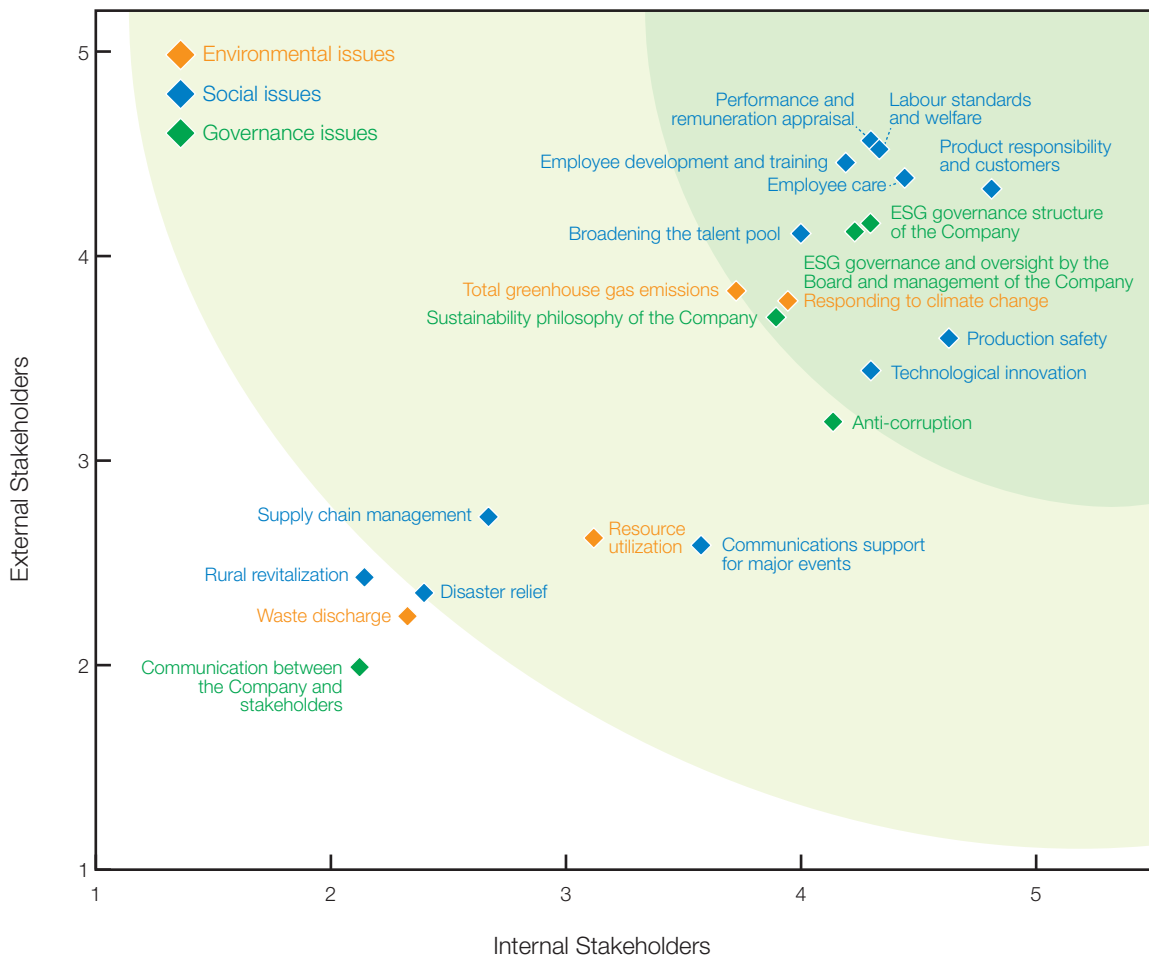


ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



ENVIRONMENTAL PROTECTION AND CLIMATE CHANGE

Climate change not only has profound impacts on the global ecosystem, but also brings relatively great 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 presents 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.

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 organized 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-related Disclosures

The Group has been disclosing climate change-related information across four dimensions: governance, strategy, risk management, and metrics and targets, taking into account the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) since the financial year 2022, and continues to enhance the relevant disclosures. During the reporting period, the Group made further disclosures with reference to the Climate-related Disclosures from IFRS S2 and the requirements of Consultation Conclusions “Enhancement of Climate-related Disclosures under the Environmental, Social and Governance Framework” published by The Stock Exchange of Hong Kong Limited.

Governance

The Board of the Group serves as the supreme decision-making body for sustainable governance (see “ESG Governance Structure” section for details), responsible for overseeing the Group’s overall management direction and strategic orientation regarding climate change-related risks and opportunities. The members of the Board possess diverse professional backgrounds and management experience, enabling them to make comprehensive judgments on climate-related issues from strategic, risk management, and business development perspectives.

To continuously enhance the Board’s understanding of climate change issues and ensure its full awareness of relevant regulatory requirements, industry trends, and potential business impacts, the Group will regularly provide climate-related specialized training for the Board. When necessary, external institutions or experts will be invited to share their insights and engage them in discussions on climate risks, transition trends, and response strategies. Additionally, the Board receives updates on progress regarding climate action and other sustainability initiatives every half-year. The Board’s Audit Committee supports the Board in evaluating climate-related risks and opportunities, formulating climate strategies and dual carbon targets, defining response measures and mitigation roadmaps for emission reduction.

In terms of the development of the remuneration and incentive system, the Group has included in its consideration regarding climate-related performance into the medium-to-long-term optimization research scope of its remuneration policy, which is currently under scheme evaluation, exploration of implementation approaches, and careful study of feasible ways to link climate targets with incentive mechanisms, so as to gradually promote the effective implementation of the climate strategy at the organizational level. In addition, the Group has issued the Appraisal and Evaluation Rules for Green Development Work to define the “Dual Carbon” management indicators and specific implementation rules of the Group’s subsidiaries, to promote the reinforcement of the main responsibilities of all parties, to objectively evaluate the implementation and effectiveness of the various tasks, and to promote the effective implementation of the “Dual Carbon” work and the green and low-carbon development across the entire business. The Group also issues annual energy-saving and emission reduction budget targets to its provincial companies and strictly implements the energy-saving and emission reduction performance reward and punishment mechanism to ensure the successful completion of the annual energy-saving tasks.

Strategy




The Group places high priority on the potential risks and opportunities arising from climate change, integrating climate-related risks as a critical component of its long-term corporate strategy. The Company systematically assesses climate-related risks and opportunities, and implements proactive measures to address them.

As of the reporting period, the Group has formulated the Green Development Rolling Plan for 2026–2028, which covers the low-carbon business system for climate transition. Moving forward, by incorporating the national dual-carbon policies, industry sustainability standards and the characteristics of its own business structure, and based on further in-depth multi-dimensional assessment of climate-related risks and opportunities, the Group will gradually advance the research and compilation of its climate transition plan, specifying core transition directions, phased objectives, key tasks and resources guarantee measures.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

At this stage, the Group has systematically integrated climate-related factors into its business planning process and is gradually adjusting its business structure to reduce reliance on high-carbon activities while seizing business opportunities related to low-carbon and sustainable development. Such adjustments are reflected in the Group’s continuous expansion of business areas related to low-carbon transition, including integrated consulting services covering power infrastructure and supporting facilities, new energy, and carbon management.

The Group has identified the following potential impacts of climate change on the Company’s strategies and financials in three time periods, namely short-term (occurring within the next one year), medium-term (occurring from the next year to 2030) and long-term (occurring from 2031 to 2050), upon discussions with cross-functional business departments and industry experts:

Risks/ Opportunities	Type	Risks/Opportunities description	Potentially affected segments of the value chain	Potential impact pathways	Short-term	Medium-term	Long-term
 Physical risks	Acute	Extreme precipitation or severe weather events such as cyclones/ typhoons/hurricanes and hail	<ul style="list-style-type: none"> Production and operation Upstream supply chain 	<ul style="list-style-type: none"> Extreme precipitation and flooding may cause delays in construction, increase construction costs and affect project delivery schedules Obstruction of transportation links in the core supply chain, such as communications equipment and fibre-optic cables, affects equipment procurement and project implementation 	√	√	
	Acute	Events of extreme heat and sudden droughts	<ul style="list-style-type: none"> Production and operation 	<ul style="list-style-type: none"> High temperatures may lead to increased health risks for outdoor construction workers, such as heat stroke, which in turn affects work efficiency Increased intensity of operation of air-conditioning and other cooling equipment at the operating sites 	√	√	
	Chronic	Global warming trend	<ul style="list-style-type: none"> Production and operation Upstream supply chain 	<ul style="list-style-type: none"> Global warming causes critical facilities such as communications base stations and data centers to face higher temperature pressures, accelerating aging and increasing failure rates 			√
 Transition risks	Policy and legal risk	Legal and regulatory policies on environmental protection, carbon emissions and information security, etc.	<ul style="list-style-type: none"> Production and operation 	<ul style="list-style-type: none"> Restrictions on data center and infrastructure construction. The government may restrict high energy consumption projects through data center energy consumption standards, which may affect China Comservice’s business expansion across the country 	√	√	√
	Technological risk	Changing business scenarios as a result of low-carbon technology transformation	<ul style="list-style-type: none"> Production and operation 	<ul style="list-style-type: none"> The communications industry is moving towards green transformation and low-carbon technology upgrades to better meet customer demand 	√	√	√
	Market risk	Changing customer behaviour	<ul style="list-style-type: none"> Downstream sales 	<ul style="list-style-type: none"> Corporate customers are increasingly emphasizing their own carbon management, and the demand for green integrated solutions has increased 	√	√	√
	Reputational risk	Stakeholder requirements for climate risk disclosure	<ul style="list-style-type: none"> Direct operations 	<ul style="list-style-type: none"> Regulatory requirements for public disclosure of climate risks are becoming increasingly stringent, and non-compliant disclosures and inappropriate climate performance can damage corporate reputation 		√	√
 Opportunities	Energy sources	Low-carbon energy use	<ul style="list-style-type: none"> Production and operation 	<ul style="list-style-type: none"> Installation of distributed photovoltaic and replacement of new energy vehicles will increase the proportion of new energy consumption and reduce its own greenhouse gas emissions 		√	√
	Products and services	Low-carbon digitalization services	<ul style="list-style-type: none"> Downstream sales 	<ul style="list-style-type: none"> Accelerating digital transformation across industries and the need to reduce carbon emissions are driving demand for smart energy consumption management, green cloud computing, and low-carbon IoT solutions 	√	√	√

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



The Group places high importance on the financial implications of climate risks and opportunities. While quantitative models and data systems are currently being refined, quantitative data (including but not limited to related investments, funding plans, asset values, percentages, and capital expenditures) are not available. Relevant information will be disclosed progressively according to assessment capabilities.

Current financial effect (potential)	Anticipated financial effect	Response measures
<ul style="list-style-type: none"> Loss of revenue: delays of projects may lead to delays in client payments, affecting the stability of revenues Rising supply chain costs: bad weather affects the stability of the supply chain, leading to an increase in the price of core equipment and increase in procurement costs 	<ul style="list-style-type: none"> Low impact on financial performance in the short to medium term 	<ul style="list-style-type: none"> Implement contingency plans and form a rapid response team to react quickly in the event of extreme weather to minimize the impact of the weather and safeguard project deliveries Establish a diversified supply chain system to ensure that key equipment and materials are sourced from multiple sources to minimize the risk of supply chain disruption caused by extreme weather events
<ul style="list-style-type: none"> Rising operating costs: increase in demand for cooling leads to a significant rise in electricity consumption 	<ul style="list-style-type: none"> High impact on financial performance in the short to medium term 	<ul style="list-style-type: none"> Implement adequate health protection measures, such as providing regular breaks, hydration, and heat-prevention and cooling equipment, for outdoor workers and those working in high-temperature environments, so as to reduce the risk of heat stroke and health problems Optimize energy management programs and adopt energy saving and consumption reduction measures, such as using green energy and improving energy efficiency
<ul style="list-style-type: none"> Rising operating costs: equipment durability is decreasing, maintenance frequency is increasing, and the company may need to increase investment to maintain operations 	<ul style="list-style-type: none"> Low impact on financial performance in the long term 	<ul style="list-style-type: none"> Develop and use high-temperature-resistant, low-energy-consumption communications equipment to cope with environmental changes due to global warming
<ul style="list-style-type: none"> Business expansion is constrained, affecting revenue growth: if the new policies limit high energy consumption projects, the company's business expansion in some regions may be affected, which in turn affects revenue growth expectation 	<ul style="list-style-type: none"> Medium impact on financial performance in the short, medium and long term 	<ul style="list-style-type: none"> Through active participation in government-led establishment of standards on environmental protection, low-carbon and industry, the company obtains timely information on policies and regulations, which helps the company to plan in advance, and through cooperation with industry associations, promotes the deployment and implementation of relevant policies to ensure that the company is in a favorable position in the changing policy environment
<ul style="list-style-type: none"> R&D expenditures are on the rise: the transformation of low-carbon technologies usually requires large R&D investment, which requires a large amount of capital in short term 	<ul style="list-style-type: none"> Low impact on financial performance in the short, medium and long term 	<ul style="list-style-type: none"> Cooperate with leading low-carbon technology companies and research institutes to accelerate the process of technology transformation. Through cooperation, the company can reduce the cost of R&D, improve the maturity of technology and its market adaptability, and reduce the risk of technology introduction
<ul style="list-style-type: none"> Increase in R&D expenditures: in response to changing customer demand for low-carbon, green communications services, the company adjusts its existing product and service portfolio to introduce green solutions that meet market demand 	<ul style="list-style-type: none"> Low impact on financial performance in the short, medium and long term 	<ul style="list-style-type: none"> Conduct regular market research to gain a deeper understanding of the changing needs of customers in terms of low-carbon and green services to ensure that the company can accurately grasp market dynamics and customer expectations
<ul style="list-style-type: none"> Decrease in brand value: delay in corporate climate action and disclosure may lead to doubt on corporate sustainability commitments by the publics and customers, affecting brand value and customer loyalty 	<ul style="list-style-type: none"> High impact on financial performance in the medium to long term 	<ul style="list-style-type: none"> Regularly publish environmental, social and governance reports to enhance communication with investors, customers and regulators, and positively demonstrate the company's actions and effectiveness in addressing climate change
<ul style="list-style-type: none"> Reduced operating costs: savings in purchased electricity expenses, carbon compliance transaction costs, etc. 	<ul style="list-style-type: none"> Low impact on financial performance in the medium to long term 	<ul style="list-style-type: none"> Ensure a stable supply of green electricity by investing directly in renewable energy facilities or partnering with renewable energy providers. While ensuring a stable supply of energy and controlling costs, the company can also ensure that its business meets green energy requirements by cooperation or purchasing green electricity certificates
<ul style="list-style-type: none"> Increase in revenue: low-carbon digitalization services can expand into new markets and improve the company's overall business revenue 	<ul style="list-style-type: none"> Low impact on financial performance in the short, medium and long term 	<ul style="list-style-type: none"> Form a dedicated low carbon services team to enrich the current digitalization products and solutions

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Scenario analysis

In order to accurately identify and measure the impacts of climate disasters on enterprises under climate change, the Group has prepared contingency plans in advance to enhance the Company’s climate resilience. During the reporting period, the Group conducted a physical risk analysis based on the SSP2-4.5 medium greenhouse gas emissions scenario and SSP5-8.5 high greenhouse gas emissions scenario in the Shared Socio-economic Pathways (SSPs) proposed by the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR6), based on the underlying data of domestic climate disasters and geographic distribution.

Scenario	Scenario description	Predicted end-of-century temperature rise	Boundary of analysis	Scenario assumptions	Scenario source
 Medium greenhouse gas emissions scenario	Under this scenario, global socio-economic development progresses at a moderate pace, accompanied by intermediate-intensity climate policies and mitigation measures. Greenhouse gas emissions stabilize at current levels before commencing a gradual decline by mid-century	< 3°C	Basic office and major operational business segments. This covers the Group’s headquarters and 22 provincial companies (excluding overseas companies)	Assuming no change in internal factors such as main business, asset size, risk response measures, etc., and analyzing only the specific climate risk to which the assets are held under the disaster levels of each scenario	IPCC
 High greenhouse gas emissions scenario	Under this scenario, the global economy grows rapidly, but relies mainly on the extraction of fossil fuels and energy-intensive industries, with little or no climate policy management, and climate change pressures intensify, with greenhouse gas emissions increasing rapidly during this century and reaching roughly double that level by 2050	> 4°C			

According to the company’s main assets operating address, industry information and relevant data sets, an assessment was conducted covering typical climate risk types such as extreme heat, extreme precipitation, sudden drought, tropical cyclones, and global warming trends. In the SSP2-4.5 and SSP5-8.5 scenarios, the physical risk levels of extreme heat, sudden drought and sea level rise all show an upward trend, of which the upward trend in the risk levels of extreme precipitation and extreme heat is more significant than that of the other physical risks. In addition, in the SSP5-8.5 scenario, the frequency and intensity of extreme heat and precipitation events will increase significantly. Combined with the results of scenario analysis, the Group has initially identified that under extreme climate conditions in the future, extreme precipitation and extreme heat may have a certain impact on the on-site operation arrangements and the operation of relevant infrastructure. The relevant analysis results will serve as an important reference for the Company to identify and assess climate-related physical risks, and support the formulation of follow-up risk management and response measures.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Based on the scenario analysis, the Company has simultaneously advanced climate resilience assessment. For the medium greenhouse gas emissions scenario, a comprehensive assessment will be conducted focusing on the adaptability of existing business layouts to climate disturbances and the operational effectiveness of existing risk response mechanisms. This will systematically identify potential challenges to business operations under progressive climate impacts, providing support for optimizing the existing risk prevention and control system. For the high greenhouse gas emissions scenario, the focus will be on the impact of extreme climate events on business, with an in-depth assessment of emergency response and recovery support capabilities to consolidate the foundation for strengthening bottom-line resilience and ensuring the stable operation of core businesses.

Based on the results of the climate resilience assessment, the Company will, in the short term, mitigate the immediate impacts of extreme climates by means such as optimizing on-site operation processes and upgrading infrastructure protection standards; in the medium term, adjust business layouts and enhance risk transfer and response capabilities in high-risk areas; and in the long term, continuously track the evolution of climate risks and gradually promote the transformation of business models towards low-carbon and resilience directions.

The Group will continuously review and update scenario assumptions as appropriate, gradually introduce more applicable climate scenarios and risk dimensions, closely monitor temperature changes and the evolution of climate risks, and steadily enhance its risk identification and response capabilities in the context of climate change, so as to strengthen the overall resilience of business operations.

Risk Management

The Group is actively addressing the potential significant financial or strategic impacts of climate change in the short, medium or long term, integrating climate change risk management into the Company's existing overall risk assessment and management system. Based on the current risk management framework, the Group conducts continuous and systematic management and supervision of climate change-related risks and opportunities in accordance with the standardized process of "risk identification, risk analysis, risk assessment, risk prioritization and risk response".

During risk identification and assessment, the Group utilizes the SSP scenario data from IPCC AR6, and combines climate scenario analysis results, business layout and operational characteristics to focus on physical risks such as extreme weather and potential transition risks triggered by changes in policies, regulations and markets. Through the existing risk assessment mechanism, the Group conducts a comprehensive analysis of the likelihood of relevant risks and their potential impacts on financial conditions, operating results and strategic objectives, and determines the significance and management priority of risks accordingly.

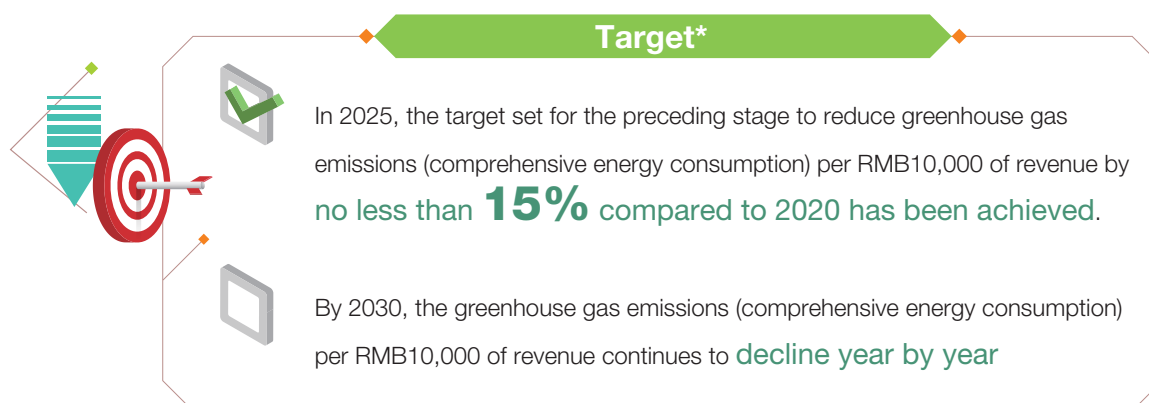
Meanwhile, the Group continuously improves the internal control processes and risk management procedures related to environmental, social and governance matters, effectively links climate-related risk management with the overall risk management system and internal monitoring mechanisms, and constantly strengthens its systematic management capabilities for climate change and other sustainability issues. Compared with the previous reporting period, there have been no material changes to the core processes of the Group's climate risk management. The Group will continue to optimize climate risk management arrangements in light of the external policy environment and business development, and gradually enhance the depth and refinement of climate-related risk management within the overall risk management system, so as to strengthen the Group's operational resilience and sustainable development capabilities in the context of climate change.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

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 development 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.

The Group strictly adheres to the core objectives established by the latest international climate change agreements. Guided by China’s policy deployments under the Paris Agreement regarding carbon peaking and carbon neutrality, and based on its service nature and its actual business development, the Group ensures its green and low-carbon goals align with international consensus and national strategy, while being scientifically sound and feasible.



As the Group has not yet been included in the national official list of key greenhouse gas emission-controlled enterprises, no internal carbon pricing mechanism has been established during the reporting period. The Group continues to monitor national policies on carbon peaking and carbon neutrality, as well as the development of carbon market-related systems, and has conducted preliminary research on internal carbon cost management and the application of carbon price signals. Moving forward, the Group will dynamically assess the applicability of an internal carbon pricing mechanism according to the policy environment, industry development and its own management needs, and advance planning of the relevant system in a timely manner.

During the year, the Group continued to promote carbon inventory work among its subsidiaries at all levels to have a clear picture of Group’s overall greenhouse gas emissions, further consolidating the foundation for energy conservation and emission reduction. The Group has established an assessment mechanism for green and low-carbon development, with evaluation indicators focusing on dual control of carbon emissions, ecological and environmental protection, and the development of typical demonstration projects. The assessment covers 22 provincial subsidiaries and is integrated into the performance assessment of unit heads through deduction points in the negative list.

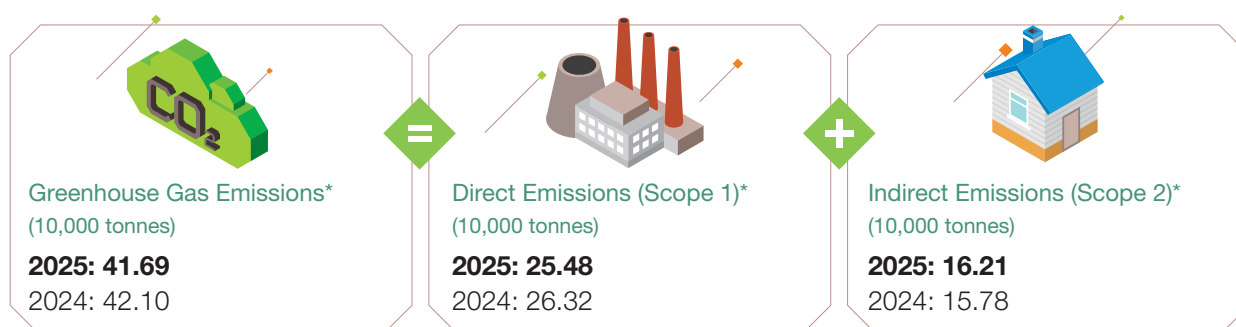
* This target is set based on the Group’s own operational data and industry energy efficiency benchmarks. Industry decarbonization approaches of external tools such as carbon credits are not adopted at this stage.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Energy Consumption

In 2025, the Group's total energy consumption amounted to approximately 162,000 tonnes of standard coal and 10.77 kilograms of standard coal per RMB10,000 of revenue (2024: approximately 165,000 tonnes of standard coal and 11.00 kilograms of standard coal per RMB10,000 of revenue).

According to the Group's energy statement, the total greenhouse gas emissions from the Group's energy consumption in 2025 were approximately 416,900 tonnes (2024: approximately 421,000 tonnes), which was calculated in accordance with the Greenhouse Gas Protocol.



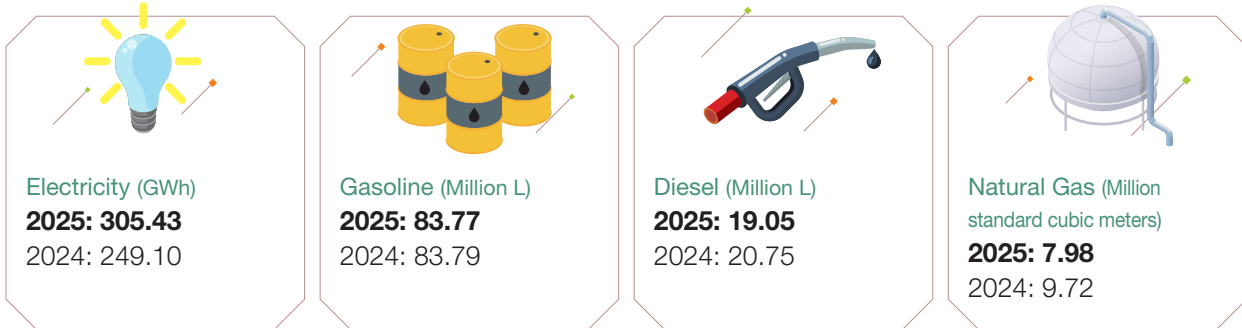
Notes:

1. Total GHG emissions comprise Scope 1 direct GHG emissions and Scope 2 indirect GHG emissions.
2. Scope 1 direct GHG emissions include GHG emissions from the consumption of natural gas, coal, gasoline, and diesel fuel.
3. Scope 2 indirect GHG emissions are calculated using the location-based method, including GHG emissions from purchased electricity and purchased heat.

* The Group previously accounted for greenhouse gas emissions including carbon dioxide, methane, and nitrous oxide. In accordance with the Environmental, Social and Governance Reporting Code of the Hong Kong Stock Exchange, the measurement of Scope 1 and Scope 2, was with reference to the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004). This is an internationally accepted and widely recognized industry standard for greenhouse gas accounting, and all input data are based on the Group's actual operational data. This year, in alignment with the Guidelines for Greenhouse Gas Emissions Accounting and Reporting for Industrial Enterprises (2015) issued by the National Development and Reform Commission and the Announcement on the Publication of CO₂ Emission Factors for Electricity in 2023 (Announcement No. 47 of 2025) jointly released by the Ministry of Ecology and Environment and the National Bureau of Statistics, the Group has updated its GHG accounting methodology to CO₂ emissions, incorporating revised emission factors.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Direct/Indirect Energies by Type



Our Actions

Action 1

The Group has set up a “Carbon Peaking, Carbon Neutrality” management organization, namely the “Leading Working Group for Energy Conservation and Ecological and Environmental Protection of China Comservice”, with the President as the main person in charge and members from the Company’s management, forming a three-tier working structure which aims to promote the Group’s green and low-carbon development.



Leading Group

Direct the deployment of green development work and study and make decisions on important issues in respect of “Dual Carbon”



Office of the Leading Group

Implement the specific work and organize the day-to-day work of the Group for “Dual Carbon”



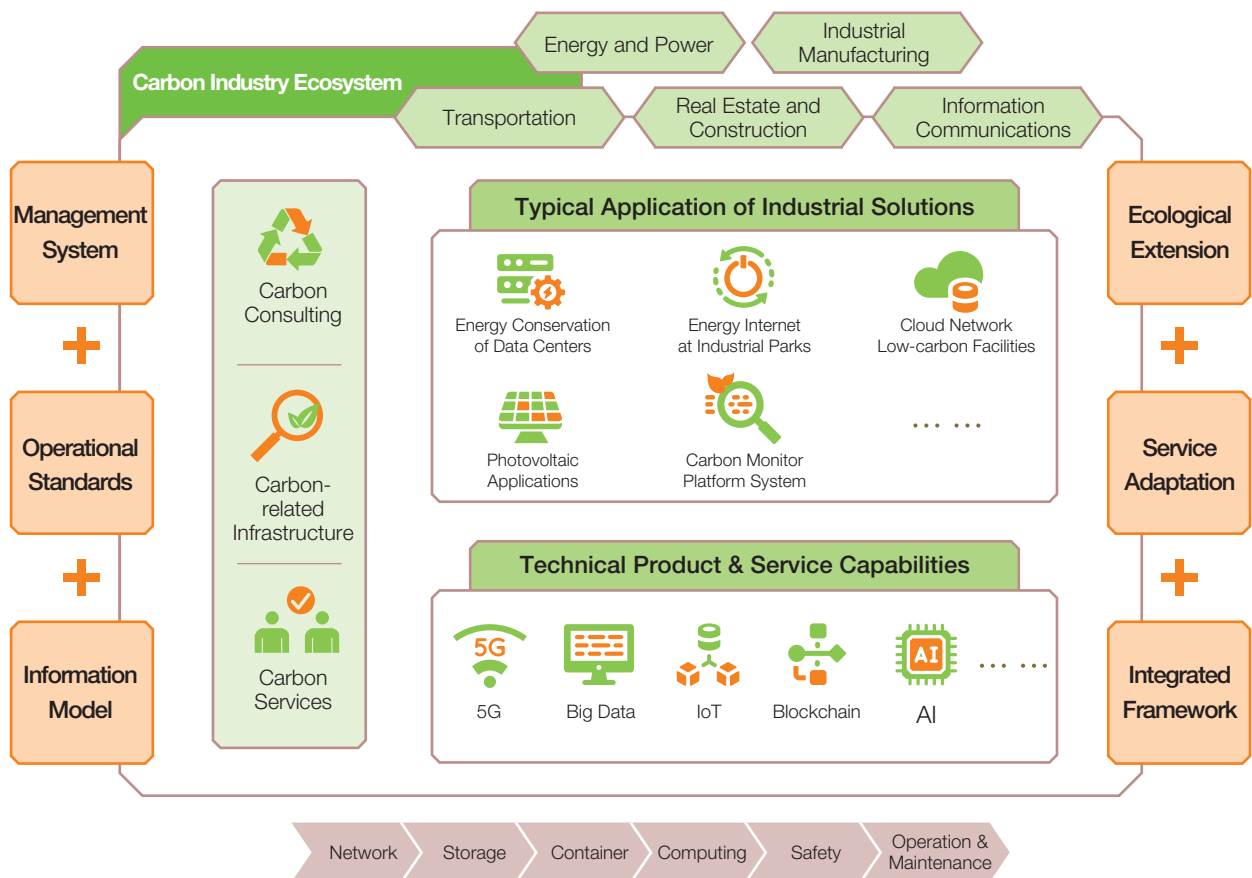
Subsidiaries and Branches at All Levels

Implement the Group’s “Dual Carbon” planning objectives, promote and implement “Dual Carbon” projects

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Action 2

The Group prepared “the Green Development Rolling Plan for 2026–2028”, and continuously promoted the “Research on the Peaks of Carbon Emission and Pathways to Carbon Peaking”. 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 such as energy and power, industrial manufacturing, transportation, real estate and construction, and information and communications as well as three major business sectors which included Carbon Consulting, Carbon-related Infrastructure, Carbon Services, the Group strived to promote carbon reduction in society.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



Talent Development for Climate Change Response

1. Strengthening the Dual Carbon Expert Workforce

- In 2025, to enhance the professional capabilities of the dual carbon team and green experts, the Group conducted targeted training focusing on dual carbon policies, low-carbon technologies and practical application scenarios. By deepening the empowerment model of “policy + technology + practice”, the Group helped the team improve core competencies in the dual carbon field, providing solid talent support for the Group’s green transformation and the implementation of dual carbon goals.
- The Group hosted the “China Comservice 2025 ESG and Green Development Management Empowerment Training Program”. Leaders and relevant responsible persons in charge of green development and ESG work from China Comservice’s provincial companies and key professional companies gathered with top industry experts to explore ESG development paths, foster green service professionals for China Comservice, and map out a new blueprint for the Group’s green development.



2. Iteration of the Dual Carbon Knowledge System and Development of High-Quality Courses

Jiangsu Company of the Group has established a dual carbon empowerment training curriculum system and a faculty database for dual carbon training. It has actively integrated resources from the China Quality Certification Center, universities, research institutes, industry associations and other relevant institutions to develop a one-stop dual-carbon talent development program, and advanced the establishment of the dual carbon training curriculum system starting from three aspects: basic knowledge of carbon emissions, the energy supply side and the energy demand side, providing comprehensive coverage of training on dual carbon knowledge.



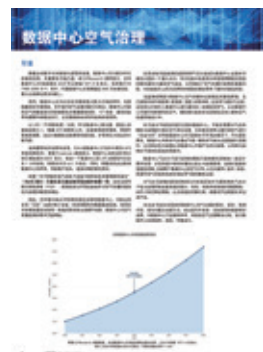
Zero Carbon Development Alliance

“Zero Carbon Development Alliance” is jointly launched by 25 entities including the subsidiaries of the Group, China International Telecommunication Construction Corporation and China Comservice Supply Chain Co., Ltd., as well as China Quality Certification Centre and Beijing Internet Exchange Center of the Ministry of Industry and Information Technology. Through collaboration and cooperation among alliance members, with the vision of co-creation, co-sharing and co-construction, and the core of co-development of standards and business interconnection, it promoted the development of ecological civilization and business development with carbon neutrality.



2025 White Paper on Air Quality Management of Data Center

China Comservice Energy Technology & Service Co., Ltd., a subsidiary of the Group, participated in the compilation of the 2025 White Paper on Air Quality Management of Data Center. The white paper analyzes the needs, current situation, testing methods and existing challenges for air quality management of data center, and systematically elaborates the impacts and main causes of air pollution in data centers, and puts forward corresponding treatment solutions.





Use of Technology to Seize Opportunities from Climate Change

In addressing the risks of climate change, the Group has leveraged its unique advantages and seized the opportunities for energy conservation and carbon reduction brought by climate change. It has intensified the application of new technologies such as 5G, cloud computing, the Internet of Things, big data, blockchain and AI. Through enhancing technological breakthroughs and product iterations, the Group has developed a series of energy-saving technologies and products in the process of promoting the upgrading and carbon reduction of energy-intensive industries. During the reporting period, the accumulated R&D investment exceeded RMB 5.4 billion.

Continuous Investment in R&D of Green Technology

With the rapid development of 5G, cloud computing, IoT, big data, blockchain, AI and other technologies, the scale of communications base stations and data centers has rapidly expanded, resulting in the continuous increase of power consumption. By fully leveraging its internal R&D synergies, the Group focuses on key technologies and intensifies technological innovation while strengthening cooperation with operators to give full play to its differentiated advantages, actively contributing to the green and low-carbon development of the communications industry.

The Group has developed its own green data center PUE simulation platform, active and passive hybrid cooling for data centers, precision optimization of integrated photovoltaic-storage-charging systems, photovoltaic intelligent management platform, photovoltaic storage cloud green energy management platform, C-Cooling energy-saving cloud platform, smart energy and carbon management platform, 5G base station smart energy-saving system, 5G base station AI energy-saving technology, 5G base station energy control intelligent shutdown technology, evaporative cooling module multi-coupling heat pipe refrigeration mainframe, energy-saving integrated cabinet, photovoltaic energy storage and power backup system, distributed intelligent power supply system, server room AI group control and other energy-saving technologies and products. It has also accumulated mature planning, design and construction experience in energy saving and emission reduction, which have been promoted across the country. Through providing information and communications technologies and services in various industries, the Group has also actively assisted in the digitalization, intelligentization and green development of the government, energy, transportation, education, finance and other sectors, realizing green coexistence.

Successful Cases of Green Technology Application



Guangdong-Hong Kong-Macao Greater Bay Area Integrated Data Center

China Comservice Construction Co., Ltd., a subsidiary of the Group, undertook the "2025 Guangdong-Hong Kong-Macao Greater Bay Area Integrated Data Center Phase 1.2 Mechanical and Electrical Project Communications Supporting Construction". The technical scheme was verified through simulation using a green data center PUE simulation platform. Green and energy-saving equipment adapted to the high-temperature and high-humidity climate in Southern China was selected, including indirect evaporative cooling air handling units (AHU) and air-cooled fluorine pump air walls, driving the project's PUE to below 1.2. Adhering to the orientation of green and energy-saving construction, the project empowers intelligent computing power with green technologies, which comprehensively improved its competitiveness.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



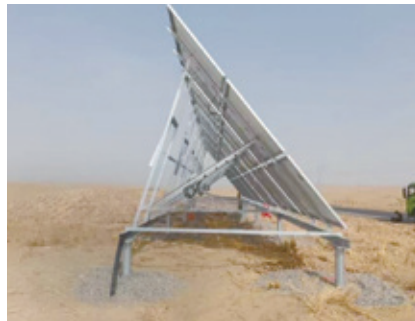
Underwater Data Center

The “Shanghai Lingang Underwater Data Center”, constructed by Shanghai Company of the Group, is the world’s first demonstration project of an underwater data center directly connected to offshore wind power. Through the innovative integration of two core technologies namely, direct supply of green power from offshore wind farms and natural seawater cooling, the project realizes the collaborated development of offshore green power and underwater computing power.



Zero-Carbon Photovoltaic-Storage Integrated System Application Project in Desert Areas

China Information Consulting & Designing Institute Co., Ltd., a subsidiary of the Group, developed the Aksu Zero-Carbon Photovoltaic-Storage Integrated System Application Project in desert areas of Xinjiang. By constructing 113 communications base stations fully powered by photovoltaic energy and energy storage, the project effectively serves railway lines, oilfield operation areas, and pastoral and agricultural residential areas. It not only solves the problem of network coverage in remote areas but also provides a replicable and promotable “Tarim Model” for global green energy construction in desert scenarios through the innovative model of “zero-carbon smart base stations”.





Data Center Distributed New Energy Microgrid Project

China Utone Communications Construction Consulting Co., Ltd., a subsidiary of the Group, successfully built China's first data center microgrid project based on the integrated energy management model of "wind-photovoltaic-storage + load". Adopting the mode of "self-generation for self-use and surplus power grid connection", the project achieves efficient and clean-energy power supply with an annual power generation capacity of 13.1 million kilowatt-hours. It can save approximately 98,700 tonnes of standard coal and reduce carbon dioxide emissions by approximately 271,100 tonnes annually, effectively improving energy self-sufficiency rate and operational intelligence. As a replicable and highly effective green energy solution for various scenarios, the project boasts significant demonstration value and prospects for promotion.



Distributed Source-Load Aggregation Project at Dairy Farming Base

Hunan Company of the Group implemented the "PV + Farming" integrated demonstration project, which is a distributed source-load aggregation project at a dairy farming base. Innovatively utilizing the roof resources of 27 cattle sheds in a large-scale breeding farm, the project constructed a photovoltaic power station with a total installed capacity of 5.356MWp. By adopting monocrystalline silicon modules, string inverter technology, and the source-grid-load-storage integrated mode, it has realized efficient local consumption of clean energy and collaborated optimization with the power grid. The project not only injects strong momentum into the green upgrading of the local agricultural industry but also creates a replicable green energy model project for rural revitalization.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



Water-Cooled Green Data Center Project

The large-scale data center electromechanical EPC project constructed by Huaxin Consulting Co., Ltd., a subsidiary of the Group, innovatively built a green and low-carbon data center through advanced technologies such as low-temperature deep lake-water cooling from reservoirs, AI-driven energy efficiency optimization, tailwater power generation, replacement of diesel generator sets with 35kV municipal power supply, waste heat recovery, and photovoltaic power generation. Its PUE was reduced to 1.13, achieving world-class advanced level in terms of energy efficiency. The project provides a replicable model for similar scenarios with rivers and lakes as cooling sources for data centers.



Zero-Carbon Park

China Information Consulting & Design Institute Co., Ltd., a subsidiary of the Group, built a technological innovation zero-carbon park. With its core concept of sustainable development, the park has established a complete green energy system by developing photovoltaic power generation, distributed energy storage, charging piles, an intelligent microgrid management platform, and other facilities as part of the construction of the zero-carbon park’s panoramic cockpit. It contributes to achieving carbon neutrality goals, and has become an important benchmark for green development in the region.





AI Bird Recognition System

The independently developed AI Space-Air-Ground Integrated Monitoring Platform by Guangdong Planning and Designing Institute of Telecommunications Co., Ltd., a subsidiary of the Group, integrates the “most powerful brain” of deep learning, the “on-site office” capability of edge computing, and the “mirror world” of digital twins technology. The system can not only recognize more than 200 species of birds with an accuracy rate exceeding 95% and at a speed surpassing human experts but also realize automatic and precise statistics of population quantities, dynamic tracking of activity trajectories, and establish millimeter-level precision 3D “digital IDs” for more than 30 species of key protected birds. These functions have upgraded the traditional ecological monitoring method relying on manual work and experience accumulation into a data-driven, real-time dynamic, and quantifiable intelligent monitoring system.



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, such as the PRC Environmental Protection Law and the PRC Energy Conservation Law. It has formulated internal documents such as the China Comservice Administrative Measures for Energy Conservation and Ecological Environment Protection to actively control pollutant and greenhouse gas emissions, sewage discharge and the disposal of solid and hazardous waste, thereby actively responding to the national call to reduce the impact of its operations on the environment.

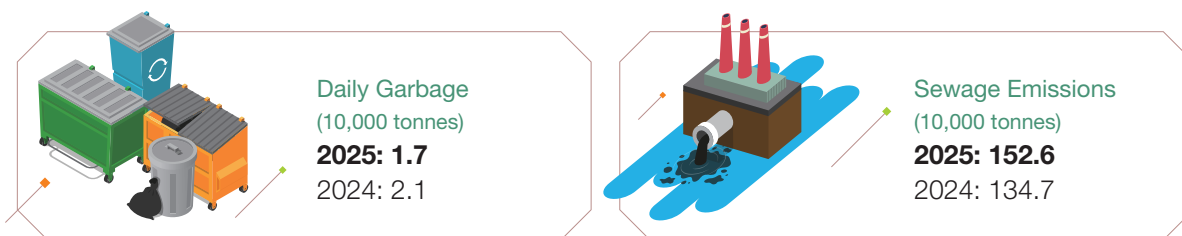


ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Waste Discharge

The Group strictly abides by the Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste and other laws and regulations governing waste disposal and utilization, and conducts waste disposal in compliance with legal requirements. Some of the provincial companies and professional companies of the Group have engaged property management firms for waste disposal.

At present, the key waste and emission indicators focused by the Group include the generation of daily garbage, sewage emissions, and paper used during office operations. These indicators mainly cover controllable daily emissions from the Group’s office and project operation activities. As the Group’s business and operation model is dominated by service-oriented businesses, waste generation is mainly affected by project types and office activities or related arrangements. The Group will study the gradual establishment of uniform quantitative emission reduction targets for relevant indicators, and evaluate and improve such target-setting to continuously enhance waste management performance.



Note:

1. The Group is an asset-light enterprise. Its solid wastes are mainly daily garbage, and the sewage it discharges is mainly daily sewage.

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 2025, the Group’s total water consumption was approximately 4.39 million tonnes (2024: approximately 4.63 million tonnes).

In respect of office paper, 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, and requires its subsidiaries at all levels to use accounting electronic vouchers and e-tendering and procurement. In 2025, the Group’s use of office paper amounted to approximately 1,388 tonnes (2024: approximately 1,423 tonnes).

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Protecting the Ecological Environment in Project Construction

The Group complies with relevant environmental laws and regulations, 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 60% professional companies of the Group have obtained relevant certifications, including approximately 100 professional companies with ISO 9001 certification and nearly 90 professional companies with ISO 14001 certification. Besides, Jiangsu Telecom Real Estate Management Co., Ltd. and Hunan Kang Pu Communication Technology Co., Ltd. which are subsidiaries of the Group, have obtained ISO 50001 energy management system certification. They are committed to managing and reducing the environmental impact in the 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



Construction Impacts

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



Equipment Pollution

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



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

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

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. The Group actively launches Energy-Saving Promotion Week and National Low-Carbon Day activities, and posts energy-saving signs in public areas, conference rooms and other venues inside the office buildings to continuously enhance employees' awareness of energy saving and environmental protection. In light of the actual conditions of provincial companies, the Group systematically carries out energy-saving renovation of office buildings, replacement of old air-conditioners and construction of distributed photovoltaic power generation systems, and helps achieve operational energy conservation through technological innovation of the office environment.

In 2025, the Group's headquarters launched the "Initiative for Headquarters to Strictly Practice Thrift and Efficiency in Office Operations". It advocated the economical use of office supplies, encouraged paperless office work and the collection of office supplies on demand; promoted energy conservation by setting the indoor air conditioning temperature no lower than 26°C in summer and no higher than 20°C in winter, turning on part or all of the lighting in meeting rooms according to meeting needs, and turning off lighting in public floor areas in principle during lunch break; and advocated resource conservation by practicing the "Clean Plate Campaign", saving water and reducing paper use.

<p>Improve Online Office Capabilities</p> 	<p>The Group makes full use of cloud conferencing and cloud investigation and research and other methods to enhance online office efficiency</p>
<p>Strengthen Power Saving Management for Lighting</p> 	<p>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</p>
<p>Enhance Energy Consumption Management for Vehicles, Promote Green Travel</p> 	<p>The Group strictly controls the formation and scale of the fleet of business vehicles to reduce the 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</p>



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 scrap and obsolete materials, 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 Co., Ltd.

China Comservice Supply Chain Co., Ltd. (“Supply Chain Company”), 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 Co., Ltd. and Hubei Xintong Communication Ltd. These subsidiaries are engaged in the auction business and disposed of cables, storage batteries, telecommunications equipment, terminals, air-conditioners, vehicles and office equipment for a total of RMB1.07 billion in 2025. Since 2009, they have disposed of assets with a total amount of nearly RMB9.4 billion.

Based on the nature of the scrap 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. This system provides end-to-end integrated services, fulfilling clients’ needs for full-process control from asset disposal to material handover, while addressing challenges such as prolonged asset disposal cycles, potential safety risks, and high warehousing costs.

Zhongjie Telecommunications Co., Ltd.

Through the restructuring of its technical foundation, innovative interactive experience and integration of ecological resources, the Zhongjie Auction Platform has formed its core competitiveness of “borderless terminals and intelligent decision-making”. It has accumulated more than 2,700 business customers. In 2025, the total auction transaction amount reached RMB940 million, including RMB470 million for cables and wires, RMB150 million for storage batteries, and RMB310 million for telecommunications equipment.

Shanghai Tongmao International Supply Chain Management Company Ltd.

The Company is deeply engaged in the green circular economy and has established a mature “green auction support system” integrating recycling, transportation, classification, warehousing and disposal, forming a whole-process closed-loop management model for reverse integration from the collection of waste materials to delivery and settlement. Relying on the auction platform with nearly 650 qualified recycling enterprises, the Company efficiently meets the disposal needs of operators for waste materials, maximizes the unit disposal efficiency of assets, effectively avoids environmental risks through strict qualification screening and process control, and earnestly fulfills the green social responsibilities of waste-generating entities.

In 2025, the Company successfully disposed of more than 360 tonnes of various waste racks, air conditioners, special equipment and terminal equipment, over 90 tonnes of waste office equipment, over 9,100 tonnes of cables, and 2,200 tonnes of storage batteries, with a total value of RMB460 million of waste materials disposed. Since 2020, the cumulative disposal value has reached RMB2.77 billion.

Zhejiang Zhongtong Communications Co., Ltd.

Relying on a recycling and disposal network covering 11 prefecture-level cities across Zhejiang province, the Company held more than 50 special auctions for various types of waste materials during the year. The Company continued its one-stop material disposal service model covering the whole process of asset evaluation, recycler qualification review, online auction and revenue management, further consolidating its leading position in the field of waste material disposal in the communications industry.

In 2025, the Company continued to focus on the waste material disposal business for telecommunications operators. The materials disposed throughout the year included waste cables, air conditioners, terminals, storage batteries, obsolete wireless equipment and other scrap materials. The total auction amount was RMB52.47 million, and the total amount of the province reached RMB61.97 million.