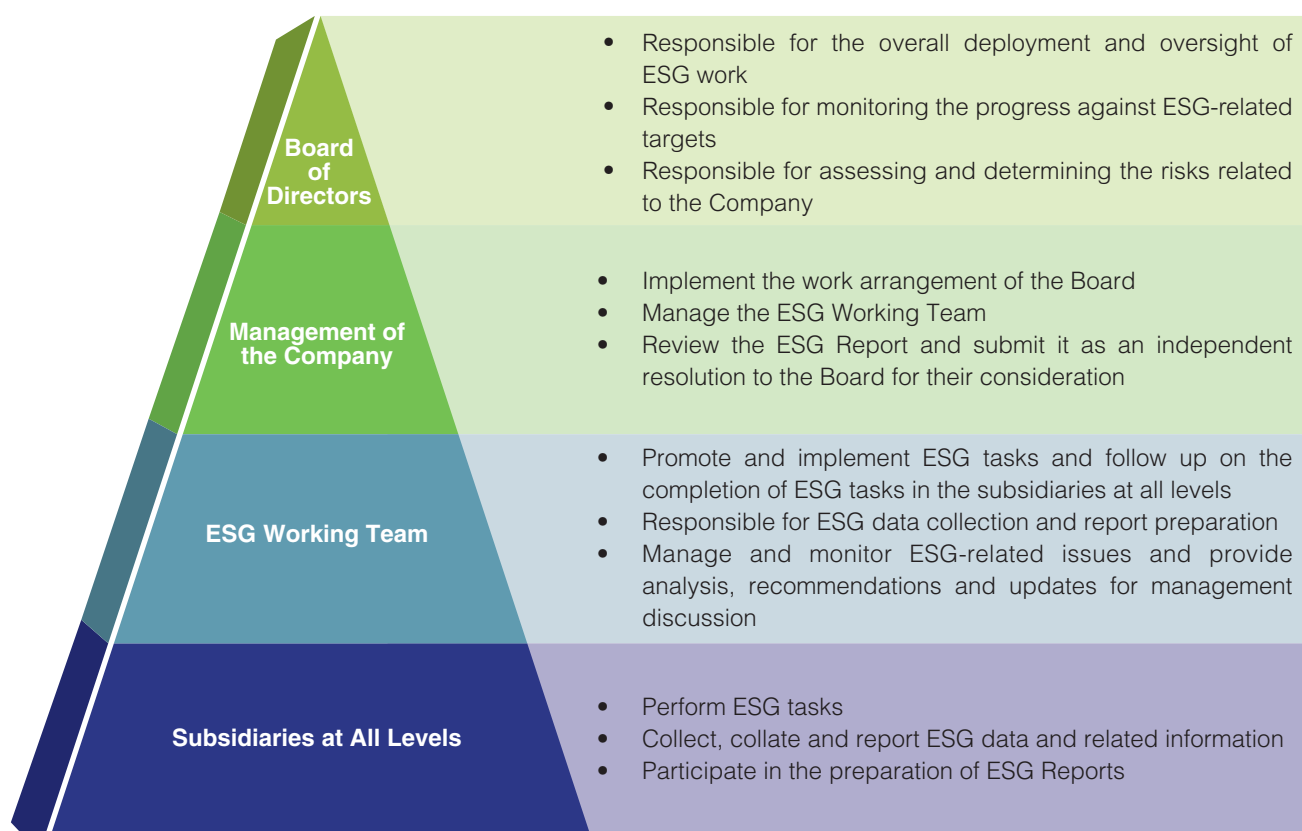
## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Board Statement

The Board of Directors (the “Board”) of China Communications Services Corporation Limited (the “Company”) is the highest responsible and decision-making body for ESG governance and has overall responsibility for environmental, social and governance work. The Board meets annually to review and approve the publication of this report (including the review of the progress on ESG-related goals). The Company’s management is authorized to be responsible for the implementation of specific ESG works of the Group (including stakeholders identification and communication). At the same time, the Board reviewed the potential risks and opportunities of ESG issues on the Company’s overall strategy and the results of the materiality assessment of ESG issues.





The Audit Committee of the Board of the Company is responsible for assisting the oversight of ESG issues and is continuously enhancing the requirements of internal control processes for ESG risk identification. The management of the Company formulates relevant internal control processes in accordance with the requirements of the Audit Committee of the Board to ensure the effective control of ESG risks by the Company’s risk management and internal control system.

## ESG Governance Structure



## Communication with Stakeholders

The Group pays attention to the common interests of stakeholders, including the government and regulatory authorities, shareholders and investors, employees, suppliers, customers and communities. It attaches great importance to the communication with them. Through announcements, regular reports, meetings, talks, visits, special communications and events, the Group collates and actively responds to the views and suggestions of all parties to promote innovative, coordinated, green, open and shared corporate development.

| Stakeholders   | Mechanism and Means of Communication                                 | Expectations on the Company   | Company Response   |
|--|--|---|--|
| <br>Government and Regulatory Authorities | Meeting  | Compliance with laws and regulations  | Comply with laws and operate with integrity  |
|  | Reports or statements  | Implement government regulatory requirements  | Pay taxes in accordance with the laws and promote employment   |
|  | Report and visits  | Promote the building of an industrial ecosystem   | Innovate smart products and services   |
| <br>Shareholders and Investors           | Periodic reports, announcements                                      | Asset preservation and appreciation   | Operate in a stable manner and continuously create value for shareholders  |
|  | Special report, visit  | Regulate corporate governance   | Improve corporate governance and continuously enhance the internal control system  |
|  | Daily communication  | Prevent operational risks   | Protect the rights and interests of investors, especially small and medium-sized investors, in accordance with the laws  |
|  | Investor meeting   | Regulate information disclosure   | Disclose corporate information in strict accordance with the rules   |
| <br>Employees                           | Employee representative supervisors, employee representative meeting | Safeguard legal rights and interests  | Regulate labour management   |
|  | Employee symposium with management                                   | Achieve career development  | Enhance staff training and open up career paths  |
|  | Employee questionnaire   | Participate in management   | Improve income distribution and welfare protection mechanism   |
|  | Letter and visit   | Staff caring  | Care for the physical and mental health of staff and improve working conditions  |
| <br>Suppliers                           | Supplier selection and engagement                                    | Integrity and self-discipline in procurement, clearly defined systems, rigorous processes and standardized operations | Improve the synergistic and compliant procurement management systems and separate the supplier selection, procurement execution and monitoring functions   |
|  | Subcontract management   | Clear needs and high transparency in management   | Establish a supplier resource base, ensure supplier qualifications and service capabilities, provide necessary skills training and strengthen project-focused whole process management   |
|  | Green procurement  | Implement green and eco-friendly concepts, reduce the damage and impact to the environment                            | Give priority to suppliers with environmental management system certificates and products that are in line with environmental protection standards. Disseminate the concept of environmental protection to suppliers and actively explore whole-process electronic procurement |

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

| Stakeholders   | Mechanism and Means of Communication | Expectations on the Company                   | Company Response  |
|--|--------------------------------------|---|---|
| <br>Customers | Contract fulfilment                  | Cost-effective solutions (services, products) | Identify customer needs accurately and innovate smart products to meet their customized needs   |
|  | Visit, meeting and communication     | Good service quality                          | Project reports, regular meetings, project visits, etc. for full life cycle business management |
|  | Roadshow, exhibition                 | Efficient response                            | Respond to customer needs as soon as possible   |
| <br>Community | Community communication activity     | Protect the environment                       | Energy saving, emission reduction and conservation of water and electricity                     |
|  | Community building activity          | Safeguard emergency communications            | Actively engage in disaster relief and communications safeguard                                 |
|  | Public welfare activity              | Care for the underprivileged groups           | Carry out poverty alleviation work, help the disabled and the poor                              |

## Material Topic Identification

With regard to the 12 ESG issues set out in the Guide, the Group took into consideration the characteristics of its business and the industry in which it operates to conduct investor meetings so as to understand the concerns of external stakeholders such as shareholders, investors and the capital market. It actively participated in questionnaire surveys conducted by ESG rating agencies to comprehensively analyse the concerns of stakeholders. At the same time, in combination with the Company's strategies, the Group interviewed its internal employees and conducted research on the issues related to sustainable development. Together with the results of internal and external analysis, it identified several material topics and specifically disclosed and analysed them in this ESG report. These topics included "Environmental Protection and Climate Change", "Human Resources Management", "Development and Training", "Health and Safety", "Supply Chain Management", etc. Details of which are discussed in this report.

## Material Issues Analysis Process



## ENVIRONMENTAL PROTECTION AND CLIMATE CHANGE

Climate change not only has profound impacts on the global ecosystem, but also brings significant impacts on the global economy. Carbon dioxide emission has been adopted as an important indicator by the PRC for the evaluation of an enterprise's production and operation performance, which presented new requirements for enterprises to adapt to climate change. The Group has realized the effects of risks and policies associated with climate change on its operations and has taken corresponding proactive measures to capitalize on the opportunities arising therefrom and cope with the challenges.

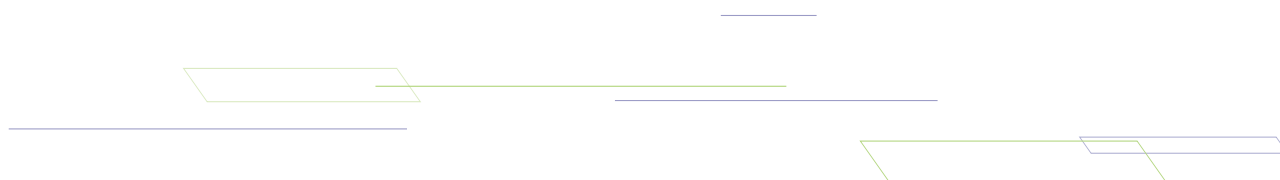
In 2022, the Group actively researched on and discussed the pathways to address climate change and control greenhouse gas emissions, while formulating green and low-carbon development plans. It organised capacity building, technology research and publicity work to fight against climate change and endeavoured to improve its capability in environmental management, with a view to contributing to mitigate global warming.

### Climate Risk Governance

To enhance its ability to respond to climate change, the Group has analysed and sorted out major climate-related issues that had and may have an impact on the Company and the action taken to managing climate change. It has also established targets and work plans for reducing emissions. The Company has also taken into account the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to advance its work on governance, strategy, risk management and targets to address climate change.

### Governance



The Board is responsible for coordinating and overseeing the implementation of ESG goals and ESG actions, including climate risk management and "Carbon Peak, Carbon Neutrality" ("Dual Carbon") planning. The ESG Working Team under the Board is responsible for carrying out ESG-related tasks, including climate risk assessment and energy saving and emission reduction initiatives. Besides, the Group also set up a "Carbon Peak, Carbon Neutrality" management organization, with the President of the Company as the person in charge, which is responsible for work related to overall planning and management.



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Strategies

The Group realized the long-term and significant impact and risks posed by climate change to the enterprise. By analysing the potential impact of the risks, it identified strategies to deal with risks to avoid negative impact on business operations as far as possible. In addition, the Group prepared “the Dual Carbon Goals Rolling Development Plan” and “the Dual Carbon Action Plan” to actively seize the opportunities from climate change. Please refer to relevant sections in this report for relevant contents.

| Type of risk  |   | Risk description   | Potential impact   | Preventive strategy   |
|---|---|--|--|---|
| <br>Physical risks     | Acute risk: extreme weather such as typhoons and heavy rainfall | Increase in frequency and severity of extreme weather, such as heavy rainfall, which affects business development progress | Loss of revenue, higher operating costs  | Implement emergency plans for natural disasters   |
|   | Chronic/long-term risk  | Higher temperature in the future, increasing energy consumption  | Increase in operating costs such as energy consumption due to the need for more refrigeration equipment as a result of higher temperatures | Implement energy saving and emission reduction measures<br><br>Research and development for the application of more energy-efficient refrigeration technologies and equipment |
| <br>Transition risks | Technology risk   | Low-carbon technology transformation leading to change of business scenarios   | Stranded assets due to failure to adopt low-carbon technologies timely   | Enhance R&D capabilities for low-carbon technology and commence relevant technology cooperation   |
|   | Market risk   | Customer preference for low-carbon products and solutions based on climate related considerations                          | Failure to effectively meet consumer demand for green and low-carbon products and solutions  | Expand the industrial ecosystem to provide low-carbon products and solutions  |
|   | Regulatory compliance risk                                      | Enforcement of stricter climate-related laws and regulations   | Increase compliance costs  | Form working groups to regularly follow up on legal and regulatory requirements   |

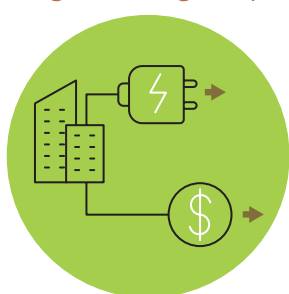
## Risk Management

The Audit Committee of the Board is responsible for reviewing the assessment of the relevant risks and delegating authority to management to develop and implement the relevant systems. At the same time, climate change risks were included in the overall risk assessment and management system of the Company and internal control process related to the environmental, social and governance was newly added to further strengthen the Company's risk management of ESG.

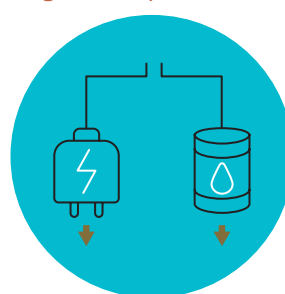
## Metrics and Targets

The Group actively responds to the national strategy of "Dual Carbon" while persistently implementing the development philosophy of innovation, coordination, green, openness and sharing. It has formulated green and low-carbon plans and related implementation programs and continuously increased its R&D investment in emerging energy-saving technologies and new businesses, thereby creating a green ecosystem and making China Comservice more eco-friendly.

### Targets during the period of Dual Carbon Goals Rolling Development Plan



The growth rate of total energy consumption does not exceed that of business revenue



Electricity and fuel consumption per revenue of RMB10,000 remains on a reasonable decline

|   | 2022         | 2021* | Change |
|---|--------------|-------|--------|
| Energy consumption per revenue of RMB10,000 (kg of standard coal) | <b>11.29</b> | 12.70 | -11.1% |
| Electricity consumption per revenue of RMB10,000 (kWh)            | <b>20.56</b> | 23.69 | -13.2% |
| Fuel consumption per revenue of RMB10,000 (L)                     | <b>7.26</b>  | 8.12  | -11.9% |

\* During the reporting period, the Company systematically sorted out the calculation methodology adopted by the Greenhouse Gas Protocol for the disclosed data and made corresponding adjustments to the data for 2021 to increase data comparability, so the data for 2021 is slightly different from those disclosed in the 2021 report.

## Our actions

### Action 1

The Group has set up a "Carbon Peak, Carbon Neutrality" management organization, with the President as the main person in charge and the Company's management working together to form the leading group. This three-tier working structure aims to promote the Group's green and low-carbon development.

#### Leading Group

Directing the deployment of green development work and studying and making decisions on important issues in respect of "Dual Carbon"



#### Office of the Leading Group

Implementing the specific work and organizing the day-to-day work of the Group for the "Dual Carbon"



#### Subsidiaries at all levels

Implementing the Group's "Dual Carbon" plans and objectives, promoting and undertaking "Dual Carbon" projects





## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



During the year, “Dual Carbon” management organization planned and conducted a three-week “Dual Carbon” Empowerment Training Month under three themes: new infrastructure and new energy, contract energy management and consulting training, and platform services and eco-cooperation, and a total of over 1,500 participants joined the training online.

The Group summarized the main capabilities of subsidiaries at all levels in terms of “Dual Carbon” and formed a list of “Dual Carbon” services in 12 major categories and six areas in total.

| 中国通服双碳赋能月    |                          |          |
|--------------|--------------------------|----------|
| 创新引领 科技共享    |                          |          |
| 新基建及新能源篇     |                          |          |
| 7月12日上午09:00 |                          |          |
| 时间           | 内容                       | 发言人      |
| 09:00-09:15  | 领导讲话                     | 梁世平      |
| 09:15-09:35  | 绿色5G基站产品及解决方案            | 湖南康普     |
| 09:35-09:55  | 绿色5G基站一体化服务能力            | 中时讯      |
| 09:55-10:15  | 老旧机房节能降碳解决方案             | 中通服节能    |
| 10:15-10:35  | 新型绿色低碳数据中心一体化服务能力        | 中通服设计    |
| 10:35-10:55  | 光伏新能源解决方案                | 中通服绿建    |
| 10:55-11:15  | 光伏发电一体化解决方案              | 浙江工程     |
| 11:15-11:35  | 中国通服2022年“双碳”赋能光伏新能源解决方案 | 安徽电力行业中心 |
| 11:35-11:55  | 风力发电项目承接解决方案             | 中邮建      |

| 中国通服双碳赋能月    |                |              |
|--------------|----------------|--------------|
| 创新引领 科技共享    |                |              |
| 平台服务及生态合作篇   |                |              |
| 7月26日上午09:00 |                |              |
| 时间           | 内容             | 发言单位         |
| 09:00-09:20  | 生态合作-能源数字化     | 中能融合智慧科技有限公司 |
| 09:20-09:40  | 生态合作-绿电        | 国网绿色能源有限公司   |
| 09:40-09:55  | 绿电交易探索         | 公诚设备         |
| 09:55-10:10  | 碳足迹            | 中国通服数智科技     |
| 10:10-10:25  | 智慧节能机房         | 福建技星         |
| 10:25-10:40  | 园区智慧节能管控管理平台   | 中通服科技        |
| 10:40-10:55  | 双碳监测管理平台       | 重庆通能         |
| 10:55-11:10  | 基于平台的多场景节能服务   | 浙江邮电工程       |
| 11:10-11:25  | 智慧园区下的双碳管理解决方案 | 中通服绿建        |
| 11:25-11:40  | 机场智慧能源         | 中通服绿建        |
| 11:40-12:00  | 领导总结           | /            |

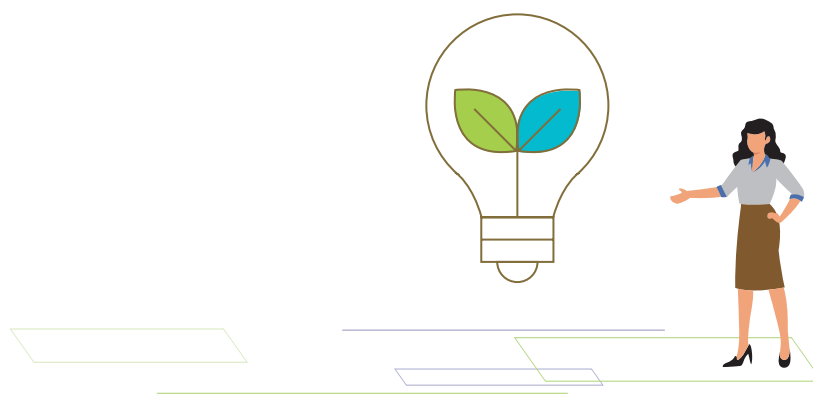
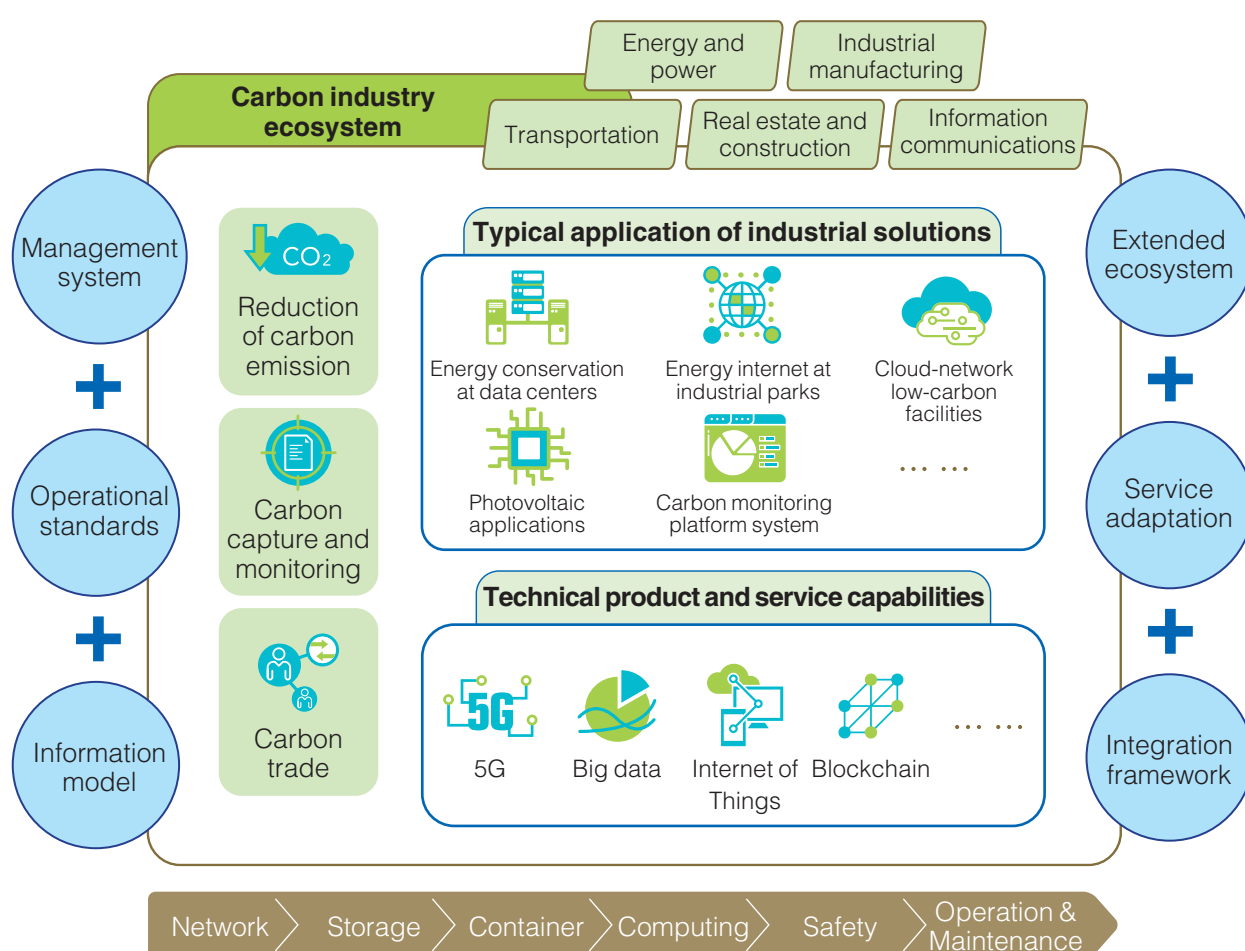


The Second Carbon Neutralization Boao Conference was successfully held and the Group's subsidiary, China Information Consulting & Designing Institute Co., LTD., was awarded the “Carbon Neutrality Industry Pioneer Award (Information and Communications Industry)”. This award is the most influential award among the China Energy Conservation Association's carbon neutrality field enterprise awards, reflecting the industry's high recognition of the Company's capabilities and achievements in the field of carbon neutrality in the information and communications industry.



## Action 2

The Group prepared “the Dual Carbon Goals Rolling Development Plan for 2023–2025” and “the 2023–2025 Dual Carbon Action Plan”, and continuously promoted the “Research on the Peaks of Carbon Emission and Pathways to Carbon Peak”. Leveraging the “Dual Carbon” mission, it improved the organizational system and rules for energy conservation and emission reduction, supported the construction of a binding incentive mechanism for energy conservation and emission reduction, and reduced total energy consumption. Focusing on the areas of energy and power, industrial manufacturing, transportation, real estate and construction, and information and communications as well as three major business sectors which included carbon emissions, carbon management and carbon removal, the Group strived to promote carbon reduction in society.



## Use of Technology to Seize Opportunities from Energy Saving and Carbon Reduction

In managing the risks of climate change, the Group has leveraged its unique advantages to increase the application of new technologies such as 5G, big data, cloud computing and the Internet of Things. While promoting upgrade and carbon reduction of energy-intensive industries, it developed a series of energy-saving technologies and products for energy saving and carbon reduction, which allows it to seize the opportunities in climate change.



### The First “Zero-Carbon” Green Big Data Center in China

China Telecom (National) Digital Qinghai Green Big Data Center undertaken by Huaxin Consulting Co., Ltd., which is a subsidiary of the Group, in general contracting model, has reached a PUE of less than 1.2 through advanced cooling technologies such as indirect evaporative cooling and liquid cooling. With the construction of its own distributed photovoltaic parking shed for power generation and the development of a green power monitoring platform in collaboration with State Grid, it established China's first traceable 100% clean energy power supply, as well as China's first exemplary model of integrated source-grid-load-storage smart green power supply in the data center sector. The data center has been rated as an AAAA low-carbon data center (planning category) and it has passed the ISO certification for data centers. It has also been awarded the “2022 Industrial Transformation and Energy Saving Special Fund” in Qinghai Province, selected as one of the “2022 Corporate Cases for High-Quality Development of Big Data Centers” and “2022 Excellent Case of Green ‘Dual Carbon’ Technology Application in Digital Industry” in China.





### Integrated Energy Management Platform for Smart Airport

China Comservice Transfar Technology Company Ltd., which is a subsidiary of the Group, provides integrated smart energy control services for the green airports. With a focus on energy consumption indicators, the platform achieves panoramic multi-dimensional visual monitoring of the airport energy system and helps airports to make better data-driven decisions. A new integrated energy dispatching system was established to enable “demand-supply interaction”. Based on load forecasts and energy production costs, it dynamically adjusts the composition of production equipment to achieve optimal dispatching of the entire network, further improves the quality of energy consumption and reduces production costs.

An international airport has become the first airport in China to adopt smart energy management. It has achieved significant reductions in average annual energy consumption, average annual energy costs and total carbon emissions, without compromising the comfort of passengers.

#### Operational outcome of the integrated smart energy management platform at an international airport



##### Reduction in energy consumption

**2022: 27%**

2021: 18%



##### Reduction in standard coal (tons)

**2022: 3,111**

2021: 2,940



##### Reduction in carbon emission (tons)

**2022: 7,558**

2021: 7,330



### Distributed Photovoltaic Power Generation Project of a Factory

China Comservice Construction Co., Ltd., a subsidiary of the Group, has built a photovoltaic parking shed for customers, adopting the mode of “self-generation for self-use and grid-connection of surplus power”. By utilizing Building Integrated Photovoltaic (BIPV) and BIM technology, the distributed photovoltaic power generation steel structure parking shed was constructed using the parking lot in the factory. The total installed capacity of the overall photovoltaic parking shed construction of the factory is about 50MWp, and the annual emission reduction of carbon dioxide is more than 18,000 tons.





## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

**Comprehensive Energy-saving Retrofit of Equipment**

Guangdong Nanfang Communication Construction Company Ltd., which is a subsidiary of the Group, adopted diversified means for the comprehensive energy-saving retrofit of the micro-modules at access network rooms, the air conditioning system in the machine room and 2/3G sites.

- A total of 17 access network rooms in Guangzhou, Foshan and Shantou have undergone the retrofit of micro-modules using a consortium approach and completed the supply, installation, testing and commissioning of micro-module equipment. The PUE of most of the micro-modules in the access network rooms is reduced to around 1.2–1.4 after the retrofit, saving approximately 1.91 million kWh of electricity for the 17 machine rooms per year.
- With regard to the energy-saving retrofit of the air-conditioning system in the machine room, a comprehensive energy-saving solution was adopted, which included the use of high-efficiency inverter screw units, inverter pumps, inverter cooling towers and EC fan terminal air cabinets. Following the completion of the renovation of the central air-conditioning system of a comprehensive building of a research institute, the customer can precisely adjust the cooling system according to the real-time changes of the cooling load and achieve 50% more energy saving benefits as compared to those before the retrofit. As a result, the customer can save around 2 million kWh of electricity each year.
- The minimalist retrofit of 2/3G sites included the customization of the centralized dispatching plan for remote and near-end server rooms, the consolidation of BBU and integration of baseband boards for target sites, and the switch-off and phase-out of high-energy-consuming equipment such as air-conditioners at relevant sites. The minimalist retrofit of nearly 1,500 sites has been completed, which reduced the overall power consumption by about 53% and cut carbon dioxide emissions by about 22,500 tonnes per year.

**Red Line Monitoring System for Ecological Protection**

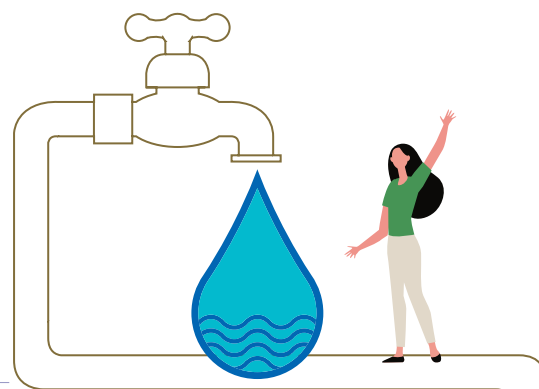
China Comservice Construction Co., Ltd., which is a subsidiary of the Group, undertook the construction project of the red line monitoring and supervision capacity for the ecosystem and ecological protection in Shenzhen City, Guangdong Province. The system covered five major areas of monitoring, which included the monitoring of ecosystem structure, the monitoring of ecological resources status, biodiversity observation, ecosystem function observation and human habitat suitability monitoring. A total of 296 biodiversity observation sites (200 for animals, 11 for insects and 85 for plants) and 20 sites for building the monitoring capability of human habitat suitability (6 for air microorganisms, 6 for pollen, 6 for negative ions and 2 for BVOC) have been established. Relying on “integrated space, sky and ground” drones, video surveillance, ground surveillance and other automated monitoring means, the system achieves round-the-clock and large-scale real-time dynamic monitoring of urban ecology and ecological protection red line.



### “Smart Water Conservancy” Products

Based on a unified microservices structure, the Group achieved the integration and unified visualization presentation of diversified applications for the management of “three defense”, river chiefs, water resources and environment, with successful cases all over China.

- Three Defense Command Center and Protection System for a customer in Guangdong Province**  
 The center established and achieved the integrated linkage of three defense decision support, three defense video surveillance, three defense consultation and dispatch and three defense mobile application business system. It launched a mobile APP for remote consultation and integrated monitoring of flood and rainfall, weather and video surveillance.
- Phase I of Smart Water Conservancy Project in a city of Jiangsu Province**  
 The project included the building of eight major sub-systems, namely the flood and drought prevention information management system, water supply information management system, drainage information management system, South-to-North Water Transfer information management system, water conservancy project information management system, water resources information management system, rural water conservancy information management system and smart water conservancy collaborative office platform, etc. It is also China's first integrated informatization platform for water conservancy and water affairs.
- Smart Water Conservancy Construction Project in a city of Fujian Province**  
 The project included the building of an efficient and comprehensive awareness system, a big data resource center and a unified smart application platform of water conservancy in that city. It assisted the customer in making decisions and reducing flood disasters, eliminating potential flood hazards, safeguarding people's lives and property, and improving public service efficiency and service capacity.



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Promote Green Operations

The Group is an informatization communications service provider. In the course of providing services to customers, the Group has always strictly complied with various laws and regulations on environmental protection and emissions, including the Environmental Protection Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China. It has carefully formulated internal management systems for environmental protection and resource use, actively controlled pollutant and greenhouse gas emissions, sewage discharge and the disposal of solid and hazardous waste. The Group has actively responded to the national call to reduce the impact of its operations on the environment.

## Energy Consumption

In 2022, the total energy consumption of the Group was approximately 159,000 tons of standard coal, with an energy consumption per revenue of RMB10,000 at 11.29 kg of standard coal (2021\*: approximately 170,000 tons of standard coal, with an energy consumption per revenue of RMB10,000 at 12.70 kg of standard coal).

According to the energy report of the Group, the total emission of greenhouse gases generated from energy consumption of the Group in 2022 as accounted pursuant to the Greenhouse Gas Protocol was approximately 442,900 tons (2021\*: approximately 482,700 tons).



Greenhouse gas emissions  
(10,000 T)

**2022: 44.29**  
2021\*: 48.27



Direct emissions (Scope 1)  
(10,000 T)

**2022: 24.83**  
2021\*: 26.92



Indirect emissions (Scope 2)  
(10,000 T)

**2022: 19.46**  
2021\*: 21.35

### Notes:

1. Scope 1 direct greenhouse gas emissions include greenhouse gas emissions from the consumption of natural gas, coal, gasoline and diesel.
  2. Scope 2 indirect greenhouse gas emissions include greenhouse gas emissions from the purchase of electricity and heating.
  3. Total greenhouse gas emissions are the sum of Scope 1 direct greenhouse gas emissions and Scope 2 indirect greenhouse gas emissions.
- \* During the reporting period, the Company systematically sorted out the calculation methodology adopted by the Greenhouse Gas Protocol for the disclosed data and made corresponding adjustments to the data for 2021 to increase data comparability, so the data for 2021 is slightly different from those disclosed in the 2021 report.

## Direct/Indirect Energies by Type



Electricity (GWh)

**2022: 289.32**  
2021: 317.42



Gasoline (Million L)

**2022: 87.17**  
2021: 94.84



Diesel (Million L)

**2022: 14.99**  
2021: 13.97



Natural gas (Million  
standard cubic meters)

**2022: 8.75**  
2021: 11.93

## Waste Discharge

The Group strictly follows the Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes and other laws and regulations regarding waste disposal and utilisation, and carries out waste disposal in accordance with regulatory requirements. Some of the provincial companies and professional companies of the Group have engaged property management firms for waste disposal.



Daily garbage<sup>1</sup> (10,000 T)

**2022: 1.68**

2021<sup>2</sup>: 1.87



Sewage emissions<sup>1</sup> (10,000 T)

**2022: 93.24**

2021<sup>2</sup>: 93.82

Notes:

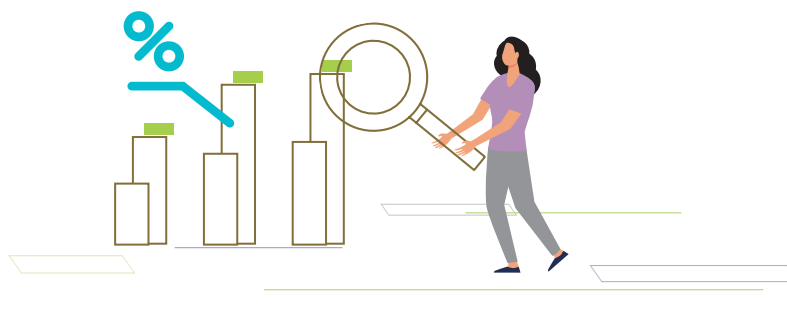
1. The Group is an asset-light enterprise, its solid wastes are mainly daily garbage, and the sewage it discharges is mainly daily sewage.
2. During the reporting period, the Company has made concurrent adjustments to the data for 2021 to enhance data comparability, leading to the slight difference between the data for 2021 and those disclosed in the 2021 annual report.

## Resource Utilisation

In terms of the use of packaging materials, the Group operates in the informatization communications service industry, and is mainly engaged in design, construction, supervision, maintenance and other services. Therefore, there is no significant usage of packaging materials in its production and operation process.

As for water consumption, the Group's water supply is provided by the owner or property manager of the office building. The Group attaches great importance to the reasonable and efficient usage of water resources in the normal course of business. It strives to promote and advocate water conservation through public promotion on a daily basis and the installation of water-saving taps, which allows it to further intensify the management of water resource utilisation and reduce unnecessary consumption of water resources. In 2022, the Group's total water consumption was approximately 4.60 million tons (2021<sup>2</sup>: approximately 5.30 million tons).

In respect of office paper usage, the Group adheres to the principle of economical use and tolerates no waste to strictly control the use of office paper. In addition, the Group actively enhances its online office capabilities, continuously improves its service quality with informatization means, and extensively promotes the use of cloud-based office applications such as paperless conference systems and online conference systems. In 2022, the Group's total office paper consumption was approximately 1,135 tons (2021<sup>2</sup>: approximately 1,081 tons).





## Protecting the Ecological Environment in Project Construction

The Group complies with environmental laws and regulations, contracts and other relevant requirements in its business operations. It reduces construction waste and natural resource consumption, and requires its subsidiaries to understand the environmental characteristic and needs of the regions where they operate, and establish and implement environmental management strategies in line with the requirements. More than 100 professional companies of the Group have obtained the ISO9001 and ISO14001 certifications and among them, Jiangsu Communications Real Estate Management Co., Ltd., a subsidiary of the Group, has obtained ISO50001 energy management system certification. They are committed to managing and reducing their environmental impact in their business activities.



### Land conservation

Strictly abide by national laws and regulations, effectively protect arable land, and orderly implement treatment and restoration work such as site closure, rehabilitation and greening to achieve sustainable use of land resources



### Equipment pollution

Give priority to equipment that is free of noise, electromagnetic radiation and pollutant emissions



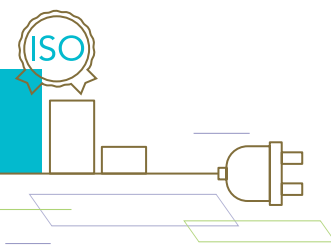
### Construction impacts

Avoid mineral deposits, forests, grasslands, wildlife, natural relics, human relics, natural reserves, scenic spots and other areas when conducting field survey for communication lines and avoid changing the neighbouring environment when laying optical fibre cables as far as possible



### Electromagnetic radiation

Actively adopt advanced technical means to refine the layout of base stations and ensure that the electromagnetic radiation indicators meet the national standards; monitor and assess the electromagnetic environment around base stations; strictly control the quality of equipment connecting to the network to exercise strict control at source



## Green Office

The Group constantly improves its organizational system, management system and work process for energy saving and emission reduction through multiple measures, so as to effectively reduce energy consumption. Campaigns like Energy-saving Promotion Week and National Low-carbon Day are actively carried out by the Group to continuously raise the energy-saving and environmental-protection awareness of its staff. Energy conservation slogans are put up in venues such as public areas inside the buildings and conference rooms. In addition, the Group strictly implements the assessment and reward and punishment mechanisms in relation to energy saving and emission reduction performance and sets annual energy-saving and emission-reduction budgetary targets for its provincial companies, which ensure the accomplishment of its annual energy-saving tasks.



### Improve online office capabilities

The Group makes full use of cloud conferencing and cloud research to enhance online office efficiency



### Strengthen power saving management for lighting

The Group continues to enhance its daily electricity saving measures and adopts energy-saving lamps in all offices, meeting rooms and other premises to reduce the electricity consumption of lighting equipment



### Enhance energy consumption management for vehicles and promote green travel

The Group strictly controls the formation and scale of the fleet of business vehicles to reduce its energy consumption, and it has implemented a "one vehicle, one card" refuelling system in an effort to reduce total fuel consumption. With the use of GPS systems for precise positioning, it aims to reduce the energy consumption of vehicles. It also advocates green travel among employees



## Eco-friendly Recycling

Several professional companies of the Group collect returned network equipment, inefficient equipment with high-energy consumption and other inefficient assets from telecommunications operators for recycling and disposal via a green auction platform. By introducing the reverse integrated asset disposal model of “dismantling, transportation, storage and sale”, a closed-loop ecological chain of environmentally-friendly asset disposal, starting from the source of scrap materials till the auction and delivery of assets, has been developed, which not only realizes eco-friendly disposal of waste and obsolete products, but also achieves effective utilisation of resources.

The Group will actively establish and improve a long-term mechanism for resource conservation, improve energy efficiency, develop a circular economy and fulfil its corporate environmental responsibility.

### China Comservice Supply Chain Management Company Ltd.

China Comservice Supply Chain Management Company Ltd. (“Supply Chain Company”), which is a subsidiary of the Group, owns six subsidiaries including Zhongjie Telecommunications Co., Ltd., Shanghai Tongmao International Supply Chain Management Company Ltd., Zhejiang Zhongtong Communications Co., Ltd., Jiangsu Zhong Bo Communications Co., Ltd., Fujian Zhongtong Communication Logistics Co., Ltd. and Hubei Xintong Communication Ltd. These subsidiaries engaged in the auction business and disposed of cables, batteries, return network equipment, office supplies and engineering materials for a total of RMB860 million in 2022. Since 2009, they have disposed of assets with a total amount of over RMB6 billion.

Based on the nature of the waste and obsolete materials from customers, Supply Chain Company has established a green auction support system, which integrates the recycling, transportation, sorting, storage and disposal of such materials to solve the problems including long asset disposal cycle, various safety hazards and high storage costs for customers. The company has also compiled a whole process integrated plan to meet customers’ needs for the whole process control from asset scrapping to material delivery.

### Zhejiang Zhongtong Communications Co., Ltd.

Since 2009, it has engaged in the recycling, storage and disposal of scrap materials for operators and built its own disposal platform for waste and obsolete products. The company has over 1,600 high-quality recycling partners and a business presence in 31 provinces, municipalities and autonomous regions across China. It disposes of communication assets, office supplies and engineering materials for customers including telecommunications operators, such as China Telecom, China Mobile and China Tower. It also offered integrated assets disposal services for asset owners which include asset valuation, qualification examination and online auction services.

### Shanghai Tongmao International Supply Chain Management Company Ltd.

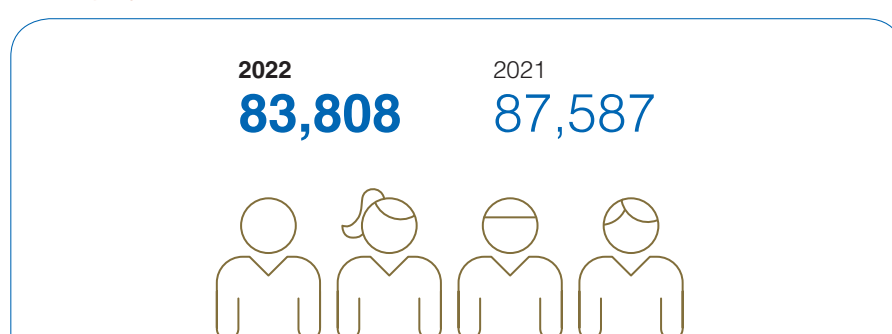
The green auction support system of Shanghai Tongmao formed a mature reverse integrated asset disposal model by integrating the recycling, transportation, sorting, storage and disposal of scrap materials. The whole process fully covers from the source of scrap materials after they are generated, all the way to the disposal, delivery and settlement of scrap assets. Currently, the auction platform has nearly 350 recycling enterprises with various qualifications for various types of materials, which can cover the disposal needs of operators for scrap materials. Apart from improving the disposal efficiency of asset units, it can also avoid the environmental risks arising from scrap materials and fulfils the environmental responsibilities of waste-producing units.

## HUMAN RESOURCES MANAGEMENT

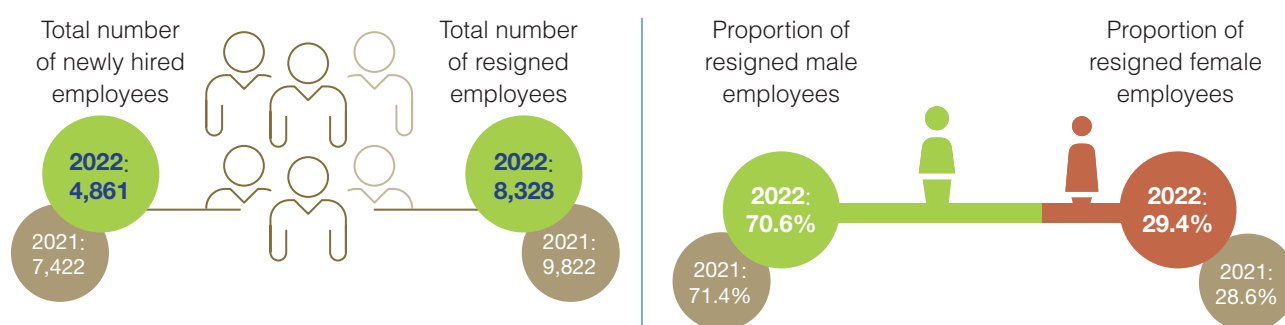
### Employment

The Group had approximately 84,000 employees as at 31 December 2022. We are committed to ensuring equal development opportunities for both genders, and protecting and enhancing the rights and interests of female employees. Our employees are located primarily in the PRC with some of them located in other regions around the world such as Southeast Asia, the Middle East and Africa. Our employees are divided into contract employees, dispatched employees, part-time employees and other employees.

### Total Number of Employees

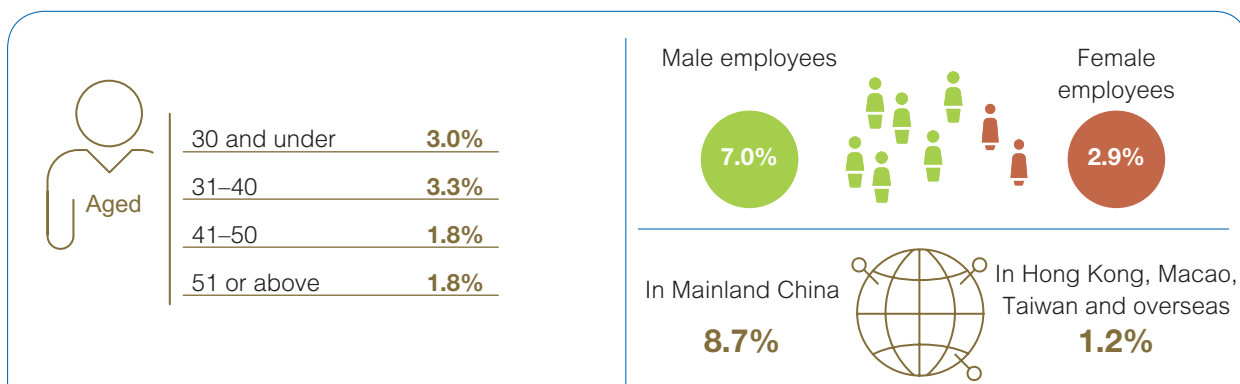


| Indicator                             | 2022          | 2021   |
|---------------------------------------|---------------|--------|
| <b>By type (no. of employees)</b>     |               |        |
| Contract employees                    | <b>80,549</b> | 83,871 |
| Dispatched employees                  | <b>3,009</b>  | 3,380  |
| Part-time employees                   | <b>59</b>     | 140    |
| Others                                | <b>191</b>    | 196    |
| <b>By geographical location (%)</b>   |               |        |
| Mainland China                        | <b>98.7</b>   | 97.6   |
| Hong Kong, Macao, Taiwan and overseas | <b>1.3</b>    | 2.4    |



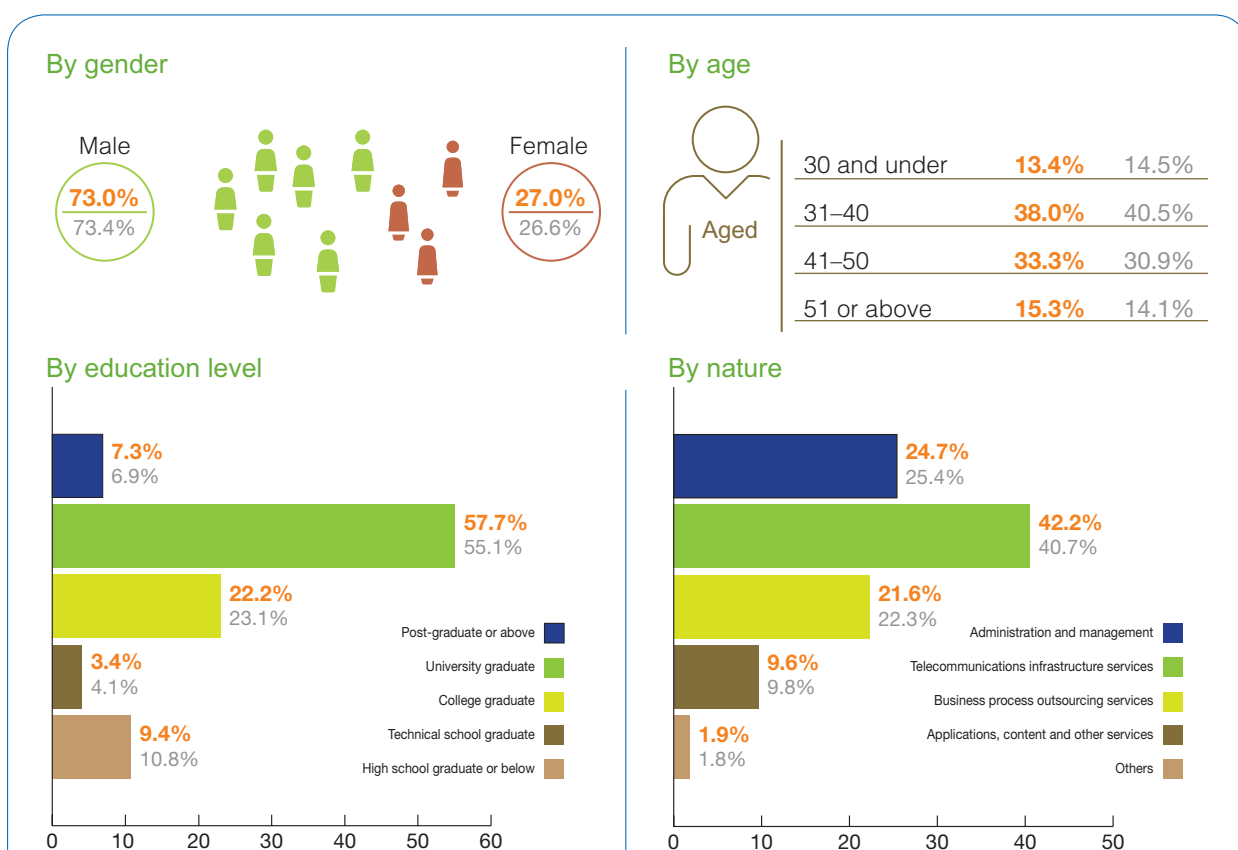
## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 2022 Employee Turnover Rate

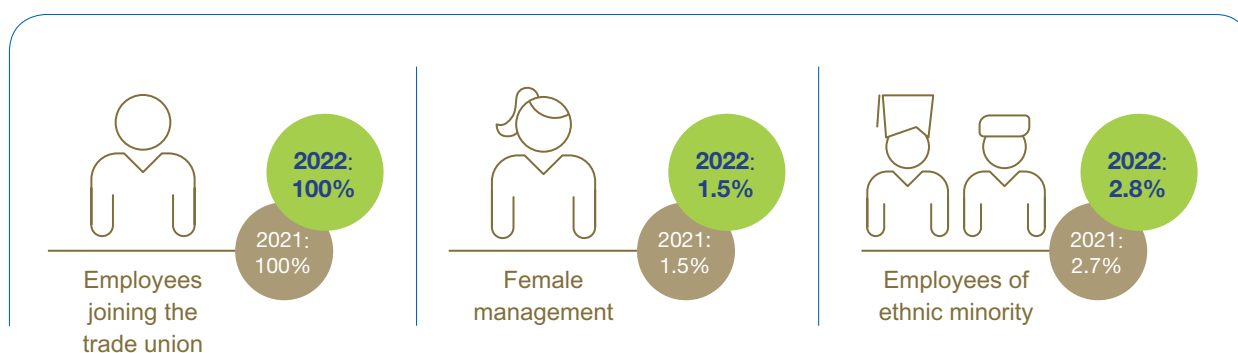


## Employee Structure (Contract + Dispatched Employees)

● 2022 ● 2021



## Contract



## Broadening the Talent Pool

As a state-owned enterprise, the Group undertakes an important social responsibility of stabilizing employment situation and provides a large number of job opportunities in the market every year. In addition, we take into consideration the characteristics of communications infrastructure construction projects, i.e. strong cyclicity with a large demand for temporary labour, and encourage our upstream and downstream partners to conduct flexible recruitment during the installation of communication cables and equipment based on actual business needs. Through which, we created a large number of job opportunities in the market, which plays an important role in building up our own talent pool and addressing the employment needs of fresh college graduates.

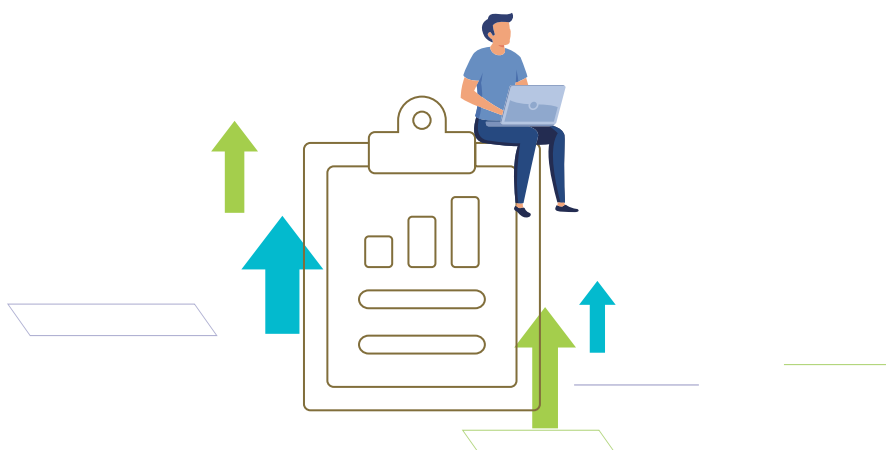
To further improve the market-oriented operational mechanism and deepen the innovation of the human resources system and mechanism, the Group has been pushing forward the reform of the human resources, labour, and allocation systems in 2022. It established an employment mechanism based on position management with contract management as the core, with a focus on key business areas. It has also introduced high-tech, highly skilled, and high-quality talent, maintained control over the total number of employees, optimized the workforce structure, improved the effectiveness of career mobility mechanism, enhanced the overall quality of staff, and boosted labor productivity continuously.

## Remuneration and Performance Management

The Group regards employees as an important resource of the enterprise and attaches significance to the protection of their interests. In accordance with the principle of “performance-oriented, internally equitable and externally competitive”, it optimises the remuneration distribution system which links closely with its enterprise value and individual performance. It formulates and implements the “Guidance on Performance-related Pay for Heads of Professional Companies and Municipal Companies under Provincial Subsidiaries of China Comservice”. It insists on adopting a remuneration system that favours employees with outstanding contributions and those working in crucial and front-line positions of hardship and danger to support first-class talents in delivering first-class performance for first-class remuneration, so that employees who worked more would be paid more.

The Group actively supported the implementation of the position-based bonus incentive scheme for state-owned technology-based enterprises in 47 technology-based enterprises under the Group, which aimed to promote a close linkage between the remuneration of technological talents and their innovation ability and contribution. This allows employees to share the fruits of corporate development and stimulates the vitality of the organization and staff. The Group pays social insurance and housing fund for its employees in strict accordance with relevant national policies. It establishes an enterprise annuity system to protect the basic rights and interests of employees.

We are committed to the career development of our employees and offer dual promotion paths for them: “promotion for management functions” and “promotion for technical expertise.” We implement a system that links our employees’ remuneration and promotion to their work experience, capabilities, and performance, which encourages them to be proactive. Staff promotion follows the principles of fairness, justice, openness and transparency, and fully respects employees’ right to choose, right to know and right of supervision. In addition, the Group provides the Provincial Company Leaders’ Performance Evaluation Indicator System and Scoring Measures every year to ensure the full implementation of the Company’s development objectives and tasks for the year. By closely coordinating the budget, evaluation, and resource allocation, the Group gives full play to the motivating and guiding roles of performance evaluation, motivates business units at all levels to further develop strategic businesses, and promotes the steady improvement of the Company’s value and capability.



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

In order to deepen the reform of the incentive and restraint mechanism and establish a sound medium and long-term incentive system, the Group launched a new round of share appreciation rights incentive scheme in 2022 to promote the mutual coordination and promotion of shareholders' interests, the Company's interests and the interests of incentive recipients. As a result, the interests of core employees in key positions are closely aligned with the Company's operating performance, which motivates their enthusiasm.

## Welfare and Labour Standards

### Compliance with the Laws in the Use of Labour

The Group has always complied with laws and regulations on dismissal, working hours and anti-discrimination. Our employees are entitled to national holidays. The Group strictly abides by and implements the laws and regulations in relation to labor employment and protection of labor's rights and interests, including the PRC Labor Law, the PRC Labor Contract Law and the PRC Trade Union Law. Pursuant to which, the Group protects the labor rights and interests, democracy and spiritual and cultural rights and interests of its employees.

The Group stands on various labor policies, including but not limited to, gender equality, and equal pay for equal work. It treats employees equally in the process of recruitment and promotion, regardless of their gender, age and race. It protects employee privacy in compliance with laws and implements a paid leave system.

- It strengthens labor employment management in a lawful and standard manner, ensures the entering into labor contracts with contract employees and makes contributions to the social insurance.
- In line with employment standards, it provides standardized labor contracts by category to clarify the rights and obligations of both parties, so that there are rules and laws for the management of labor relations to follow.
- It sets up standards for the dispatching contracts entered into with the labor dispatching units, inspects and supervises the signing of labor contracts between the labor dispatching units and dispatched employees, makes contributions to the social insurance and protects the rights and interests of the dispatched employees.

The Company strictly implements the relevant requirements of the Provisions on the Prohibition of Using Child Labour. It specifies the age requirements for applicants in accordance with the recruitment management measures, prohibits the use of child labour in accordance with the law and prevents the use of forced labour. There were no incidents of child labor and forced labor in 2022.

### Safeguarding Democratic Rights and Interests

The Group continuously improves the organizational structure of the labor union, clarifies the division of responsibilities, and strives to leverage the role and value of the labor union in promoting business development. We also continuously expand democratic management channels, improve democratic management systems, adopt diversified methods to ensure staff representatives participate in enterprise democratic management, encourage employees to provide suggestions and fully guarantee their rights of information, participation, expression, and supervision. We continuously enhance the level and ability of enterprise democratic management, safeguard democratic rights and interests, and promote the healthy development of the Company.

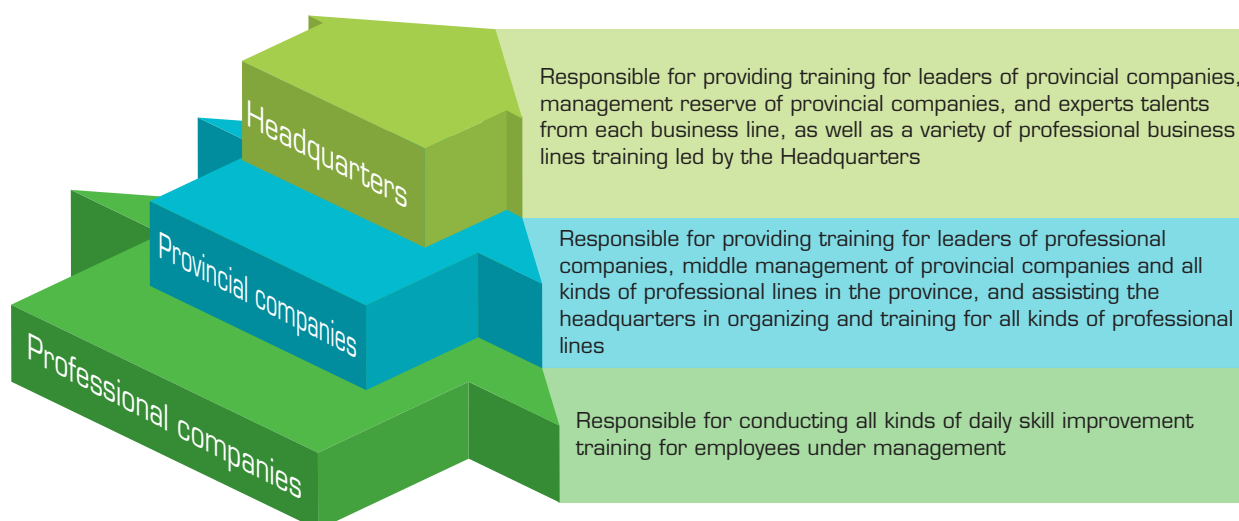
### Safeguarding the Rights and Interests of Female Employees

The Group is highly concerned about and values the care for female employees and strengthens the protection of their legal rights and interests, enhances female employees' qualities and contributions, offers support of rights protection, strictly implements the protection of female employees during the "four periods" (menstruation, pregnancy, childbirth and breastfeeding), and cares and comforts "single mothers" and menopausal female employees. At the same time, enterprises at all levels are urged to protect the legal rights and interests of female employees and widely collect reasonable suggestions from female employees.



## Development and Training

The Group attaches great importance to staff training. Currently, it has established a three-tier training system covering the headquarters, provincial companies and professional companies. By fully leveraging the resource advantage of the training centers under the Company, it strives to build a hierarchical, classified, synergistic and efficient training system to promote the building of a learning-oriented organization.



In 2022, the Group formulated and issued the “China Comservice 2022 Training Work Plan”. It made synergistic and efficient use of resources from the colleges and training centers under the Company, led by the key tasks of promoting high-quality development of the Company, and concentrated on the key tasks for the year. With a focus on building up three teams, namely leading cadres, expert talents and key employees at the base level, it coordinated the training camps for improvement of various management and professional capacities, and continuously optimized the training management system, course development system and online training system, so as to provide talent and capability support for the innovation and transformation of the Company.







**Leadership development training:** In the context of the main tracks and new challenges of the Group in the new era, and towards the requirements of high-quality development of the Company, we are committed to promoting the awareness enhancement, knowledge re-construction and mindset re-creation of the management reserve in each provincial company, so as to build a double-engine management reserve team of “Entrepreneurial Leaders” and “Technical Talents”.

**Professional line training:** Focus on creating a high-quality talent ecology, with the goals of expanding perspectives and enhancing capabilities, and take various training camps and action learning as the vehicle to train for practice, combine training with practice, and devote efforts to cultivate a team of professional backbone talents on each line.

**Demonstration and rotation course at the primary level:** We pay attention to the capability enhancement and development aspirations of the core backbone employees at the frontline, and organize various comprehensive ability and professional skills training courses for frontline employees on 5G key technologies and industry applications, project management, marketing, etc., so as to build a frontline employee team with core competitiveness and cohesion.



### Training camp for elite managers of general contracting projects

In order to timely adapt to the market demands under the new norm, the Group focused on offering training to project managers with potential and planned to nurture a team of around 300 high-calibre managers for general contracting projects to support and lead the development of the general contracting business. The training camp covered three main types of general contracting projects, namely 5G, IDC and DICT projects. Project managers received different training on professional practices based on their fields, so that they were precisely trained and empowered with a combination of general knowledge and specialist expertise.

### Training for directors and supervisors of subsidiaries

In 2022, the Group organized training for directors and supervisors of its subsidiaries to educate them on the relevant contents of the Company Law, the responsibilities, rights and obligations of directors and supervisors, the operational practices of the board of directors and the relevant working system. The training aimed to help directors and supervisors to carry out their work properly, reasonably and effectively.

### Training course for reserve heads of subdivision of accounting units

We organized “China Comservice Subdivision Lectures” for all leaders of level 2 and level 3 subdivision of accounting units. These lectures aimed to enhance the strategic thinking and operation and management ability of these heads, and to build a team of leaders of subdivision of accounting units who “know strategy, can lead teams, are good at operation and can manage accounts”.

### Training course for service capability (bidding capability) improvement in the operator market

The course is designed for employees who are engaged in the bidding and tendering processes for all levels of operator customer business lines. Combining community management and online “live + recorded” teaching, the course covered bidding laws and regulations, demand analysis of purchasers, important skills and key points in bidding document preparation. Its aims are to enhance the theoretical and professional technical skills of relevant personnel, refine their skills in preparing tender documents, solve various problems in the process of tender preparation, and ensure that each tender can meet the needs of customers, thereby improving the winning rate and comprehensively enhancing the service capability for the operator market.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



Total training expense  
(RMB million)

**2022: 127**

2021: 129



Average training expense  
(RMB/person-time)

**2022: 160**

2021: 192



Total number of trainings  
(Person-time)

**2022: 794,926**

2021: 672,390



Total training hours (Hour)

**2022: 48,920,547**

2021: 32,113,610



Average training hours  
(Hour/person-time)

**2022: 62**

2021: 48

| Types of Training                       | Unit             | 2022           | 2021    |
|---|------------------|----------------|---------|
| Production safety training              | No. of trainings | <b>6,057</b>   | 6,179   |
|   | Person-time      | <b>216,922</b> | 205,979 |
| Anti-corruption training and activities | No. of trainings | <b>1,886</b>   | 2,081   |
|   | Person-time      | <b>59,348</b>  | 63,089  |
| Operation management training           | No. of trainings | <b>2,980</b>   | 3,486   |
|   | Person-time      | <b>70,191</b>  | 62,237  |
| Technical expertise training            | No. of trainings | <b>13,207</b>  | 42,529  |
|   | Person-time      | <b>262,166</b> | 189,352 |
| Other training                          | No. of trainings | <b>6,069</b>   | 8,047   |
|   | Person-time      | <b>186,299</b> | 151,733 |

#### Training by Position/Gender

|  |       |              |       |
|--|-------|--------------|-------|
| Proportion of senior management receiving training | Ratio | <b>2.6%</b>  | 2.3%  |
| Proportion of middle management receiving training | Ratio | <b>35.8%</b> | 29.6% |
| Proportion of general employees receiving training | Ratio | <b>61.6%</b> | 68.1% |
| Proportion of male employees receiving training    | Ratio | <b>72.1%</b> | 72.6% |
| Proportion of female employees receiving training  | Ratio | <b>27.9%</b> | 27.4% |

#### Average Training Hours by Position/Gender

|  |                  | 2022      | 2021 |
|--|------------------|-----------|------|
| Average training hours received by senior management | Hour/person-time | <b>93</b> | 84   |
| Average training hours received by middle management | Hour/person-time | <b>39</b> | 77   |
| Average training hours received by general employees | Hour/person-time | <b>72</b> | 34   |
| Average training hours received by male employees    | Hour/person-time | <b>59</b> | 46   |
| Average training hours received by female employees  | Hour/person-time | <b>69</b> | 51   |

## OPERATION MANAGEMENT

### Health and Safety

The Group proactively complies with the national laws and regulations, and resolutely implements the PRC Labor Law, the PRC Production Safety Law, the PRC Fire Protection Law, the Administrative Regulations on the Production Safety of Construction Projects and the safety production requirements of the industry regarding construction and building. It continuously improves the basic management system, and carries out the works in strict compliance with China Comservice Production Safety Management Measures and the safety management requirements of units of higher levels regarding densely-populated premises and communications materials warehouses.

### Safety Management System

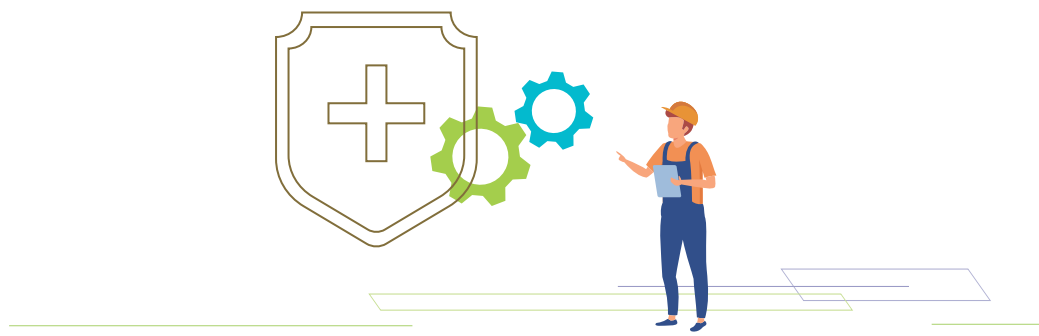
The Group's Production Safety Committee is a production safety management body, with the President as its director. Each of the subordinate provincial companies has set up a production safety committee to implement production safety responsibilities and regularly hold production safety committee meetings to discuss and make decisions on material matters related to production safety. By refining the duties and responsibilities of the organization and increasing the number of experts, the level of safety management is continuously enhanced.

### Safe Construction

The Group attaches importance to and makes every effort to safeguard the funding for production safety, and requires all its subsidiaries to reserve special production safety funds in accordance with the regulations for, among others, improving working conditions, improving safety facilities, updating labor protection equipment, conducting education and training, and strengthening safety inspections, so as to provide financial safeguard for the smooth implementation of production safety.

In 2022, the Group issued "China Comservice's Ten Forbidden Matters for Production Safety" to specify the requirements for safe production in 23 scenarios, and issued "China Comservice's Eight Hard Measures for Production Safety". The Group engaged 18 externally invited production safety experts to consolidate its technological strength. Joint training and knowledge competitions were held, covering 254 units (including provincial companies, professional companies and closely cooperating subcontractors). Over 4,000 emergency evacuation drills were organized by the Group's headquarters and all of its provincial companies during the three-year special rectification period for production safety.

In 2022, the Company carried out a special inspection and rectification of production safety hazards throughout the Group and conducted a special safety hazard inspection of owned properties and leased properties to identify and rectify production safety risks and hazards in a timely manner to prevent accidents from occurring at source.



## Building a Culture of Safety

### Conducting education and training on production safety

The Group continued to carry out production safety education and training to enhance employees' awareness of production safety. Firstly, through the Group's production safety education and training platform, a total of 8,853 production safety managers from all provincial companies were provided with production safety training. Secondly, we organized a production safety knowledge competition for a total of over 70,000 employees from all provincial companies and business cooperation partners in conjunction with the theme of the "Production Safety Month" activity.

### Valuing expert talents

In 2022, the Group updated and optimized the "Management Measures for Invited Experts of Production Safety of China Comservice", and engaged several external experts to give full play to their technological supporting role. These experts created synergy with the Group's expert talents, thereby enhancing China Comservice's education and training and supervision and management capabilities in respect of production safety.

### Pilot working mechanism of on-site investigation and research by safety experts

A team of experts was sent to the branches from all regions and prefectures of Sichuan Communications Services under the Group to conduct in-depth investigation and research on the implementation of production safety. The team pointed out problems and gave advice on rectification in a timely manner. On the basis of the in-depth investigation and research and taking into account the current situation of safe production in other provincial companies of the Group, the expert team prepared the "Report on the Reflections and Working Recommendations on Production Safety of China Comservice" and presented it to the Company's Production Safety Committee.



### Safeguarding the Occupational Health of Employees

The Group always values the occupational health management of its employees, strictly complies with The Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other relevant laws and regulations, provides occupational safety and protective equipment that meets the national occupational health standards and requirements, and ensures the occupational health of all employees. In order to enhance health and safety management, the Group has introduced internationally recognized occupational health and safety management system certification. As at the end of 2022, a number of the Group's subsidiaries have obtained the international OHSAS 18001 certification, ISO 45001 certification or relevant domestic certifications, etc.

The Group has established and implemented an accident reporting system and prepared statistics on a quarterly basis. During 2022, the Group did not have any material production safety responsibility accidents, and for the past three years (including the reporting year), there were no responsible work-related fatalities or serious injuries to employees\*, and no working days were lost due to work-related injuries.



\* The scope of the data covers current contract employees, which is counted based on the scope of responsibility for production safety, including those production safety incidents for which the Group has direct responsibility or management responsibility.

## Supply Chain Management

In compliance with relevant laws and regulations of the PRC, the Group takes into account the actual situation of the enterprise to continuously improve the relevant administrative methods on procurement and strengthens their implementation, with a focus on the management and control over key procedures of, among others, the selection and management of suppliers, contract signing, safety management, financial settlement, supervision and inspection. At the same time, it provides trainings on job skills and safety education to the personnel of suppliers, and regulates their management on production safety, ensuring that the suppliers comply with the national and local regulations on the payment of remuneration and labor management.








| Geographic Location           | Unit of service suppliers (Number) | Unit of goods suppliers (Number) |
|-------------------------------|------------------------------------|----------------------------------|
| ● Northeast region            | 329                                | 153                              |
| ● Northwest region            | 1,250                              | 1,132                            |
| ● Mid-South region            | 3,605                              | 2,478                            |
| ● Southwest region            | 1,078                              | 2,033                            |
| ● Northern China region       | 893                                | 1,047                            |
| ● Eastern China region        | 3,631                              | 5,295                            |
| ● Hong Kong, Macao and Taiwan | 2                                  | —                                |
| Overseas                      | 26                                 | 5                                |
| Total                         | 10,814                             | 12,143                           |

Note: Each supplier is counted only once according to the area of principal use; some suppliers supplying services and goods at the same time are counted separately on both sides.



## Develop a Fair and Equitable Supply Chain Environment

The Group implements hierarchical management of suppliers by its headquarters, provincial companies and professional companies. The headquarters is responsible for establishing a synergistic procurement system, formulating procurement management strategies and IT-based management requirements, and supervising, inspecting and assessing the procurement management of provincial companies. Provincial companies are responsible for establishing their own provincial procurement management system, carrying out the synergistic management of suppliers in the province through the IT system, formulating the implementation rules for procurement management and improving the corresponding internal control processes, and conducting inspection and assessment of the procurement situation of professional companies. Professional companies are responsible for the specific implementation of procurement management in their own units, formulating management standards or specific measures, and accepting supervision and inspection by the headquarters and provincial companies.

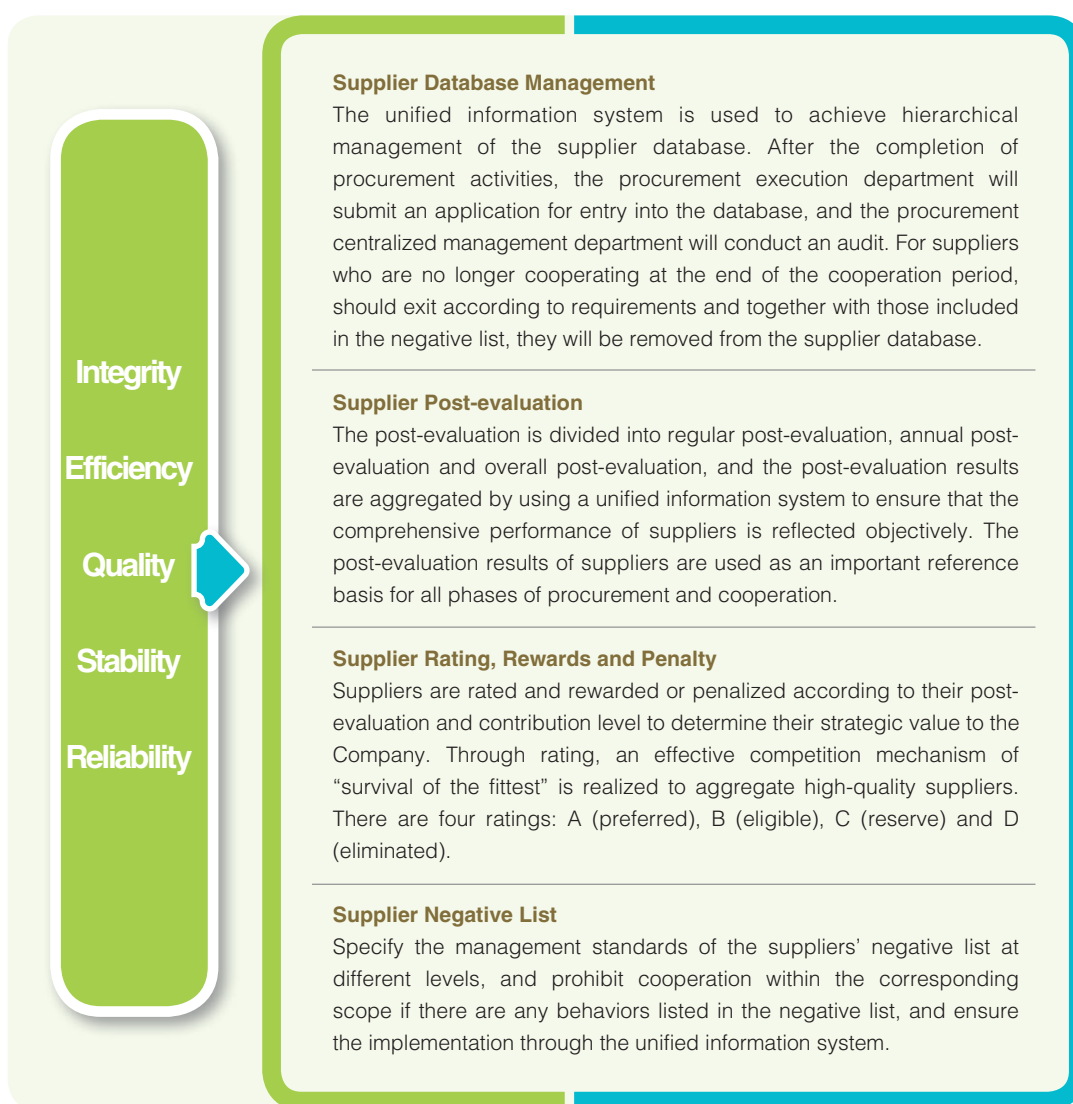
|   |   |   |
|---|---|---|
| 1 |  <b>Organizational System</b>  | <ul style="list-style-type: none"> <li>Adapting to the Company's organizational structure and establishing the system of "three-level procurement and two-level centralized procurement"</li> <li>Leveraging the Company's subsidiary, China Comservice Supply Chain Management Company Ltd., to implement centralized procurement</li> <li>Establishing "headquarters + 21 provincial companies" centralized procurement center</li> </ul> |
| 2 |  <b>Scope &amp; Plan</b>     | <ul style="list-style-type: none"> <li>Headquarters-level centralized procurement, provincial-level centralized procurement, professional company procurement</li> <li>Classifying procurement types based on business development model, professional nature and other factors</li> </ul>  |
| 3 |  <b>Procurement Method</b>   | <ul style="list-style-type: none"> <li>Procurement methods include tendering, comparison, quotations, competitive bargaining, competitive negotiation, competitive bidding, single-source procurement, etc.</li> <li>Implementing procurement according to the content and amount, taking into account both efficiency and effectiveness, to ensure the maximum transparency of procurement</li> </ul>                                      |
| 4 |  <b>Contract &amp; Price</b> | <ul style="list-style-type: none"> <li>Formulating and utilizing standardized contract texts and adopting electronic approval throughout the process</li> <li>Establishing and implementing an "annual benchmark price" management system to control procurement costs reasonably</li> </ul>  |
| 5 |  <b>Supervision</b>          | <ul style="list-style-type: none"> <li>Comprehensively using "the China Comservice procurement management platform" to conduct procurement work</li> <li>Ensuring procurement data is comprehensive, timely, true and valid</li> <li>Improving the review and assessment mechanism to carry out supervision level-by-level</li> </ul>   |





## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

In 2022, targeting the principal business activities and key issues of supply chain management, the Group newly formulated, among others, the “China Communications Services Corporation Limited Procurement Management Measures (Self-use Category)”, “China Communications Services Corporation Limited Procurement Management Measures (Contracting Business Services Category)” and “China Communications Services Corporation Limited Centralized Procurement Management Measures” on the basis of the previous systems to ensure the achievement of procurement objectives, enhance the enterprise’s ability to acquire and integrate external resources, and improve the efficiency and service level of the supply chain operation, thus fostering a green cooperation ecosystem of “integrity, efficiency, quality, stability and reliability”.



### Supplier Communication

The Group fully implements the “China Communications Services Corporation Limited Procurement Supplier Management Measures”. In order to facilitate suppliers and potential suppliers to accurately understand the Group’s relevant policies on supplier management, we proactively disclose such measures in the public through “China Comservice Procurement and Tendering Portal” (<https://szyc.chinaccs.cn/>).

## Controllable Supply Chain Risk

Through continuous amendments and improvement on the system, the Group drives the implementation of the system and further improves management, implementation and monitoring and inspection capabilities. It strictly follows the supplier selection and examination procedures to eliminate the disqualified suppliers, to ensure that all suppliers enlisted in the “supplier resource pool” have materials to prove they possess adequate capabilities to perform the contract and control the risks. Such materials include enterprise qualifications issued by relevant government departments (the construction enterprise qualification, the design qualification, the labor qualification and the production safety permit), product standards and competence certificates recognized by the industry (product certificates and the service capability evaluation), professional qualification certificates of relevant personnel (certificates related to special operations, and certificates of safe production specialists of A, B and C classes). The Group instructs suppliers to improve their awareness of production safety, eliminates hidden risks and hazards and promotes the healthy development of the Company through a range of activities such as establishment of IT systems and standardization of management processes.

|   |   |                                  |  |
|---|---|----------------------------------|--|
| 1 |    | <b>Pre-job Training</b>          | <ul style="list-style-type: none"> <li>Daily safety and technical briefings for construction operations</li> <li>Unified drills</li> </ul>   |
| 2 |   | <b>Working with Certificates</b> | <ul style="list-style-type: none"> <li>Climbing, electricity and other high-risk work scenarios require the appropriate certificates</li> </ul>  |
| 3 |  | <b>Purchase of Insurance</b>     | <ul style="list-style-type: none"> <li>No insurance, no entry</li> <li>Work-related injury insurance, with additional commercial insurance for construction business</li> </ul>            |
| 4 |  | <b>Labor Protection</b>          | <ul style="list-style-type: none"> <li>Pay the production safety fee in full and ensure the usage</li> <li>Central purchase of labor protective equipment with reliable quality</li> </ul> |
| 5 |  | <b>Safety Supervision</b>        | <ul style="list-style-type: none"> <li>Complete on-site supervision by project manager</li> <li>High frequency of safety inspection</li> </ul>   |

For major suppliers providing construction and other services, the Group required its subsidiaries at all levels to include the training and education of their employees in the organization coordinated by the Company. During the year, the Group's headquarters organized a production safety knowledge competition relating to information and communications engineering to promote training, explicitly covering employees of major suppliers.

When the Group enters into contracts with suppliers, the Group includes the Confidentiality Agreement, Production Safety Agreement, Anti-Corruption Agreement and Environmental Protection Agreement as the main annexures to the contracts, monitors the relevant situations through proactive audit activities to ensure the contracts are honored during cooperation, and performs procedures such as termination of cooperation, withdrawal or inclusion in the list of negative suppliers in accordance with the regulations for suppliers who have committed relevant risky acts.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Green Procurement

The Group has incorporated “green and environmental friendly” as one of the principles in its procurement system and strives for its compliance. In practicing the concept of green procurement, the Group has to take into account the requirements of environmental protection at the beginning of raising the procurement needs and is committed to working with the upstream and downstream of the supply chain to reduce the damage and impact on the environment.

|   |   |   |
|---|---|---|
| 1 |  <b>Preference for Suppliers with Environmental Management System Certification</b>  | In centralized procurement, the presence or absence of the environmental management system certification (ISO 14001) is one of the scoring criteria for suppliers.  |
| 2 |  <b>Preference for Products that Meet Environmental Protection Standards</b>        | In the centralized procurement of goods, specific environmental protection clauses are set as one of the main technical requirements in the technical specifications, and the implementation standard is “Requirements of Concentration Limits for Certain Restricted Substances in Electrical and Electronic Products” (GB/T 26572-2011), etc. Bidders are required to present their RoHS inspection reports.  |
| 3 |  <b>Conveying Environmental Protection Concepts to Suppliers</b>                   | The Group’s subsidiaries are explicitly required in the system to strengthen the dissemination of environmental protection concepts to suppliers; for service suppliers, the “Environmental Protection Agreement” is included as one of the main annexures to the contract and their implementation of environmental protection responsibilities is strictly monitored; specific requirements are made for the packaging of goods in the centralized procurement of goods to prevent unnecessary excessive packaging. |
| 4 |  <b>Disciplinary Action Against Suppliers who Neglect Environmental Protection</b> | Suppliers who cause environmental pollution incidents can be withdrawn from the system and disqualified from cooperation according to the system. During the year, no supplier was withdrawn accordingly.   |
| 5 |  <b>Actively Exploring the Whole Procurement Process through Electronic Means</b>  | The Group put into operation of its “China Comservice Procurement Management Platform”, covering many modules such as procurement and tendering portal, procurement system, bidding system and e-mall, to promote the whole procurement process to be accessed online and minimize carbon emissions from paper use and personnel travel.  |

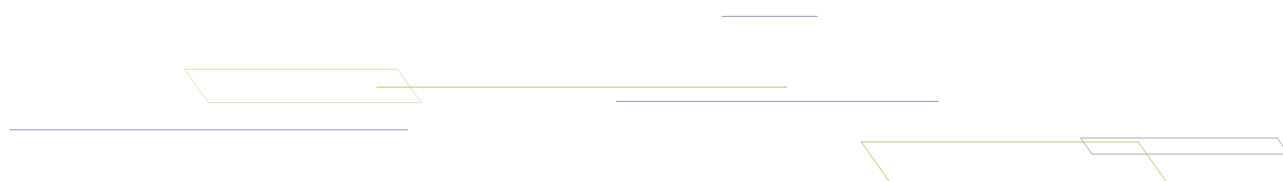
### Integrity and Self-discipline in Procurement

In accordance with the provisions of the Group's procurement-related system, before the commencement of a procurement project, all personnel involved are required to sign a "Commitment of Integrity and Self-discipline" to remind them to perform their duties objectively and impartially and to serve as a basis for accountabilities afterwards. A pool of bid evaluation experts is established and maintained on a graded basis, and experts are randomly selected to participate in the evaluation process before the commencement of a procurement project, of which 381 experts were approved and included in the pool of headquarters-level bid evaluation experts in 2022. During the year, the Group conducted an inspection and verified the supplier enterprises, and included over 500 relevant enterprises into the negative list of suppliers at the headquarters level according to the system in order to prevent the occurrence of integrity risks.

### Labor Rights Protection by Suppliers

The Group pays great attention to the protection of the rights and interests of its labor by its suppliers. In the process of cooperation with suppliers during procurement, we ensure that the wages and remuneration packages provided by suppliers are reasonable, wages are paid in a timely manner and all labor rights and interests are enforced through prior review, inspection during the process and assessment afterwards.

The Group specifically opens a channel for whistle-blowing and complaints regarding defaulted migrant workers' wages, ensuring that it is accessible, and actively coordinates the handling of relevant clues received. The Group could include suppliers who deliberately defaulted on migrant workers' wages or caused mass events in the negative list of suppliers in accordance with the system. During the year, the Group's subsidiaries had cumulatively included two suppliers who had wage claims in the negative list of suppliers at the corresponding level.



## Product Responsibility and Customers

### Ensuring Quality of Service

The Group is committed to building a “Service Excellence” corporate image and continuously improves its service quality. Over 100 subsidiaries of the Group have obtained ISO 9001/GB/T 19001 quality management system certification. During the year, the Group compiled the “China Communications Services Corporation Limited Service Quality Management Guidelines” to further standardize and improve the service quality management system, promote service awareness of companies at all levels of the Group, improve management and service quality, enhance customer satisfaction, shape a good image of the Company, build a “moat” of service quality and establish service golden signboard.

### Basic Principles of Service Quality Management

|   |  |
|---|--|
|  <b>Customer Satisfaction-oriented</b>               | <p>We gain in-depth understanding of customers’ requirements or potential demands to offer compliant products and services that are in line with the interests of the customers and able to meet their demands. We also promote our service awareness and enhance our professional capabilities so as to enhance customer satisfaction.</p>  |
|  <b>Emphasize the Involvement of All Employees</b> | <p>The detailed analysis on customer demand and the thoughtful and meticulous services and communications of the marketing personnel, the suitable solutions provided by the technical personnel, the stringent quality control of the delivery personnel, and the strict process control of the quality personnel are the core forces for the provision of high-quality delivery services of the Company. The staff in all departments and job positions cooperate with each other to establish the awareness of service quality, actively seek opportunities to enhance their skills, knowledge and experience, and proactively share the knowledge and experience with the team in an effort to jointly promote the improvement of service quality.</p> |
|  <b>Focus on Process Control</b>                   | <p>Service quality is not only reflected in the results, but more importantly in the quality of the service process. We ensure the overall service standard of the Company by establishing reasonable and detailed service specifications and processes, implementing process control to manage risks that may affect the process and results outcome, through practicing the principle of prevention beforehand, control the process and assessment afterwards.</p>   |
|  <b>Maintain Continuous Improvement</b>            | <p>We timely track customer advices and recommendations, analyse the key concerns of customers, continuously improve our technical solutions, optimize the service processes, and constantly enhance professional capability and service quality in order to satisfy customers’ demand.</p>  |
|  <b>Enhance Services Communications</b>            | <p>The communication with customers is the key method of the provision of services by the Company, and an important source for customer to realise the overall service quality of the Company. Companies at all levels should establish their own service concepts, maintain timely communication and quick response, enhance motivation and sense of responsibility to solve the actual problems faced by the customers.</p>  |

In terms of the delivery management of contracting business, the Group implements the “China Communications Services Corporation Limited Contracting Business Delivery Management Measures” to regulate the whole process from project implementation to completion, acceptance and settlement, to streamline the responsibilities of internal and external parties and management processes in the delivery process, and to promote internal management and customer satisfaction through scientific, regulated, standardized and effective delivery management.

|   |  |   |
|---|--|---|
| 1 |  | Determine the department and person responsible for delivery quality management |
| 2 |  | Develop clear delivery quality standards with clients for specific projects     |
| 3 |  | Quality control/inspection/assessment during delivery process                   |
| 4 |  | Use of digitalized control tools  |
| 5 |  | One-time quality acceptance target  |
| 6 |  | Data archiving/experience accumulation/continuous improvement                   |

Ensuring  
Quality of  
Service



The Group held the “Cloud-network Engineering Service” labor competition to improve engineering service level and enhance engineering service quality.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

*Awards Received*

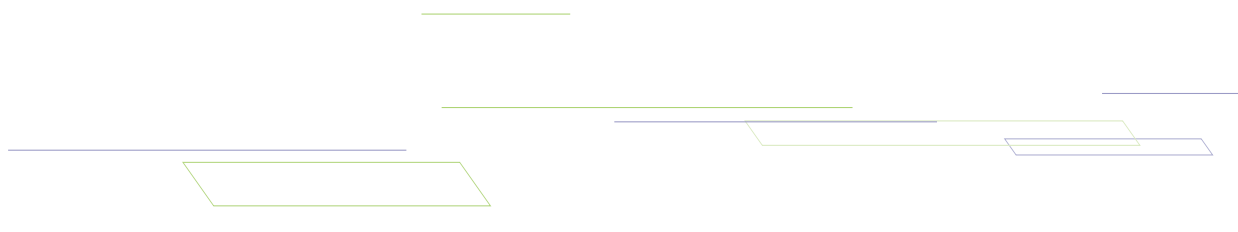
During the year, the Group's subsidiaries provided supervision services for a project which was selected for "China Construction Engineering Luban Prize", a project which was selected for "the China Installation Star" and two projects which were selected for "the China Steel Structure Golden Award", respectively, and provided design, construction and supervision services for a project which was selected for "the National Quality Engineering Award".

*Responding to Customer Complaints*

Adhering to the "customer-centric" development philosophy, the Group pays great attention to customer perception. Catering to the characteristics of customer service for government and enterprises, companies at all levels under the Group have set up service departments for different customer groups, established direct and efficient communication channels with customers, and actively followed up on customers' needs through customer visits, skills exchanges, implementation of delivery, maintenance services, post-sales visits and satisfaction surveys at all stages of pre-sales, in-sales and post-sales.

The Group has set up a customer complaint response mechanism, with different response processes for serious and general complaints. It adopts closed-loop management in handling customer complaints, with the handling process recorded and filed in writing. It proactively explores the in-depth root causes of customer complaints. The Group organizes service quality meetings from time to time to collect and handle customers' opinions and recommendations on its services, carry out analysis on service quality, and formulate specific rectification measures so as to develop an effective mechanism of improvement.

In 2022, customers were generally satisfied with the quality of the Group's services and there were no material complaints or disputes. The Group belongs to the informatization communications services industry, and is mainly engaged in project design, construction, supervision and maintenance services for the communications service industry, which does not involve product recall.



## Intellectual Property Protection

The Group strictly complies with all the laws and regulations in relation to the protection of intellectual property rights, such as the PRC Civil Code, the PRC Trademark Law, the PRC Patent Law, the PRC Copyright Law and the PRC Anti-Unfair Competition Law, while continuously enhancing its awareness of intellectual property rights protection, handling and resolving infringement disputes on a timely basis. The Group strengthens trademark management to regulate the use of registered trademarks. It pays attention to brand protection while promoting its own brand and enhancing the brand value. It conducts research on intellectual property in respect of the emerging businesses of the Group. The Group organizes law-enforcement seminars from time to time to enhance its employees' knowledge of, respect to, compliance with and usage of relevant laws and regulations and their awareness and levels of intellectual property rights protection.

In the process of product research and development, the Group attaches importance to the protection of intellectual property rights, resulting in the corresponding patents or software copyrights.

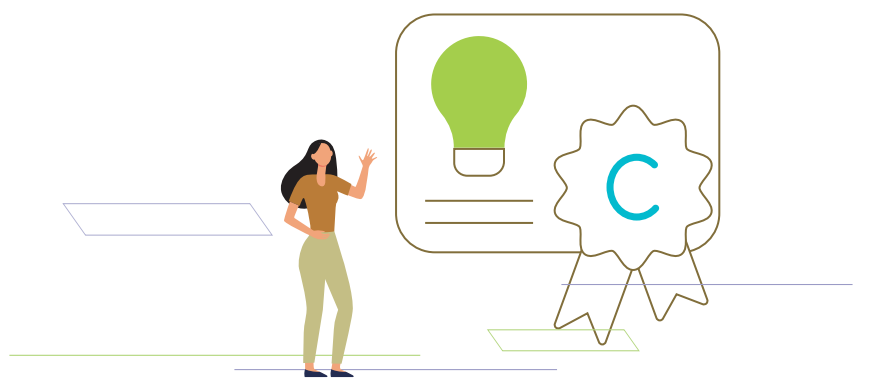


## Information Security and Privacy Safeguards/Cybersecurity

Attaching great importance to the protection of information, privacy and data security of the Company, its employees and customers, the Group strictly complies with the laws and regulations such as the PRC Cybersecurity Law, the PRC Data Security Law, the PRC Personal Information Protection Law, and complies with and continuously improves a series of systems such as the Management Measures for Network and Information Security and the Management Measures for Data Security of the Group to regulate internal network, information and data security management. Over 60 companies under the Group obtained ISO27001 information security management system certification.

### Network and Information Security Management System

The Group's Network and Information Security Leading Group is the network and information security management body, headed by the President. Each of its provincial companies has set up its Network and Information Security Leading Group to fulfill the responsibility for network and information security. The Group and all of its provincial companies regularly hold monthly meetings of the Leading Group to discuss and make decisions on network and information security matters.





## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

*Network/Information Security and Privacy Protection Training and Dissemination*

The Group strengthened the training and dissemination of network and information security and privacy protection for its employees. In 2022, a total of five training sessions on network and information security were organized for relevant management and technical personnel, including policy interpretation, awareness dissemination and skill enhancement, with a total of over 190,000 person-times' participation. In addition, we actively participated in publicity activities such as National Security Education Day and Cybersecurity Publicity Week, and we have been raising the awareness of internal employees on network and information security and privacy protection through online and offline forms such as special training by external experts, poster publicity and video dissemination.

*Building a Strong Line of Defense for Network and Information Security*

The Group actively carries out regular security operations, organizes 7 x 24 hrs round-the-clock security monitoring, regularly analyses security situation, conducts and organizes offensive and defensive drills and social engineering drills covering the entire Group, conducts special inspections and checks on key issues, and establishes an all-round emergency response mechanism and process.

In order to strengthen information security protection, the Group continues to promote various special actions, organizes data security compliance assessments, and conducts regular inspections of new technologies and businesses. Meanwhile, it carries out assessments and inspections of its own APPs involving users' personal data to effectively protect users' personal information and avoid excessive claims to rights.

*Culture and Responsibility of Privacy and Security*

In 2022, no occurrence of leakage of customer privacy and information was identified within the Group. The Group enters into relevant information protection agreements in accordance with the customer needs and signs confidentiality agreements with relevant employees according to actual needs, which are strictly complied after signing. The possibility of leakage of customer privacy is also eliminated through technical means such as isolation from the Internet, data desensitization and encryption, data leakage prevention and data auditing.



### Cybersecurity Capabilities

Through integration of internal resources, the Group has established a sub-brand of “CCS Cyber Security” and set up a professional team to serve the country, customers and industry, so as to provide overall solutions and comprehensive security products and services for information infrastructure security and undertake the construction of national major network and information security projects. Having participated in compiling the national and industrial standards for network and information security, the Group was accredited the “Pilot Demonstration of Cybersecurity Technology Application” by the Ministry of Industry and Information Technology in many occasions. It has been listed in the “Top 100 Cybersecurity Enterprises in China” report published by “AQNIU”, an authoritative media in the cybersecurity industry for four consecutive years, and its own core products and services have been selected for many times in the “China Cybersecurity Industry Panorama” report. The brand influence of “CCS Cyber Security” is gradually expanding.



Cyberspace asset  
surveying and  
mapping platform

Based on the perspective of network attack and defense, it adopts a combination of active and passive methods to comprehensively discover the security assets in the enterprise network, continuously detects the security risks of network assets through real-practice-oriented, automated and intelligent technical means, consolidates the cornerstone of customer security management so that the security of assets is identifiable, visible, manageable, verifiable and controllable.



Data security  
monitoring and  
management  
platform

We provide data security management services such as data asset management, data desensitization management, interface security management and access and operation audit management to help customers improve their overall data security capabilities and enhance their data security assurance capabilities, so as to build a good data security ecology and provide protection for the development of digital economy.



Comservice  
crowdsource  
testing and  
security  
vulnerability  
management  
platform

By aggregating information security experts through Internet crowdsourcing, and based on an intelligent control model with in-depth integration of “manual + automation”, we provide operators, government and enterprise customers and venture-startup teams with a full set of one-stop services with cybersecurity vulnerability management as the core, realizing the visibility, control and management of the whole life cycle of vulnerabilities.

## Anti-corruption

### Strengthening Integrity Construction

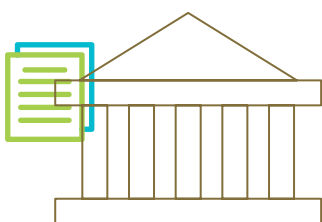
The Group always strictly abides by the PRC Criminal Law, the PRC Oversight Law, the Law of PRC Administrative Discipline for Public Officials, the PRC Company Law, the PRC Anti-Money Laundering Law, the PRC Anti-Unfair Competition Law, the Regulation on the Integrity of State-owned Enterprise Officials and other laws and regulations, and complies with social morality, business ethics and industry rules, and has formulated the Code of Conduct and Ethics for Employees, the Code of Conduct and Ethics for Senior Management and the Code of Professional Conduct for Employees to supervise senior management and employees to comply with them consciously. These codes and guidelines set out the Group's regular initiatives in key areas, including anti-corruption, fraud, conflict of interest, anti-discrimination, anti-competition and confidentiality, which form the basis for the Group to deliver its products and services in a responsible manner. The Code of Conduct and Ethics and the Code of Conduct Guidelines provide guiding principles for all employees of the Group to act with integrity, impartiality and honesty.

The Group safeguards the rights and interests of shareholders, creditors, customers and partners, fulfills contracts in good faith and includes the "Anti-Corruption Agreement" as a major annex to contracts when entered into contracts with suppliers. It abides by its business credentials, opposes improper competition and eliminates corrupt practices in business activities, including but not limited to bribery, extortion, fraud and money laundering.

The Group attaches importance to strengthening integrity and discipline education, and actively guides and supervises the management and employees at all levels to enhance their awareness of integrity and red lines through various means such as holding warning education conferences, informing of typical cases, conducting integrity propaganda, daily conversations and reminders and new media platforms propaganda. During the year, the Group held a total of 254 warning education conferences, and actively conducted integrity publicity activities to continuously build up the ideological defense line of integrity and self-discipline.

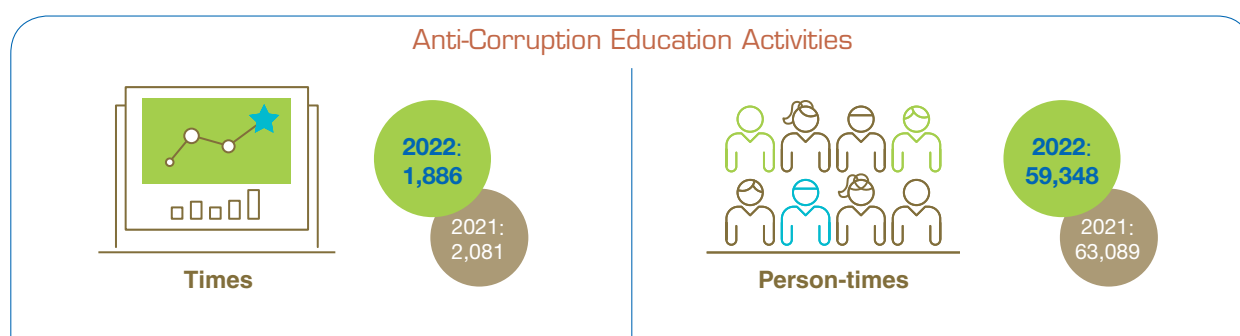
### Improving the Supervision System

The Group continues to establish and improve the supervision system in order to strengthen the restriction and supervision to exercises of power. Focusing on key areas and key sections, the Group carries out targeted special governance and supervision, optimizes relevant system processes, improves risk prevention and control capabilities, and resolutely prevents major risks. The Group focused on strengthening supervision and inspection over important nodes, strictly and genuinely reinforced the conversation reminders for and daily supervision on management and personnel in key positions at all levels, and conducted 6,734 on-site supervisions and inspections at major festivals and nodes. The Group integrates all kinds of supervision efforts such as human resources, audit, risk management, industry and finance, actively builds a synergistic and efficient general supervision system, promotes the integration of all kinds of supervision in a concerted effort.






The Group has continuously strengthened the management of letter and visits and problem clues and the development of integrity culture. It has established a whistle-blowing mechanism to standardize the acceptance procedure. When the Group's internal employees and business partners identify corruption and bribery of the Group's personnel, they can report by real-name or anonymously through the post office box (Beijing, 100033 mailbox 33 bin), or by telephone or by visiting the Group in person. The information of the whistleblower will be kept strictly confidential. The Group will investigate the report according to the regulations, disciplines and laws, timely beware of the existing problems and solve them, so as to continuously create positive atmosphere of good integrity.

During the year, the Group provided training to directors and employees on anti-corruption.



The Group attaches great importance to the development of an anti-corruption system, always maintains a high-handed anti-corruption stance at all times, enforces discipline and accountability seriously with "zero tolerance" for violations of laws, regulations and disciplines, and deals with them seriously in accordance with the requirements of laws and regulations to maintain the normal operation order of the Group. During the reporting period, there were no concluded litigation cases regarding corrupt practices brought against the Group or its employees.

|   |   |
|---|---|
|  <b>Organizational system construction</b> | <p>Leverage the role of the anti-corruption coordination team. Hold regular coordination team meetings, promote the organic integration of audit supervision, accounting supervision and other kinds of supervision, and actively build a synergistic and efficient supervision system.</p> <p>Improve the primary-level supervision system, and formulate guidelines for the list of 13 supervision items in 4 categories; Use digital means to realize cross-domain data communication and timely alert, and weave densely the primary-level supervision network.</p> |
|  <b>Work style construction</b>            | <p>Insisting on the performance-oriented principle and selecting the best from the best, the Group organized and carried out the selection of "Dare to Take Charge, Good at Acting" pacesetters and advanced individuals in anti-corruption work and awarded 15 pacesetters and 32 advanced individuals who adhered to the principles and made outstanding contributions in various types of supervision were commended.</p>  |
|  <b>Warning and education enhancement</b>  | <p>Promote the integrity education via warning and education meetings, integrity promotion, daily education and reminder, and new media platforms publicity, to make employees hold discipline in awe, keep the vigilance and hold the baseline, thus building a solid integrity and self-discipline ideological defense line.</p>  |

## SOCIAL PARTICIPATION

The Group has always fulfilled its responsibilities as a State-owned enterprise in disaster relief and emergency support, actively participated in rural revitalization and the improvement of people's livelihood, encouraged its employees to participate in social welfare activities in a bid to give back to society and contribute to the building of a harmonious society.

### Communications Support for Major Events



#### Communications support for the Beijing 2022 Winter Olympics and Paralympic Winter Games

With clear working goals and requirements, Huaxin Consulting Co., Ltd., Zhejiang Post & Telecom Engineering Construction Co., Ltd. and Zhongzhixin Technology Consulting Co., Ltd., which were the subsidiaries of the Group, devised the emergency plans during the Winter Olympics. Sufficient vehicles, surveying equipment and tools were prepared to meet the needs of unexpected and urgent tasks. Based on the demands of clients and the Organizing Committee, our subsidiaries were able to give immediate response, organize high-quality resources and follow up actions within two hours, and deal with emergency situation without sacrificing the quality and capacity.

China Communications Construction First Engineering Bureau Co., Ltd. which was a subsidiary of the Group, established the project department and the professional support team. The team stationed at the urban area and major gaming venues of Zhangjiakou to ensure safe operation of communication equipment and pipelines within the region. It was also responsible for communication emergency support related to the Olympics and the round-the-clock non-stop patrol and inspection, troubleshooting and emergency response.

During the Winter Olympics and the Winter Paralympic Games, Anhui Boda Project Management Consulting Co., Ltd., which was a subsidiary of the Group, formed the communications support working group to help clients in monitoring failures of macro cells and DAS sites related to the Olympics, dispatching, on-site supervision, tracking and information reporting, so as to implement refined management of personnel at sites and the responsibilities of individual staff. The Group also focused on the self-inspection of safety hazards and failures. By completing multiple inspection at full capacity, it ensured safe communications.







### 25th anniversary events of Hong Kong's return to the Motherland

On 1 July 2022, Hong Kong held a series of major events such as the celebration of the 25th anniversary of Hong Kong's return to the Motherland and the inauguration of the sixth government of the Hong Kong Special Administrative Region. The Group's subsidiaries, international company and Hong Kong company actively planned and carried out various communications support services of relevant activities. They allocated maintenance efforts to designated communications construction sites and communications maintenance sites, implemented contingency plans, and engaged professional personnel for communications construction, emergency support and communications duty to ensure communications safety.





### Shanghai company's communications support for CIIE

On 4 November 2022, the opening ceremony of the 5th China International Import Expo ("CIIE") was held at the National Convention and Exhibition Center. Shanghai Telecommunications Technology Development Co., Ltd., a subsidiary of the Group, participated in the task of communications support for the 5th time at the CIIE. The project team made all the preparations in advance and completed the construction of the temporary points as well as the backbone optical fiber cable of the OB (outside broadcast) vans, satellite vans and IBC general control room. Catering to the needs of various business scenarios at the National Convention and Exhibition Centre, the project team assisted in opening a number of business links and implemented closed-loop management. During the Expo, it arranged for the support team to be on standby outside the stadium on round-the-clock basis to undertake inspection, supervision and on-site repair of server room equipments, ducts and cables and facilities along the route.



### Communications support for Boao Forum for Asia Annual Conference

In April 2022, Hainan Boao entered the "annual conference time". Acting as the communications support unit for each Boao Annual Conference previously, Hainan Communications Construction Co., Ltd., a subsidiary of the Group, attached great importance to the event, planned and carried out various support services in advance to successfully fulfil the task of communications support for the Annual Conference.

In order to ensure a smooth and uninterrupted communications network for the Annual Conference, Hainan Communications Construction Co., Ltd. strictly followed the requirements of the "Boao Forum for Asia Annual Conference 2022 Communications Support Plan" and actively put in resources for the preparatory efforts such as hidden hazard investigation, cable inspection and patrol and rectification of hidden hazards of poles. As at the end of the Annual Conference, a total of 9 vehicles, 8 sets of devices or instruments and 32 personnel were contributed; the inspection of 94 base stations in key support sites and 211 base stations in the core circle sites were completed, and the total length of optical cables inspected was approximately 4,255 kilometres.





## Disaster Relief

The Group actively practices its social responsibility, assists in emergency support all over the country in major natural disasters and public safety incidents without delay, actively assists in repairing communication lines and ensuring smooth communications networks. In the fight against the COVID-19 pandemic, it provided informatization construction services such as 5G base stations and optical fiber broadband for emergency command of governments at all levels and key medical institutions throughout the country.



over **49,400**  
person-times



**13,200** vehicle-times



more than **30,600**



more than **73,600** hours

In 2022, the Group contributed resources including a total of over 49,400 person-times and 13,200 vehicle-times, repaired more than 30,600 communications facilities and participated in disaster relief for more than 73,600 hours, while actively participating in post-disaster pandemic prevention and disinfection and environmental clean-up.



### Guangdong Floods

In June 2022, Guangdong Qingyuan and Shaoguan had sustained heavy rainfall over a vast area, with flooding in various regions and mobile base stations in some areas were flooded, as well as landslides and road collapses that resulted in large areas of fallen communications poles, damaged base stations and interrupted signals. China Communications Construction Third Engineering Bureau Co., Ltd., a subsidiary of the Group, activated the emergency plan in a timely manner and led emergency teams to the disaster-stricken areas at once to do their best to provide emergency communications support for rescue and relief.





### Chongqing Hill Fire

In August 2022, a number of districts and counties in Chongqing were hit by successive wildfires, which posed great potential hazards to communications facilities and equipment in various districts. In the face of the disaster, the Group's subsidiary, Chongqing company put in supporting resources of a total of 647 person-times, 155 vehicle-times and 622 unit-times of oil machine to support the communications at the front line, carry out preventive measures of disaster relief, excavate fire breaks and ensure the safety of server rooms and facilities of communications. Organizing the communications support measures, the Group actively conducted on-site fault repair and power generation support duty, effectively safeguarding and protecting the smooth flow of communications and the safety of people's lives and properties.





### Sichuan Ganzi Earthquake Relief

In September 2022, a sudden 6.8 magnitude earthquake struck Luding County, Ganzi Tibetan Autonomous Prefecture, Sichuan Province, causing power outages in a number of access-network server rooms and base station disruptions or blackouts. The Group's subsidiary, Sichuan company activated the emergency plan at once, set up emergency rescue team, support team and logistics team, assembled 60 members of emergency rescue team, 21 vehicles and dispatched rescue materials, and rushed to the disaster area to carry out emergency rescue for communications support.





## Rural Revitalisation

The Group actively fulfilled its corporate social responsibility, promoted the spirit of poverty eradication, and consolidated and expanded the achievements of poverty eradication to promote the effective coordination between poverty alleviation with rural revitalization. Giving full play to its own advantages, it continuously implements major supporting policies to support the development of poverty-eradicated areas and rural revitalisation.

The Group formulated and issued the “China Comservice 2022 Work Focus for Contributing to the Comprehensive Promotion of Rural Revitalization”, established a sound and effective coordination mechanism to consolidate and expand the achievements of poverty alleviation and rural revitalization, supervised and guided each provincial company to effectively implement the rural revitalization and working plans, and reported the progress of rural revitalization on a quarterly basis, so as to ensure the fulfilment of all annual mission targets.



The Group actively cooperated with the China Charity Federation, a third party organization, and raised charitable donations totaling RMB1.00 million to Shufu County, and raised charitable donations totaling RMB0.12 million to Jiuzhi County during the year of 2022.

The Group actively implemented the task of procuring agricultural products for supported areas and organized the trade unions of all provincial companies to procure agricultural by-products for supported areas. Poverty alleviation products of a total of approximately RMB33.43 million were procured in 2022, with a per capita procurement of RMB416.

The Group gave full play to their resource advantages, increased training efforts and continued to strengthen the training of grassroots cadres, rural revitalization leaders and various professional and technical talents in the supported areas. Under the guidance of Guangdong company of the Group, Guangdong P&T Human Resource Services Company, Ltd. was successfully selected as the training base for rural revitalization talents of the Guangzhou National Modern Agricultural Industry Technology Innovation Centre and signed a five-year strategic cooperation agreement. The two parties will carry out in-depth cooperation in various ways, including building training bases mutually, undertaking talent training projects, customizing training courses, cooperating on technology research projects and organizing lectures and trading activities on rural revitalization expertise.



## Employee Care

Adhering to employee-centric principle, the Group focuses on strengthening employee care, and actively launches the employees' sense of happiness program. It pays attention to the thoughts, work and life dynamics of employees, regularly communicates with employees and solves their problems to continuously improve their sense of security, sense of gain, sense of achievement, sense of belonging and sense of happiness. The Group insists on "sending warmth in winter and coolness in summer", offers "five visits and five congratulations"<sup>1</sup>, and always offers visits during festivals to retired employees, advanced and model workers and employees in difficulty.

The Group has been earnestly improving the working and living conditions of frontline employees, encouraging primary level trade unions to improve the working environment for employees by adding water purification equipment and mother-and-baby rooms, and according to local conditions, continuing to promote the "Four Small Facilities" including the "Small Canteens, Small Restrooms, Small Shower Rooms and Small Activity Rooms", which improves from "being available" to "being better".



The Group organized employees to participate in voluntary services



Since July 2022, the high temperature in several regions across the country has sustained and red alerts for high temperatures have been issued several times, which have tested every employee at the front line of production and operation. During this period, the management of the companies at all levels visited employees at the grassroot frontline and sent condolences, so that the staff could feel the care of the Company.



<sup>1</sup> The Group visits sick employees in hospitals, employees who have special family difficulties, bereaved employees, employees who encounter material family disputes, and employees who disagree with other colleagues. The Group also congratulates employees on their birthdays, weddings, giving birth, their children's admission to colleges (or the army) and their retirement.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



In order to further enrich the leisure and cultural life of female employees and motivate them to create a learning organization and become knowledgeable women, the Group carried out various abundant cultural and sports activities on holidays such as International Women's Day and Mother's Day. The trade union of the Group's supply chain company in Guangxi province organized a caring activity for female employees, namely, "Women's practical work in cloudification and digital transformation", the contents of which included studying the "Regulations on Labor Protection for Female Workers" and the "Outline of Women's Development in China (2021–2030)".



In order to safeguard the special rights and interests of female employees, the Group has been upgrading the nursery room and increasing the number of medical check-ups year by year, such as two kinds of cancer screening, so as to care for the physical health of female employees. In case of important events of female employees, such as marriage and childbirth, it will perceptively visit and congratulate them immediately.



## ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



In order to promote nation-wide fitness, enrich the cultural and sports life of employees and advocate the concept of “happy work and healthy life”, several subsidiaries of the Group actively held various cultural and sports activities.

