

# **About this Report**

This report is the 18<sup>th</sup> sustainability report issued by China Mobile, which mainly discloses the sustainability efforts of the Company in the economic, social, environmental and governance areas. This report is an annual report. Unless otherwise specified, the reporting period is from January 1, 2023 to December 31, 2023. The last report was released in March 2023.

#### ※ Report Formats

Languages: The report is available in both Chinese and English. In case of any discrepancy, the Chinese version shall prevail. The English report is translated from the Chinese version.

Versions: The report is available in both print and electronic formats, and the latter is publicly available at www.chinamobileltd.com.

#### **\*** Reporting Standards

The report has been prepared to comply with industry–standard sustainability disclosure guidelines while highlighting the unique characteristics of China Mobile within its industry context. We primarily referenced the following standards in this report.

- Guidelines for Self–Regulation of Listed Companies No.1 Standardized
   Operation, Shanghai Stock Exchange (SSE)
- Environmental, Social and Governance (ESG) Reporting Guide, Hong Kong Stock Exchange (HKEX)
- · 2030 Agenda for Sustainable Development, United Nations
- · GRI Standards, Global Sustainability Standards Board (GSSB)
- · Ten Principles of the United Nations Global Compact
- · ISO Guidance on social responsibility (ISO 26000)
- Recommendations by the Financial Stability Board (FSB) Task Force on Climate–Related Financial Disclosures (TCFD)
- Reference index system of ESG special report of listed companies holding by central enterprises, State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

#### ※ Reporting Scope

Unless otherwise specified, all cases and data in this report are from China Mobile Limited and its subsidiaries. For detailed information about corporate governance structure, organizational structure, ownership and legal form, service markets, size of the organization, etc., please refer to the *China Mobile Limited Annual Report 2023*.

#### % Currency

All monetary amounts in this report are presented in RMB (Chinese yuan) unless otherwise stated.

#### Data and Information Disclosure

The data and information used in the 2023 report was mainly obtained through the following channels:

- · Relevant internal data collection systems and statistical reports;
- Sustainable development practice cases submitted by provincial subsidiaries and specialized companies quarterly;
- · China Mobile's 2023 excellent CSR practice selection;
- Qualitative and quantitative information collection questionnaires based on the report framework.

#### ※ Report Assurance

In 2023, China Mobile engaged SGS–CSTC Standards Technical Services Co. Ltd. to provide independent third–party report assurance services. See pages 106–107 for the details of this assurance report.

#### ※ Reader Feedback

If you have any comments or suggestions regarding the report, you are welcome to send them to the China Mobile 2023 Sustainability Report Preparation Team by scanning the QR code below. We will carefully consider your feedback and commit to protecting your information from being obtained by third parties.



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# **The Chairman's Statement**



# Yang Jie

The Chairman China Mobile Limited

# Fostering New Quality Productive Forces, Boosting Core Capabilities, and Embracing the Future of Sustainability

In 2023, China Mobile positioned itself as a worldclass information services and sci-tech innovation enterprise, advanced the "1-2-2-5" strategy and reached new milestones, with revenue surpassing the RMB trillion mark for the first time in its history of development, and net profit attaining a record high. We have emerged as a world-class information services enterprise with the largest network. customer scale, and revenue, alongside leading the way in innovation, brand value, market capitalization, and profitability. While advancing high-guality development of the Company, China Mobile remains steadfast in its commitment to sustainability, focusing on promoting the widespread application of digitalintelligent information technology, continuously leveraging the empowering role of the nextgeneration of information technology, to powerfully drive the digital-intelligent transformation and sustainable development of the entire society with its own development.

## Fostering new quality productive forces and igniting new development dynamics.

Technological innovation is the core element in the development of new quality productive forces. As the fusion and innovative expansion of information and energy deepen, qualitative changes occur in laborers labor, materials, and labor objects as well as their optimized combination, turning data into a new factor of production, computility into a new fundamental energy, and artificial intelligence into a new tool of production. Those changes have jointly constituted important driving factors for new quality productive forces. China Mobile actively leverages its advantages, thoroughly advances digitalintelligent infrastructure construction, strives to bridge the digital divide, continues to strengthen the globally leading new type of information infrastructure, has established over 1.94 million 5G base stations, with Gigabit broadband covering 390 million households, ensuring the free flow of the society's digital transformation "main artery"; comprehensively forges new digital intelligent services, actively promotes the societal uptake of "cloud services, data utilization, and intelligent empowerment", enhances the supply capability of information services, data center capacities cover all hub nodes of the country's "East Data West Computing" initiative, providing general-purpose computing services with a capacity reaching 8 EFLOPS, accelerates the creation of a multi-level, wide-coverage intelligent computing capability layout, providing intelligent computing services with a capacity reaching 10.1 EFLOPS, the "capabilities middle platform" has been invoked more than 580 billion times over the year, effectively promoting the integration and development of the digital economy with the real economy on a larger scale, in broader areas, and at deeper levels; comprehensively invigorates the dynamism of scientific and technological innovation, implements the "BASIC6" scientific and innovative plan targeting "six major areas", and hastens the cultivation of strategic emerging industrial clusters.

#### Boosting core capabilities and robustly

underpinning society and economy. China Mobile is steadfast in its role as the mainstay of economic growth, the national team for technological innovation, the leader in industrial development, the stabilizer for market failures, the ballast stone for maintaining security, and the supporter for common prosperity. We're strengthening our system layout and enhancing our technological innovation capabilities. We have upgraded the "Unified Five Rings" scientific and innovative system; successfully developed the country's first reconfigurable 5G radio frequency transceiver chip "Pofeng 8676"; promoted the computility network as a national strategic emerging industry direction, launched the integrated computility and network platform, and began the commercialization pilot test of CN brain; improved the Juitian artificial intelligence network Jaunching the Jiutian Zhongqing foundation large model, as well as five large industry models covering customer service, public administration, network, corporate calling and dynamic travel analytics; released the 6G research and development test device 1.0; created a data element circulation infrastructure, released the DSSN data network platform, and the data access integrated machine (all-in-one data router). Driving industrial development and enhancing industry leadership. We have deepened the construction of the strategic partnership system, with strategic partners reaching 121: played the role of a leading industry chain. gathering more than 1,300 companies into the chain; improved the "direct investment + fund" capital operation system, with a number of invested companies performing impressively in their respective fields. Reinforcing development barriers and enhancing security support. We have worked hard to enhance the resilience and security level of the industrial and supply chain; improved the data security governance system, continuously maintained a highpressure situation against telecom network fraud, and cumulatively intercepted 371 million fraudulent calls, 279 million fraudulent messages, and 8.8924 million fraudulent websites over the year.

## Embracing and advancing sustainability and sharing developing achievement. China Mobile

has continuously advanced sustainable development, with its achievements widely recognized by all sectors of society. In 2023, China Mobile ranked at the top of the China ESG Listed Companies Pioneer 100 Ranking and the China ESG Listed Companies Technology Innovation Pioneer 30 Ranking released by the China Media Group, obtaining the AAA rating from Wind ESG for the second consecutive year and being selected as one of the top ten model enterprises at the first China ESG Model grand ceremony by the China Media Group. Green development aids the construction of beautiful China. We have been actively adopting green development as the underlying tone to push for high-quality corporate development, swiftly transitioning to green development modes. We also place a high premium on addressing climate change efforts, deeply advancing the C<sup>2</sup> Three Energy – China Mobile Carbon Peaking and Carbon Neutrality Action Plan, establishing 86,000 minimalist stations, improving the energy efficiency of new 5G base station by 9% compared to last year, reducing the average power utilization efficiency (PUE) of large and super-large data centers to below 1.32, and achieving clean energy capabilities such as wind and solar power reaching 210 million peak watts. Leading the green development of the supply chain, we have released the Green Supply Chain Guidance. We have utilized the new information service system to

empower the green transformation of society, helping to reduce greenhouse gas emissions by 310 million tonnes. Inclusive growth to share development achievements with the entire society. We are striving to meet the digital needs of all people and have constructed over 390,000 digital villages and 155,900 intelligent communities. We have built an efficient and collaborative new type of emergency communication support system, successfully completing emergency communication support tasks for the Chengdu World University Games, Hangzhou Asian Games and Asian Para Games, the Belt and Road International Cooperation Summit Forum, flood prevention, earthquake rescue etc. We have been deeply cultivating public welfare and charity that our parent company has won the China Charity Award related awards for nine consecutive sessions. We have also been deeply implementing the "Talent Strengthens Enterprise" project, genuinely forging talent into our core competitiveness. We have been respecting and protecting employees' rights, and continued to carry out "Five Small" program, "Happiness 1+1" and employee assistance programs, etc., providing employees with a friendly work environment. Advancing governance and continuously enhancing sustainable development capabilities. China Mobile has conducted high-proportion shareholder dividends, standardizing the operation of the board of directors. We established a sustainability committee under the board of directors to further enhance sustainability governance capabilities. We have been implementing a new round of State-Owned Enterprise reform to deepen and enhance actions, especially deepening key area reforms such as the "Double Hundred Action", "Scientific Reform Action" and "Specialized and Innovative" projects. We have been building a centralized, comprehensive, authoritative, efficient, and innovation-leading audit supervision system. We have advanced the construction of "Legal Compliance" in China Mobile, Carrying out "Compliance Escort Plan" in all domain to strengthen the legal guarantee for high-quality development and persistently advancing anti-corruption work, creating a clean and upright atmosphere.

The stream hits the water and the brave who strive for the boat wins. Looking forward to 2024, China Mobile will fully, accurately, and comprehensively implement the new development concept, seek progress while maintaining stability, and adhering to innovation. We will accelerate the development of new quality productive forces and comprehensively advance digital intelligence transformation and highquality development. With the joint efforts from all sectors of society to explore successful practices of information technology serving social progress, we will create broader social value and contribute to the comprehensive construction of modernization with Chinese characteristics!



March 2024

# **About China Mobile**

# **Company Profile**

China Mobile Limited (hereinafter referred to as "China Mobile", the "Company" or "we"), was incorporated on September 3, 1997 in Hong Kong, China. The Company went public on the Stock Exchange of Hong Kong Limited (HKEX) on October 23, 1997. It was the first Chinese central enterprise to be listed overseas. The Company was listed on the Shanghai Stock Exchange (SSE) on January 5, 2022, making it the first red chip company to make a comeback and get listed on the A-share main board. The Company has wholly-owned subsidiaries and 27 specialized subsidiaries in 31 provinces, autonomous regions, and directly-administered municipalities throughout the mainland of China and in the Hong Kong SAR and provides international roaming and information services in over 200 countries and regions worldwide. The ultimate controlling shareholder of the Company is China Mobile Communications Group Co., Ltd. ("CMCC"). By the end of 2023, CMCC directly and indirectly held approximately 69.81% of the total issued shares of the Company, with the remaining approximately 30.19% held by other shareholders.

With over two decades of development, China Mobile has become the world's leading telecom operator with the largest network size, the largest customer base, the highest revenue, leading innovation capability, leading brand value, leading market value, and leading profitability. The Company's main business includes mobile voice, SMS/MMS, wireless internet, wireline broadband, Internet of Things (IoT) connectivity services, data center, cloud computing, content delivery network, computing network integration, and other computing services, as well as platforms, applications, and solutions based on next–generation information technology capabilities such as artificial intelligence, big data, and security.

China Mobile is dedicated to becoming "a leading force behind China's leapfrog development of science and technology, making active contributions to the building of "Cyberpower" and "Digital China", anchoring the development positioning of "becoming a world–class information services and sci–tech innovation enterprise". It persistently strives for first–class operational performance, broadens and expands the development space of information services, independently strengthens the forging of a technology innovation engine, systematically builds a new type of information infrastructure with a focus on 5G, CN, and integration platform, innovatively constructs a new type of information service system of "connectivity + computility + capabilities". It aims to provide high–quality information services to meet, lead, and create digital–intelligent demands across all scenarios of production, life, and governance, promoting the deep integration of new–generation information technology into the economy, society, and people's livelihoods, contributing greater strength to social development and civilization progress.

# **Performance in Numbers**



## Honors and Awards

Ranked 25th in Forbes Magazine's 2023 "Forbes Global 2000"

The China Mobile brand was named one of the "BRANDZ<sup>™</sup> Top 100 Most Valuable Global Brands" by Millward Brown and Financial Times for the eighteenth consecutive year, ranking 73th among all companies considered

Ranked first in the "China ESG Listed Companies Pioneer 100 List" and "China ESG Listed Companies Technology Innovation Pioneer 30 List" released by the China Media Group

Awarded the accolade of "Most Honored Companies" in the "2023 All Asia Executive Team Poll" held by *Institutional Investor*  Awarded the accolade of "Most Outstanding Company in Hong Kong – Telecommunication Services Sector" in the "Asia's Outstanding Companies Poll 2023" held by *Asiamoney* 

Won the Gold award in "The Asset ESG Corporate Awards 2023"

Awarded a number of awards including "Best Investor Relations Company", "Best CSR" and "Best Corporate Communications" in the "13th Asian Excellence Award 2023" held by *Corporate Governance Asia* 

held by financial magazine The Asset

Received the gold award for "China's Best Large Listed Company" and "China's Best Telecommunications Company" in the "Best Managed Companies in Asia 2023" selection organized by *FinanceAsia* 

Awarded "Listed Enterprises of the Year 2023" and "Most Valuable Investment Listed Enterprise" in The 8th Listed Enterprises of the Year 2023 organized by *Bloomberg Businessweek/Chinese Edition* 

Awarded the "ESG Leading Enterprise Award" in the category for companies with a market value of over 20 billion Hong Kong dollars in the 5th "ESG Leading Enterprises Awards" jointly organized by *Bloomberg Businessweek/Chinese Edition and Deloitte* 

The parent company has received the highest rating in the central unit's targeted poverty alleviation/support assessment for five consecutive years and ranked in the top three among central enterprises for four

The parent company was selected as one of the top ten model enterprises at the first "China ESG Model" grand ceremony by

consecutive years

the China Media Group

Selected for the Wind "Top 100 Best Practices of Chinese Listed Companies in ESG for the Year 2023" list, achieving the highest Wind ESG rating of AAA level for two consecutive years

> Won the "First China Reform Cup · ESG Golden Bull Award Top 20 in Rural Revitalization" by China Securities Journal

The parent company won the government's highest award in the field of charity in China – the 12th "China Charity Award", receiving related awards for nine consecutive sessions

The parent company ranked first in the "Central SOE ESG Pioneer 100" list guided and released by the Social Responsibility Bureau of the State–owned Assets Supervision and Administration Commission of the State Council

# **Development Strategy**

# "Powerhouse" Development Strategy

China Mobile fully, accurately, and comprehensively implements the new development concepts to construct a new development pattern. We adhere to a people-centric approach, effectively enhancing core competitiveness, strengthening core functions, and fully leveraging the roles of technological innovation, industrial innovation, and security support. China Mobile aims at the overall goal of becoming a world-class information services and sci-tech innovation enterprise and a leading force behind China's leapfrog development of science and technology, making active contributions to the building of "Cyberpower" and "Digital" China, accelerating the upgrade of the development theme of "promoting digital intelligence transformation and realizing high-quality development". We vigorously promote "two shifts" and unite efforts in "two new projects", actively stimulate "five dividends", accelerate "three shifts", focus on "three new areas", deepen "three integrations", enhance "three forces", and coordinate the advancement of CHBN (customer market, home market, business market, new market) to fully exert and integrate development. We focus on driving the growth of strategic emerging industries, promoting the deep integration of the digital economy and the real economy, hastening the shift from "+AI" to "AI+", better supporting the formation of new quality productive forces, and accelerating the construction of a world-class enterprise with outstanding products, distinguished brands, innovation leadership, and modern governance. This contributes significantly to the comprehensive advancement of building a strong country and the great rejuvenation of China.



# Extended Reading One Position: The Company's position of "a world-class information services and sci-tech innovation enterprise" Two Shifts: Shift in the Company's development from leading in quantity and scale to leading in quality, profit, and efficiency; shift from focusing on the achievement of current performance targets to focusing on long-term value growth Two New Projects: A new information infrastructure featuring 5G, CN and integration platform; a new information service system integrating "connectivity + computility + capability" Five Dividends: Innovation dividend, popularity dividend, reform dividend, talent dividend, and ecological dividend

# Sustainable Development

#### **China Mobile Sustainability Model**



## CSR Philosophy: Sincerity and Fulfillment. Self-Realization and Empowerment

"Sincerity and Fulfillment, Self-Realization and Empowerment" means that China Mobile upholds the utmost sincerity and strives to fulfil our own nature, people's nature, and the nature of all things (Sincerity and Fulfillment) and that while pursuing sustainable growth of the Company itself (Self-Realization), we leverage our strengths to contribute to the sustainable development of our economy, society, and environment (Empowerment).

"Sincerity and Fulfillment" has been part of our CSR philosophy since 2006 and the core of our CSR efforts over the years. "Self-Realization and Empowerment" captures the essence of our CSR philosophy from both internal and external perspectives: we leverage our development to drive and empower the coordinated development of the wider economy, society, and environment.

Main Actions		Main Actions	Sustainability Topics
爲		Digital Intelligence Innovation	 Leading New Information Services Enabling a Future of Digital Intelligence
$( \div )$		Inclusive Growth	Striving for Common Prosperity Cultivating Well-rounded Talents
R		Green Development	 Conducting Green and Low–Carbon Operations Supporting Social Initiatives in Energy Conservation and Environmental Protection
俞		Advanced Governance	 Optimizing the Corporate Governance System Preventing and Resolving All Kinds of Risks

# Digital Intelligence Innovation

China Mobile actively grasps the wave of technological development, aiming to become a world-class information services and sci-tech innovation enterprise and a leading force behind China's leapfrog development of science and technology, making active contributions to the building of "Cyberpower" and "Digital" China. The Company continuously advances the "5G+" plan and embraces the "AI+" era. It constantly strengthens its network infrastructure capabilities, enhances the breakthrough of key core technologies, and innovates to build new infrastructure for emerging business scenario needs. By strengthening industrial and supply chain cooperation, continuously improving comprehensive security capabilities, and enriching and expanding new industries, new formats, and new models in information services, China Mobile aims to construct a new information service system, continuously empowering the digital transformation of production methods, lifestyles, and social governance.

> Leading New Information Services

Empowering a Digital-Intelligent Future





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# **Leading New Information Services**

China Mobile is deepening the construction of new types of information infrastructure, systematically creating new types of information infrastructure with a focus on 5G, computility network, and integration platform. By actively leveraging the advantages of technological innovation, it solidifies the foundation for the digital transformation of the economy and society, effectively promoting the digital transformation and sustainable development of the entire society.

# Building a Leading Experience with "Dual Gigabit" Connection

The dual gigabit network 5G and gigabit optical networks provides users with gigabit access capabilities, whether they are on a mobile or a wireline network. It features ultrahigh bandwidth, ultra-low latency, and advanced reliability, forming an integral part and the foundation of new infrastructure. China Mobile is building a high-quality "dual gigabit" network centered on user experience, continuously improving network quality, and providing high-quality network support for a diverse range of business applications.



The Company is guided by customer needs and investment returns in forging our high–quality 5G network and expanding the construction and deployment of 5G network. Throughout the year, 480,000 new 5G base stations were added, bringing the total number or its 5G base stations to more than 1.94 million, including 620,000 700MHz 5G base stations. The 5G network now covers all prefecture–level cities and county urban areas nationwide, and has achieved effective general coverage of key locations, major parks, and popular areas in China.

Has built the <b>world's largest</b> 5G network.	Leading overall mobile network quality satisfaction rate of <b>83.85</b> , which maintains a leading advantage of 1.28 pp than the industry.		
Proportion of 5G low–reception areas decreased by about <b>1.50 pp</b> from the end of 2022.	5G network offloading ratio was about <b>51.63%</b> .	Overall 5G time spent ratio was around <b>94.28%</b> , up by 7.56 pp from the end of 2022.	
Gigabit Network			

The Company precisely constructs gigabit capabilities catering for different scenarios, prioritizing on the deployment of Passive Optical Networks (PON) in gigabit communities, expanding pipeline coverage to support precise marketing, and simultaneously improving resource efficiency and investment returns. By the end of 2023, 100% of Optical Line Terminals (OLT) in urban areas of cities and counties had gigabit platform capabilities.

Household pipeline covers over 640 million households, among which gigabit broadband covers 390 million households.	Household broadband user disconnection time kept within one minute, with an average satisfaction score of <b>77.08</b> for overall household broadband internet quality, up by 2.42 pp year–on–year.	
Industry–leading activation time for dedicated lines and 5G dedicated networks, with an overall dedicated line network satisfaction score of <b>97.49</b> , up by 0.92 year–on–year .		Business broadband network satisfaction score was <b>96.23</b> , up by 1.37 year–on–year.
Optimized networks in <b>117,300</b> communities, provided "one household, one file" quality optimization service to <b>3,379,800</b> customers.		Supported gigabit service installation for <b>18,652,000</b> households in total during the year.

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#### Steadily Advancing the Commercial Deployment of 5G Lightweight (RedCap)

5G lightweight (RedCap, short for Reduced Capability) technology forms a crucial foundation for achieving interconnectivity among people, machines, and objects with 5G. It not only inherits the characteristics of 5G network slicing and low latency but also features low cost and low power consumption, playing a positive role in constructing new IoT infrastructures.

In 2023, the Company launched the 5G lightweight (RedCap) "1+5+5" innovation demonstration cities, leading the industry in completing the most extensive, most comprehensive scenario, and most comprehensive industry RedCap end-to-end compatibility tests, driving more than ten manufacturers from end-to-end to have commercial capabilities.

#### 5G Lightweight (RedCap) "1+5+5" Innovation Demonstration Cities

- One Industrial Cluster Innovation Center: Relying on China Mobile's IoT Open Lab and end-to-end product capabilities, to provide ecosystem partners with 5G Lightweight (RedCap) testing, verification, result transformation, and application promotion services.
- Five Technological Innovation Cities: Constructing 5G RedCap experimental demonstration networks in Shanghai, Guangdong Guangzhou, Zhejiang Ningbo, Hunan Yueyang, and Hubei Shiyan to conduct trials of new technologies and products, accelerating the mature commercial use of networks, chips, modules, and terminals.
- Five Application Demonstration Cities: Developing a series of 5G RedCap benchmark projects such as Zhejiang Hangzhou's Vision City, Jiangsu Suzhou's Industrial City, Fujian Ningde's Maritime City, Zhejiang Ningbo's Park City, and Guangdong Shenzhen's Innovation City, leading industry application innovation.

# **Boosting the Integrated and Unified Computility Network**

Computility refers to the capability of processing data, measured by the number of operations a device can perform per second—the more operations, the stronger the computility. Computility has become a crucial public infrastructure, representing the core productivity of the digital–intelligent economy era and the foundation for the entire society's digital–intelligent transformation. With the rapid increase in demand for computility, China Mobile proposed the new concept of computility network in 2021. Centered around computing and based on the network, it deeply integrates "network, cloud, data, AI, security, edge, terminal, and blockchain" to provide integrated task–oriented services. It is charactered by collaborative, intensive and inclusive computility, and connects dispersed computing nodes into a comprehensive ubiquitous computing cluster through the network. This setup allows users to access any type of computing resources from any location as easily as turning on a tap. It iterates on big data and artificial intelligence capabilities, making computility a public service that is as accessible on–demand as water or electricity, aiming to achieve the vision of "ubiquitous networks, ubiquitous computility and ubiquitous intelligence". Through relentless efforts, the computility network has become national strategic direction for emerging industries.

In 2023, China Mobile embedded the national "Eastern Data and Western Computing" strategy in its construction of the computility network, furthered the "4+N+31+X"<sup>1</sup> data center layout, promoted the cross-regional, cross-level, cross-kernel, and cross-entity integration and development of computility, and piloted a three-tier computility latency circle of approximately 20 milliseconds nationwide, 5 milliseconds within provinces, and 1 millisecond within cities. It built the largest single intelligent computing center among domestic operators and advanced the construction of 11 intelligent computing center regional nodes, providing large-scale training services to the entire network. By the end of 2023, the total computility reached 8 EFLOPS, and the scale of cloud servers reached 924,000 units.



1: "4" refers to the high-availability clusters deployed in the four core regions of Beijing-Tianjin-Hebei, Yangtze River Delta, Greater Bay Area, and Chengdu-Chongqing; "N" refers to the low-cost computing clusters planned within the data center clusters of the western computing hubs and the central nodes planned and deployed in key provinces; "31" refers to the mobile cloud resource pools distributed across all 31 provinces of China; "X" refers to the multiple edge computing nodes in various cities and towns.

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## Highlight

#### Building the "CN Brain", Promoting the smart operation of the Computing Network

As the intelligent hub of the computility network, the CN Brain is the core system for the unified orchestration, scheduling, management, and maintenance of computility and network resources. Upwards, the CN Brain can support the combination of atomic capabilities across various fields and the integration of computing and networking services. Downwards, it enables the cross–layer and cross–regional integration of ubiquitous computility and the cross–regional and cross–disciplinary connectivity of the network.

In 2023, China Mobile built the industry's first CN Brain, achieving maximum computility supply, data processing, network connectivity, and business supply capabilities in the computility network. The CN Brain holds the four powerful tools and pioneers a new task-oriented service model for computing and networking, driving another leap in the capabilities of the computility network.

#### Computility On-Demand Distribution

General computility, intelligent computility, supercomputility, and quantum computility, including both proprietary and third–party resources, are pooled into a network. Based on user demands, computing tasks are distributed as needed, achieving global optimal matching and precise scheduling.

#### Network Connection On-Demand

Relying on the SRv6 traffic engineering capabilities of the mobile cloud dedicated network, dynamic and flexible scheduling of network resources is achieved through an intelligent routing engine. Combined with express data capabilities, it enables on–demand network bandwidth usage, providing businesses with deterministic and elastic network transmission capabilities.

#### Breakthroughs in Key Technologies of Autonomy Computility Network



#### **Security Collaborative Protection**

A unified architecture oriented towards computing and networking security is constructed, enabling real-time perception of the security resource pool usage. Combined with business security needs, it supplies security resources on demand, erecting a solid barrier for data security.

#### **CN Integrated Scheduling**

The computing and networking security orchestration and scheduling center is established, creating capabilities for computing and network security domain awareness, integrated fusion scheduling, and collaborative orchestration control. It coordinates both demand and supply, achieving the best match between business requirements and resource supply, and offers inclusive, secure, and green computing services.

By the end of 2023, the CN Brain has been trialed for commercial use nationwide, facilitating three minute-level changes to support 115 types of CN services such as "Eastern Data and Western Computing", intelligent and smart computing, and express data delivery. It has been applied in areas like large-scale data disaster recovery storage, film and television rendering, astronomy, and pharmaceutical R&D.Building on the foundation of the CN Brain, China Mobile has developed the BaiChuan computing force grid platform, in collaboration with National Supercomputing Centers and leading industry cloud vendors. This effort integrates a broad spectrum of societal computility, including general-purpose computing, AI computing, supercomputing, and quantum computility, amounting to a total capacity of over 3.3 EFLOPS.

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#### Promoting the construction of backbone networks, and accelerating the realization of convenient ubiquitous computility services

The Company increased the deployment of 200G and above optical transport network (OTN) systems in the inter-provincial backbone transport network, and built the world's first large-scale inter-provincial backbone 400G OTN network, which covers 86% of regional/provincial data centers.

#### Minute-Level Presentation

Offers a minute-level granular panoramic view of computility, storage capacity, transport capacity, and capabilities, including both China Mobile's own computing resources across all 31 provinces, autonomous regions and directly-administered municipalities of the country and societal computing resources.

#### Minute-Level Resource Scheduling

Achieved minute-level activation, billing, and scaling of CN resources, innovating task-oriented services such as express data delivery. By the end of 2023, nearly ten million resources were scheduled between the East and West every minute.

#### Minute-Level Task-Oriented Application Development

Developers can easily utilize over 2,100 atomic capabilities made available by the CN Brain and develop an "Eastern Data and Western Computing" application within 10 minutes.

# **Developing an Open and Shared Integration Platform**

The integration platform is an innovative digital infrastructure that organically integrates data and technology elements to intelligently and efficiently serve business needs. Internally, the integration platform reduces costs, increases efficiency, and enhances quality, creating a positive cycle among internal resources, product services, and user demands. It injects intelligence into various aspects of production, operation, management, and service. Externally, it facilitates cooperation, mutual benefits, and intelligence empowerment, supporting social–wide, multidimensional data collection, big data analysis, and real–time data processing in society, thereby accelerating the digital–intelligent transformation of the economy and the society.

China Mobile has pooled high-quality internal and external capabilities and high-value data, leveraged its resources and integrated its high-quality capabilities in areas such as big data, artificial intelligence and blockchain that have been developed over the years. This consolidates into a unified capability view, establishing an open "Ability as a Service" (AaaS) integration platform service system unique to China Mobile.

#### Innovating the Creation of a New Infrastructure for the Integration Platform

By the end of 2023, the AaaS integration platform has launched over 1,000 capabilities in a variety of fields, including basic telecommunications, big data, artificial intelligence, security, and high-precision positioning. In 2023, it responded to more than 580.71 billion calls from both internal and external users, continuously bringing efficiency and benefits of innovation across the society.



## Building the "Jiutian" General + Industry Large Model System

Artificial Intelligence (AI) technology is becoming a key driver of social and economic development nowadays, playing a vital role in enhancing production efficiency, driving technological innovation, and optimizing resource allocation. China Mobile has boldly taken on the responsibility of developing strategic new AI industries. Its layout in the field of AI began in 2013 with the establishment of the "Jiutian" AI team at the China Mobile Research Institute, focusing on breakthroughs in AI applications such as intelligent customer service and big data analysis.

A decade of dedication has yielded fruitful results. In 2023, centered around the original systematic AI technology system, China Mobile has constructed a comprehensive general + industry large model system, achieving full–chain core technology control and independent innovation in the domain of large model.

#### General Large Model

- Highlight

Developed the Jiutian general–purpose foundational language large model suitable for a wide range of scenarios, with training data exceeding two trillion Tokens. It integrates specialized knowledge from eight major industries, including telecommunications, energy, steel, construction and transportation, featuring supply–side enhancement, continuous training, security and controllability, and flexible deployment across cloud, edge, and terminal environments. In 2023, based on the Jiutian general language foundational large model, the "Jiutian · Zhongqing Base Large Model" was launched with the support from several leading and key enterprises.



#### Industry Large Models

Developed over 20 industry-specific large models, including Jiutian · Customer Service, Jiutian · HaiSuan Government Affairs, Jiutian · Network, Jiutian · Enterprise Communication, and Jiutian · Chuanliu Travel. Some of these models have already been applied in commercial use such as digital government and customer service.



#### \* Establishing an Integrated and Open "Capability Supermarket"

To foster better integration and sharing on the integration platform, China Mobile leverages "AI+" to integrate production elements across the platform, and continuously enhances the level of intelligence and creativity of its capabilities. It has established a "Capability Supermarket" as a one-stop entrance to a suite of services, including "Efficient + Intelligent" capability guidance, service subscription, cooperation and exchange, and a "Central Kitchen" sharing model, all in a "what-you-see-is-what-you-get" experience.

The "Central Kitchen" caters for developers and users, enabling a one-stop capability application service system that offers unified packaging and flexible utilization of capabilities through the approach of "setting up the kitchen, preparing the kitchenware, and gathering ingredients". Furthermore, it empowers partners to use capabilities more freely and create rich applications with higher quality and efficiency.



# Constructing a Cutting–Edge and Leading Sci–Tech Innovation Highland

China Mobile has stepped up as a pivotal force in turning China into a technologically advanced nation. By leading the way in developing a modern industrial ecosystem, it has fostered a collaborative environment that encourages various innovators within the industry to work together towards common goals. This collective effort is crucial in propelling China towards greater technological independence and strength.

## ※ Upgrading to the "Unified Five Rings" Sci-Tech Innovation System

In 2023, the Company continued to refine its science and technology innovation system, upgrading from the "Unified Four Rings" to "Unified Five Rings" overall strategy for scientific and technological innovation. A new international cooperation sphere was added to further strengthen open cooperation with the international industry, adopting an open-minded approach to technical exchanges and joint problem-solving.

The Company focuses on fostering a strong culture of scientific and technological innovation, aiming to set a benchmark as a leading enterprise science and technology association. By the end of 2023, it established 43 sci-tech association branches, 11 sci-tech association divisions, and 4 sci-tech association zones, with over 200,000 members. Additionally, it organized 530 Sci-Technology Workers' Day, Sci-Technology Week, and other activities, reaching over 7 million people both online and offline.

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#### Upgrading the "10<sup>1</sup>-10<sup>2</sup>-10<sup>3</sup>-10<sup>4</sup>" Partnership Initiative

To further promote chain strengthening, supplementation, enhancement, and shaping, and to accelerate the construction of a cooperative and win–win industrial chain community, in 2023, the Company upgraded the "10<sup>1</sup>–10<sup>2</sup>–10<sup>3</sup>–10<sup>4</sup>" partnership initiative to help improve the country's industrial basic capabilities and modernization levels.

Jointly promote the upgrade to industrial layout to accumulate developmental potential. Strengthen industrial layout, focus on expanding sub-chains such as artificial intelligence, security, vehicular networks, and the metaverse; establish an international chain working group, strengthen the Global TDD Initiative (GTI) international industrial cooperation platform, "import" international industrial capabilities and innovations, and drive the global expansion of "10<sup>1</sup>-10<sup>2</sup>-10<sup>3</sup>-10<sup>4</sup>" partners.

Jointly promote the upgrades to resources allocation to boost development. Set up a special research budget for strategic emerging industries, advance breakthroughs in innovative technologies; increase investment in digital infrastructure and promote the common development of the industrial chain.

Jointly promote the upgrades to industry-investment coordination to enhance development efficiency. Focusing on strategic emerging industries, core technologies and key links, promote the specialized integration of the industrial chain through equity investment; providing favorable services by upgrading special industrial chain financial products for " $10^1 - 10^2 - 10^3 - 10^4$ " partners.

Jointly promote the upgrades to base facilities to gather development force. Accelerate the implementation of the 1+3+N<sup>1</sup> collaborative innovation base planning and layout, expand the China Mobile International Information Port main node to the Yangtze River Delta, Chengdu–Chongqing and Guangdong–Hong Kong–Macao Greater Bay Area regional nodes, layout provincial center battlefields nationwide, and fully support upstream and downstream R&D cooperation, innovation incubation and cluster–building along the industrial chain.

By the end of 2023, the "10<sup>1</sup>-10<sup>2</sup>-10<sup>3</sup>-10<sup>4</sup>" partnership initiative had gathered more than 1,300 chain–linked enterprises and formed a new industrial cooperation pattern led by central enterprises with wide participation from large, medium and small enterprises, and a cooperative and win–win industrial chain community began to take shape; laid out 14 sub–chains such as mobile communications and computility networks, distilled 99 key common industry–demands such as integrated sensing, storage–computing integration and Beidou integrated positioning; innovated "geese flying" collaborative problem–solving mode, forming 102 squads, achieving a series of breakthroughs; leading 5G technology evolution, tackling computility routing, hollow core fibers and other original technologies, achieving multiple industry firsts.

1. The 1+3+N collaborative innovation base planning and layout includes "1" Beijing International Information Port central main node, "3" Yangtze River Delta, Chengdu– Chongqing and Guangdong–Hong Kong–Macao Greater Bay Area regional center sub–nodes and "N" provincial company battlefields.

#### \* Launching the "BASIC6" Sci-Tech Innovation Plan

The Company positions sci-tech innovation as a key lever for building core competitiveness and enhancing its essential capabilities. It has launched the "BASIC6" Sci-Tech Innovation Plan targeting six strategic areas to accelerate the growth of strategic emerging industry clusters.



#### Leading the 6G Innovation System

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In 2023, the Company systematically accelerated 6G research and development, hastening the creation of original technology source for the next generation 6G mobile services.

Actively Integrating into the National 6G Innovation System: The Company undertook the significant responsibility of being the future industry and next– generation mobile communication technology originator for 6G, holding various leadership positions in the IMT–2030 (6G) promotion group, and being the enterprise with the highest number of leadership roles in the "National Key R&D Program" related to 6G.

**Breakthroughs in Core Technologies:** The Company made significant contributions to the 6G framework proposal by the International Telecommunication Union (ITU) and the Next Generation Mobile Networks (NGMN) 6G position statement; tackling more than 10 key technologies including novel network architectures and integrated communication perception, and proposing the world's first systematic 6G network architecture. The "Air Interface AI Theory and Technology" was recognized as one of the top ten major technological advancements in the field of information and communication by the China Institute of Communications in 2022; jointly released over 10 prototype samples, with patents, papers, and other 6G innovative achievements ranking among the top global operators.

Enhancing Collaborative Innovation: In partnership with state-owned enterprises and industry-academia-research collaborators, we have developed a crowdsourced, open 6G sensory computing fusion (crowd-sourced) R&D test apparatus. The released version 1.0 has established over 30 open capabilities, attracting 24 "crowd-sourced" partners to join our team. We have constructed a "8+2+1+1" systematic 6G collaborative innovation base, infrastructure, and experimental environment, including 8 technology R&D labs, 2 sets of infrastructure environments, 1 end-to-end testing system, and 1 globally leading 6G test network. This setup provides crucial scientific experimental devices and end-to-end network connectivity capabilities, collaborates with partners across the industrial chain, and fosters an independent and controllable 6G industry and application ecosystem.

#### Leading the Deployment of Integrated Space-Air-Ground Networks

The integrated space-air-ground network is a crucial component of the intelligent comprehensive digital information infrastructure, with Non-Terrestrial Networks (NTN) representing a hallmark technology of 5G-Advanced (5G-A) and a foundational technology for the 6G architecture. In 2023, the Company made continuous contributions in the field of integrated space-air-ground technology, achieving several global firsts.

Low Earth Orbit (LEO) Satellite Internet: Developed the world's first satellite base station prototype system based on the 3GPP R17 NR NTN international standard and the world's first satellite 5G-A core network prototype system, "Xingyuan", laying the groundwork for the world's first integrated space-ground on-orbit validation system. Completed the world's first mobile direct-to-satellite broadband trial and the world's first satellite core network for mobile direct-to-satellite broadband trial and the world's first integrability trial between a real low-orbit broadband satellite and a terrestrial commercial 5G network.

High-Throughput Satellite (HTS) Internet in Geostationary Orbit: Carried out China's first 5G satellite backhaul trial and validation test based on a domestically developed satellite baseband system and a vehicular high-throughput phased array antenna, marking significant advancements in high-orbit satellite internet technology.

## Highlight

#### Development of China's First Reconfigurable 5G RF Transceiver Chip "Pofeng 8676"

In 2023, leveraging our leading R&D capabilities and our accumulated strengths in network technology, China Mobile collaborated with equipment manufacturers and chip design companies to develop China's first reconfigurable 5G RF (Radio Frequency) transceiver chip— "Pofeng 8676".

RF transceiver chips serve as translators between radio waves and digital signals and are key components in 5G network equipment. The research and development of RF transceiver chip is technically challenging while there is a significant and urgent demand for such chips in the industry, so it is also called as the "pearl" of 5G base stations. In 2021, the Company established a joint laboratory for chip R&D with partners. By undergoing research and development in chip design, system integration, and network application in parallel instead of progressing in a traditional, sequential manner, the Company has halved the time required for chip–to–system adaptation, and also accelerated system integration, and network application to chip R&D and chip deployment. By the end of 2023, the "Pofeng 8676" chip had been integrated into equipment of several partners, filling the gap in the domestic RF transceiver chip sector and significantly enhancing the autonomy and controllability of China's core 5G network equipment.



# **Empowering a Digital-Intelligent Future**

China Mobile innovatively constructs a new information services system of "connectivity + computility + capabilities", continuously enriches digital-intelligent applications for production, life, and governance settings, produces outstanding products, innovates business models, showcases their applications, expands its scope of friends, establishes a strong barrier for secure development, deeply integrating information services across various industries and serving the public.

# Supporting Digital-Intelligent in Production

China Mobile is committed to driving the digital-intelligent transformation of all sectors of the economy, stimulating enterprises' innovation and integrated development, and supporting the creation of a new wave of industrialization characterized by the integration of digital and physical realms, thereby strengthening and enlarging the real economy. In 2023, the Company continued to promote its self-developed 9 one Platforms, which consolidated key scenario capabilities to offer comprehensive solutions for industries, one-stop empowerment for partners and providing integrated delivery for customers.



#### SG Smart Ports

Ports are crucial hubs for modern transportation. Leveraging 5G networks, high-precision positioning, and vehicle-road coordination technologies, the Company focuses on scenarios such as 5G port machinery remote control, smart tallying, unmanned horizontal transportation, and the informatization of port waterways to empower the digital transformation and upgrade of smart ports. By the end of 2023, the Company has helped with building **39** internationally-advanced 5G smart ports across **13 provinces**, **autonomous regions**, and **directly-administered municipalities**.

#### Supporting the Construction of an Innovative Smart Port Showcase at Meishan Port Area, Zhoushan Port in Zhejiang

The Ningbo–Zhoushan Port, connecting over 600 ports in more than 190 countries and regions, is an important comprehensive transportation hub on China's southeast coast. In 2023, the Company supported the Meishan Port Area of Zhoushan Port in upgrading to a 5G smart port. Through the Company's "four ones" 5G upgrade plan, which includes one 'brain' (port control brain), one 'network' (port 5G private network), one 'chain' (remote control of gantry cranes) and one demonstration zone (autonomous driving demonstration zone), enabled innovative applications of 5G such as full data collection from all production equipment and precise remote control of operations. This has reduced waiting times of gantry cranes by 17%, significantly lowered the accident rate, and supported the Meishan Port Area to become the port with the most unmanned container trucks globally. This could translated into over RMB 10 million costs savings per year and provided a replicable 5G+ smart port showcase for the transformation and upgrade of traditional ports around the world.



The Company helps the Meishan Port area of Zhoushan Port to build the smart port innovation benchmark.

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#### SG Smart Factories

The Company is accelerating the application of next-generation information technology in core aspects of production and operations, driving the end-to-end digital transformation of manufacturing processes. This transformation effectively enhances operational efficiency, reduces production and maintenance costs, and ensures production safety. In 2023, the Company promoted an upgrade of 5G to be more user-friendly and reliable, by setting-up specialized networks for offices, production, and industrial parks, as well as industry-specific networks to meet the demands for ultra-low latency, ultra-low jitter and ultra-high reliability networks in areas such as smart manufacturing. The OnePower Industrial Internet Platform was upgraded to offer services such as industrial learning and computation, industrial code generation, and industrial knowledge Q&A, significantly improving the level of intelligence in the contexts of quality inspection, remote monitoring, and scheduling. Leveraging large AI models as a technological foundation, the Company has developed new industrial forms such as 'industrial brains' and 'digital twins', provided more autonomous "self-driving" AI applications and solutions. These innovations facilitate the realization of the mature deployment of futuristic industrial scenarios such as large-scale customized production.

#### Collaborating with the Midea Group to Create

the First "5G Fully-Connected Factory" for Home Appliance Manufacturing

The 5G fully connected factory is an advanced factory that makes full use of the integration of the new generation of information and communication technologies represented by 5G to create a new industrial Internet infrastructure, build or transform production line, workshop, factory and other production sites, and form extensive connectivity of production units, deep integration of information operations, full utilization of data elements, and efficient enabling of innovative applications.

In collaboration with Midea Group, the Company has jointly built the world's largest 5G fully–connected factory at the Midea Group's third largest washing machine production base in Jingzhou, Hubei, achieving full 5G coverage across the entire park, full business 5G connectivity, and full process 5G integration. Based on the high reliability, wide connectivity and low latency characteristics of the 5G specialized network, more than 1,000 automated

machines and equipment in the production workshop operate efficiently, and more than 3,500 5G customer front equipment (CPE) and other terminal equipment can realize "seamlessly connect", eliminating the complicated pipeline in the ordinary workshop. In addition, 5G signals in production equipment allow automated machines to run faster and make the production environment safer and more convenient.

By the end of 2023, the Midea factory in Jingzhou produces a washing machine every 10 seconds, with the direct shipment rate after production doubling, inventory decreasing by 50%, per–unit labor cost reducing by 30%, achieving the development goals of improving quality, reducing cost, enhancing efficiency, becoming more environmentally friendly, and ensuring safety. It has become the most advanced and largest–scale 5G fully connected factory in the domestic appliance industry.



5G Fully-Connected Factory in the factory of Midea Group, Jingzhou, Hubei.

#### Building the World's First P-IoT Model Factory in Shandong

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In 2023, in collaboration with partners, the Company established the **world's first model factory under an innovative project based on the Passive Internet** of Things (P-IoT) at the Haier's Sino-German Washing Machine Factory in Qingdao. By deploying P-IoT front ends and P-IoT tags, it has achieved fulltransparency management in business scenarios such as automatic stock-takes as materials enter and leave the warehouse, locating materials in warehouse, automatic stock-takes for production line supplies and container location tracking.

#### Building the First 5G Smart Factory in the Domestic Electrolytic Aluminum Industry

The Company integrates advanced technologies such as 5G, cloud computing, big data, and artificial intelligence, and through the 5G+POL dual gigabit private network, it has built an intelligent production and control industrial Internet platform for the Qingtongxia Aluminum Industry Branch of the National Power Investment Corporation Aluminum & Power Company (referred to as "Qing Aluminum Branch") located in Ningxia. In August 2023, the control center of Qing Aluminum Branch officially began operations, becoming **the first 5G smart factory in the domestic electrolytic aluminum industry**. In the 5G smart factory of Qing Aluminum Branch, information technology not only connects the entire production and operation process, realizing interconnectivity from design, production to sales, but also reduces manual intervention in the production line, improves the controllability and safety of the production process, and pioneers a new pattern of digital and intelligent development in the aluminum industry.

#### ※ 5G Internet of Vehicles

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The Internet of Vehicles (IoV) is an emerging industry formed by the deep integration of the automobile, electronics, information communication, and road transportation sectors, applying cutting–edge technologies such as 5G, artificial intelligence, big data, cloud computing, and blockchain. The Company is the only communication operator enterprise for the construction of a powerful transportation country approved by the Ministry of Transport. In 2023, the Company actively deployed end–to–end technology and product systems for the Internet of Vehicles, conducted research and verification of key 5G IoV technologies, and developed the "Internet of Vehicles Intelligent Connected Management Platform" to assist car companies in achieving capabilities such as connection + information services + real–name registration, striving to become the "leading provider of toV information services." By the end of 2023, it had interfaced with over 80 car companies, with an average monthly call volume of 1 billion times, and the number of IoV connections had a net increase of more than 13 million for the year.

#### Accelerating the Commercial Deployment of 5G Internet of Vehicles

Vehicle-Road Collaboration (VRC) is a key direction in the development of intelligent transportation. By using advanced communication, sensors, computer technology, etc., it achieves comprehensive interconnectivity between people, vehicles, and roads, providing strong support for enhancing traffic operational

efficiency, improving traffic safety, and increasing road usage efficiency. In 2023, to accelerate the commercial deployment of 5G Internet of Vehicles, the Company, in partnership with equipment manufacturers, completed the country's first large–scale verification of 5G Uu Internet of Vehicles, using 5G to transmit roadside and vehicle–side information. The test results show that 5G's latency, reliability, and rate are sufficient to support typical Internet of Vehicles business scenarios. In collaboration with industry partners, the Company conducted commercial application practices of autonomous driving unmanned delivery based on 5G+AI cloud–edge–end computing network collaboration in Beijing Yizhuang, shortening the AI development cycle from weeks to days, and increasing the operational speed of unmanned vehicles from 15 km/h to 25 km/h. The company participated in the construction of 4 national–level Internet of Vehicles pilot zones, 10 "Dual Smart" pilot cities (pilot cities for the collaborative development of smart city infrastructure and intelligent connected vehicles), promoted the establishment of 35 types of standards for vehicle–road collaboration, and filed 32 national patents.



China Mobile, in collaboration with partners, constructed the world's first 5G–A Internet of Vehicles demonstration route.

#### World's First Integration of 5G+BeiDou for Precise Navigation in Chongqing's Jiefangbei Underground Loop

Chongqing's Jiefangbei Underground Loop is the world's first mega underground loop traffic project in a central urban area, which is described as having a "magical 8D traffic" for its intricate layout. Leveraging its **world's most extensive**, widest coverage and most cutting-edge "5G+BeiDou" highprecision positioning system, the Company pioneered an indoor-outdoor seamless positioning and navigation system, offering pinpoint accuracy just like above-ground to drivers while underground, to address their common navigation difficulties, whether it be getting lost or missing the right exit. By the end of 2023, the daily traffic volume in the Jiefangbei underground tunnel increased from 2,000 to 12,000, and the indoor-outdoor seamless positioning and navigation system has vastly improved the efficiency of the underground loop.

#### ※ Digital-Intelligent Transformation of SMEs

The Company is committed to fostering the innovative development of micro-, small- and medium-sized enterprises (MSMEs), by utilizing our extensive resources to promote their digital transformation and upgrade, and to help them reduce burdens, improve quality and efficiency, and enhance market competitiveness.

Cutting Operational Expenses for SMEs: The Company offers discounts to reduce their telecommunication costs in operations. In 2023, there was a notable 35.08% year-on-year decrease in average business dedicated line tariff and a 25.76% decrease in average business broadband tariff, with a cumulative concession of RMB 1,408 million.

Offering Integrated Product Packages: The Company Strengthened the integration of business broadband, cloud and innovative products and rolled out 11 million integrated product packages in 2023, providing information services to over 27 million MSMEs and improving their corporate governance.

## Launching Support for Small and Micro Enterprises through the "Hello Small and Micro Enterprises, Let's Go Together" Campaign

The Company, in partnership with the Zhejiang Provincial Department of Economy and Information Technology, rolled out the "Hello Small and Micro Enterprises, Let's Go Together" campaign throughout the province. This initiative sought to empower the high–quality development of MSMEs through ecological collaboration, platform–centric services, widespread support and digital–intelligent empowerment.

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# Enriching a Digital-Intelligent Life

China Mobile focuses on digital consumer needs, actively leverages the efficacy of the next-generation information technology, strengthens integrated operations, and continually enhances customers' sense of acquisition, happiness, and security.

#### ※ Innovating Digital-Intelligent Product Services

In 2023, the Company upgraded distinctive products such as MIGU Video, Mobile Cloud Disk, Cloud Gaming, and Super SIM, offering a rich, diverse and high–quality selection for digital–intelligent consumption.

#### MIGU Video -

The Leading Platform for Sports Live Broadcasting

On the basis of providing a vast array of high-quality content including movies, variety shows, short videos, and live streams, MIGU Video continues to push forward with live broadcasts of top domestic and international sporting events, innovatively applying multiple leading video technologies and assembling a luxurious "live broadcast supergroup". It brings a "visual feast" of exciting events to users both in China and abroad, becoming **the preferred platform for ultra-high definition viewing**. In 2023, focusing on the "four competitions, five alls" <sup>1</sup> content strategy, it developed immersive ultra-high definition audio and video original technologies, achieving 5G service quality (QoS) acceleration, commercialization of the third-generation audio and video coding and decoding technology standards (AVS3), three-dimensional Audio Vivid, ultra-high definition capabilities, and Vivid HDR imaging commercial use. The event delay time was improved to 6 seconds, reaching **an industry-leading level**.



#### Super SIM Card — Enhancing Information Reach

Compared to the ordinary SIM cards, Super SIM cards have greater storage capacity, more complex encryption algorithms, and can handle more applications and functions. Based on the core capabilities of Super SIM cards, it independently innovated the differentiated "mustreach" notification service with "priority display, prominent reminder, read receipt and interaction", which is widely used in emergency, disaster relief, public governance, and other fields. By the end of 2023, Super SIM cardholders reached **105 million**, with over **20 million** monthly active users, among which core scenario active user count reached **8.67 million**.

#### MIGU Quick Game — Enjoying 5G Cloud Gaming

MIGU Quick Game is a forward-looking, new type of competitive interactive entertainment platform built on the "5G+Cloud+Edge Computing" capabilities. It integrates functions such as edge node resource activation, game resource allocation, game cloudification, video stream encoding and decoding, and game portal generation. It has become the cloud gaming platform with the richest content, the most comprehensive scenarios, and the largest user base in China. In 2023, in collaboration with partners, it launched the world's first glasses-free 3D cloud gaming solution. Based on artificial intelligence + glasses-free 3D technology, it created the MIGU Quick Game 3D version, allowing users not only to play premium cloud games in 3D but also to watch game live broadcasts in glasses-free 3D, bringing a new multi-dimensional integrated experience to users. By the end of 2023, it had launched over **2,200** premium cloud games and had a full-scenario monthly active user base of **117 million**.

#### China Mobile Cloud Disk — Smart Life and Office Assistant

Based on the Company's technological capabilities, China Mobile Cloud Disk offers users a secure, intelligent, mobile data-free personal cloud storage services with no speed cap. In 2023, utilizing network intelligent segmentation technology, it achieved a 100% real-scenario transmission success rate, with a 66% increase in transmission speed; launched an AI zone and AI tools such as "Picture to Cartoon", "Old Photo Restoration" and "Picture Caption Generation"; launched mounted disks, addressing users' space anxiety.

China Mobile Cloud Disk's all-scenario active user base reached



 Four Competitions refer to the 2023 FIFA Women's World Cup, the 2023 FIBA Basketball World Cup, the 31st FISU Summer World University Games in Chengdu, and the 19th Asian Games and Asian Para Games in Hangzhou; "Five Alls" mean covering all age groups, all genders, full–day, all CHBN (customer, home, business, new) market, full–scenario and all–form.

Video Ringback Tone -New 5G Calls -New Ways to Make Calls on 5G "Speak Face to Face" Video Ringback Tone is China Mobile's innovative service. It integrates Using Enhanced Voice Services (EVS) codec technology, it creates voice calls, social attributes, short videos, music, and other diverse ultra-clear audio and video call services characterized by "ultraelements to provide users with a new audio-visual experience, and has clear picture quality, stereo voice and authentic sound". Compared become a "golden window" to display personal and enterprise image. to traditional calls, new 5G calls are more stable and not interrupted In 2023, the world's first international standard for video ringback tones by incoming calls. Additionally, new 5G calls offer audio and video led by China Mobile MIGU was approved by the ITU Telecommunication Al processing capabilities, enabling intelligent translation, fun calls, Standardization Sector (ITU-T). In addition, the Company provides oneinteractive ringback tones and other value-added applications based stop copyright protection services for original online works with its 5G on video calls on existing terminals. By the end of 2023, new 5G calls have been launched for trial in 30 provinces (autonomous regions and video ringback tone rights confirmation capability. The Video Ringback Tone Overseas initiative also opens up new imaginative space of directly-administered municipalities), bringing a new calling experience imagination for global 5G calls users. to more than 3 million users. 50 0#0# Total Video Ringback Tone users 402 million Cloud Computing Terminal -**Expanding Terminal Capabilities** ......... Leveraging its rich resources, China Mobile has created thin terminal products with cloud computility, such as cloud phones, cloud computers, mobile cloud The annual play volume of HD, and fat terminal products with terminal computility as the main feature. Video Ringback Tone 让诵话前的等待充满期待 such as prosperous computility hosts, home computility hosts. Combined with 中国移动视频影铃 236.504 the integrated computility package of connection + capabilities + applications, it

#### Innovative Tech at the Asian Games Delivers a Visual Spectacle

billion times

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China Mobile MIGU, as the official broadcaster for the 19th Asian Games and Asian Para Games in Hangzhou, is dedicated to offering audiences superior ultra-HD viewing experiences for live competitions. Utilizing the latest in the third-generation audio and video coding standard (AVS3) across both MIGU Video and its Love to Watch platform, it has established dedicated zones for both on-demand content and live broadcasts. It optimizes the automatic metadata generation algorithm of Vivid High Dynamic Range (HDR Vivid) to significantly improve the portrayal of bright and dark details and mitigate common issues like highlight blowouts and lost shadows. It elevates the ultra-HD video experience on MIGU Video and providing a clear and vivid visual feast for audiences.



provides users with flexible configuration, freely combinable cloud, computing,

and terminal integrated services.

Third–Generation Audio and Video Coding and Decoding Technology Standard (AVS3) + Vivid High Dynamic Range Imaging (HDR Vivid) Video Effects.

#### Boosting High-Quality Content by Investing in Phoenix Media

Jiangsu Phoenix Publishing & Media Corporation Limited, known as Phoenix Media, stands as one of the country's most influential and largest publishers and distributors. In 2023, with an investment of around 2 billion yuan, the Company became the second–largest stakeholder in Phoenix Media. This investment, a strategic partnership, aligns with the "National Digitalization Agenda for Culture", aiming to advance the digital transformation of culture and education sectors. Together, we are committed to offering an expanded range of digital cultural and innovative educational services to our users.

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#### ※ Elevating Customer Brand Engagement

The Company deeply analyzes the differentiated needs of various customer groups, deepens the integrated operations of "connection+application+rights", and launches the "Mobile Love Homes" customer brand to enrich the digital experience of the customer brand. By the end of 2023, there were **330 million** customers integrated with rights, with a net increase of **42.76 million** customers.

The "China Mobile" brand was selected for the **18th consecutive year** in the "**Brand Finance Global Top 500 Most Valuable Brands**" ranking published by the *Financial Times*, ranking **32nd** in the global overall list and **4th** among operators. China Mobile ranked **fifth** in the "BrandZ Top 100 Most Valuable Chinese Brands" list.

Key Offerings: Premier Travel Experiences, Exclusive Privileges, and Services



#### 2023 Highlights:

The Company has enhanced the GoTone Premier Service Loyalty Program, introducing a suite of additional travel incentives for our customers. These benefits include discounts on international flights, hotels, tickets and car rentals, international roaming packages, covering the whole value chain of travel scenes (transport, accommodation, play and daily usage), and providing a one-step premium travel experience. By the end of 2023, the service boasted **5.5254 million users** and provided over **10.386 million** travel-related services. Furthermore, the Company has launched Marathon Privileges for seven elite marathon events, including offline competition quotas, on-site customized services, and 5G application benefits, to encourage more users to engage in fitness activities. **Key Offerings:** Happy Filial Card and Delivery Riders Card by EasyOwn



#### 2023 Highlights:

Tailoring the offerings to meet the unique needs of the general public customers, the Company introduced the Happy Filial Cards and Delivery Rider Cards, complemented by the Elderly Guard and Delivery Riders Guard initiatives. For the elderly, the Company has rolled out a suite of services designed to ensure comfort and ease, including products made with care, educational initiatives for the public good, thoughtful gift packages, senior-friendly online services, and designated rest areas in our outlets. For the delivery riders, the Company has provided a benefit package that includes helmet, battery, insurance, and enjoyment of membership perks, all to honor the protectors of cities. By the end of 2023, the EasyOwn brand celebrated a significant growth to **17.9331** million subscribers, with an increase of **65.06%** year-on-year, including **8.4772 million** Happy Filial Card holders and **2.4601 million** Delivery Rider Card users.

Key Offerings: M–Zone Mango Card, M–Zone Trendy Play Card, M–Zone Cute Card



#### 2023 Highlights:

Embracing the Intelligent Trend vibe, the Company innovated a fresh product strategy encapsulating Content, IP, Network, and Applications with the introduction of the M–Zone Mango Card, integrated multiple entertainment resources and full–scenario customized rights, produced collaborative discount tariff products, and provided young customers with an immersive experience. By the end of 2023, the M–Zone Mango Card had reached an impressive order tally of **11.4674 million**, achieving standout product status. The Company also actively engaged in niche activities centered around music, street dance, and esports, marking the brand's 20th anniversary with standout events like the M–Zone Music Festival, M–Zone Street Dance Celebration, and M–Zone Esports Extravaganza. Nationwide, more than 100 Campus 5G Pioneer Matches and China Street Dance League Campus Tournaments were organized, drawing in **over 70 million** participants.

Key Offerings: Mobile Gigabit Broadband, Mobile Family Wi–Fi, Integrated Home Intelligence, High–Definition Mobile Services, Mobile Home Security, and Mobile Health Solutions



#### 2023 Highlights:

The Company has introduced the All–Gigabit + Cloud–Based Lifestyle as a novel paradigm for smart home living, offering Connected – TV – Lifestyle as our core product trio aimed at creating fast, smart, and expertly tailored home living environments. By the end of 2023, there was a notable uptick in our smart networking capabilities, with an increase of **36.245 million**, Mobile Home Monitor subscriptions rose by **16.2166 million**, and voice remote control adoption surged by **25.124 million**, driving our total

family IoT connections to **492 million**.



### ※ Dedicating to "Heartwarming Service"

Under the guiding principle of earning customer trust through superior quality encapsulated in our "Heartwarming Service" initiative, the Company has dedicated ourselves to creating an all-encompassing service system that involves a "Three-All" (all-round, all-process and all-staff) suite of services. Our goal is to ensure the services are smart and personalized, fast and convenient, transparent in terms of consumption information. By the end of 2023, our overall customer satisfaction and complaint rate had led the industry for five consecutive guarters.



#### Launching the 86 NEXT Advanced Service Portal



By the end of 2023, the proportion of intelligent services reached **38.06%**, and the first-call resolution rate of the 10086 hotline increased by 1.14 percentage points compared to the beginning of the year.

#### "Five-Ones" Strategy for Enhancing Service Experience



#### Expanding the Da Yin Platform's Reach

Focusing on the three major scenarios of unaware auditing, complaint early warning processing, and insight and prediction care, digital employees were piloted in 11 provinces, autonomous regions, directly–administered municipalities companies, achieving the capabilities of automatic handling of appeal results and automatic analysis of work order quality inspection reports.

Built a model for low satisfaction in service halls, and optimize and upgrade the complaint prediction model. Constructed a service tag integration system, with the service tag's monthly average call volume reaching **754 million** by the end of 2023, a **45.37%** increase year–on–year.

Supported the efficient operation of service quality closed–loop improvement mechanisms such as "Complaint Resolution, Immediate Evaluation after Use, Listening to Storefront and Frontline Feedback", and implement the "Monitoring and Early Warning, Traceability and Rectification, Supervision and Accountability" mechanisms for complaint resolution. The complaint responsibility rate of 10080 has decreased by **6.94 percentage points** year–on–year, with the "Immediate Evaluation after Use" reaching an average of **330 million** customers per month.

#### Attentively Listening to Customer Feedback

Enriching Evaluation Methods: Improving five types of evaluation methods, carrying out customer perception evaluation regularly through telephone evaluation, post–use evaluation, experience test, use measurement and etc., covering more than 260 CHBN (customer market, home market, business market, new market) scenarios, and set more than 4,000 monitoring indicators to achieve larger amount, more accurate, more timely and deeper customer perception. By the end of 2023, the Listen in the Store campaign involved 129,300 participants, with 38,100 suggestions made and a 97.40% completion rate of optimizations.

Enhancing Evaluation Applications: Focusing on marketing promotion, network quality improvement, product experience improvement and other key directions, strengthen the application of results, linking Da Yin platform and related production and operation systems, achieving full real-time transparent transmission of evaluation data after use; the post-use evaluation data will be deeply integrated into the production operation and management process to promote the closed-loop optimization of core shortages, and promote the continuous improvement of service quality. The satisfaction of the main contact channels such as the business hall and 10086 hotline has **remained above 90**, while the satisfaction of network quality and product quality has **continued to improve**.

#### **Protecting Customer Rights**

Oriented by satisfying customer communication service needs, marketing activities are pre-audited according to layered and tiered management principles. By the end of 2023, **33,300** marketing services were reviewed, and full review and one-vote veto were strictly implemented.

Continued to promote the "Sunshine Action", through measures like weekly reports, monthly warning lists, and quarterly bulletins, to normalize the monitoring, analysis, and verification of business subscription dispute complaints, introducing new features such as real-time triggered task orders to enhance monitoring response efficiency. By the end of 2023, the complaint rate of business subscription dispute complaints decreased by **18.84%** from a low base.

By the end of 2023, the complaint rates for the four focus issues of unsuccessful business transactions, unclear promotions, questioned charges, and network problems decreased by 59.41% compared to the beginning of the year.

# **Promoting Digital-Intelligent Governance**

China Mobile, leveraging its information infrastructure that spans provincial, municipal, county, township, and village levels, along with massive, real-time, multidimensional data resources, strengthens application innovation in areas such as digital government, smart cities, and smart communities. This initiative empowers government management, social governance, and the improvement of people's livelihoods with intelligence.

#### Serving Digital Government Construction

The Company has established a five-horizontal and "Five Horizontal and Five Vertical" Product Capability Layout for digital government, released a digital government capability construction map, held the first Digital Government Construction Forum, and during the China Mobile Worldwide Partner Conference, hosted the inaugural ToG sub-forum. These efforts comprehensively enhance the one-stop, full-process information service capabilities aimed at digital government. By the end of 2023, the Company has provided government information services to more than 300 cities in **31** provinces, autonomous regions, directly-administered municipalities, with over **1,800** information technology project construction cases, providing strong support for advancing the modernization of the national governance system and governance capabilities.

#### China Mobile's Digital Government "Five Horizontal and Five Vertical" Product Capability Layout



#### Setting Top Domestic Benchmarks to Forge Heilongjiang's Six Best Service Brand

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In response to the Heilongjiang Provincial Government's challenges, including disparate standards, significant data barriers, limited support capabilities, low digital literacy, and duplicative construction, the Company launched a project in September 2022 to elevate Heilongjiang's digital government framework. This initiative streamlined government interactions by over 50%, leveraging data interoperability and electronic documentation to notably reduce processes, paperwork, wait times, and the need for in–person visits. By the end of 2023, 30 systems had been put into trial operation, propelled Heilongjiang towards establishing a standout service brand for both businesses and residents, marked by the most streamlined operations, minimal paperwork, fastest processing, least expense, greatest ease, and utmost satisfaction.

#### "

I just planned to ask about transferring my electricity meter at the service office today and brought no documents. I was amazed that a facial scan was all it took to handle my request—what a convenience!

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-Mr. Ll, Raohe Town, Raohe County, Heilongjiang

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#### Advancing Gansu's Digital Government to Streamline Public and Business Services

Following the *Strategic Cooperation Framework Agreement on Digital Government Construction* with Gansu's provincial government in 2021, the Company spearheaded the development of the comprehensive "12345+N" digital governance framework. This initiative meticulously catalogued over a million administrative services throughout Gansu, ensuring consistent processing and standard procedures across the province. By October 2023, the successful completion and acceptance of 50 provincial digital government projects significantly advanced Gansu's ambition to establish a "leading in mid–west, first–class in nation" digital government. This effort significantly contributes to making government decision–making more scientific, administrative operations more efficient, public services more accessible, and social governance more precise.







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Hefei's 12345 government service hotline aspires to ensure every case is acknowledged, every issue resolved. Leveraging China Mobile's Panjiang digital workforce, cloud customer service, and smart training capabilities, we've successfully interconnected AI– driven service, human interaction, and an extensive data knowledge base. This synergy guarantees quicker call handling, more precise task allocation, and more substantial resolutions.

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#### Innovating Baoding's Government Services

To advance the construction of Digital Baoding, the Company focused on reengineering the governmental service processes for 107 high–frequency, cross– departmental matters, implementing cross–departmental, cross–level, and cross–regional service process reengineering. This effort led to the full process online handling of 645 municipal–level and 15,757 county–level governmental service items, increasing the rate of complete online processing to 99%. At the same time, supporting the 12345 complaint and request handling system to achieve one–number acceptance, one–platform processing, and one–network supervision, the response rate to complaints was increased to 99%, successfully aiding Baoding in creating a new government service brand of "one thing done in one go".

#### ※ Empowering Digitalization of Public Services

The Company actively supports the digital-intelligent transformation in vital livelihood areas such as education, healthcare, and elderly care, promoting the convenience and intelligence of public services, enabling the public to enjoy more detailed, precise, and efficient social public services.

#### Accelerating the Digital-Intelligent Transformation of Education

The Company closely follows the digitalization movement in education, and for ten consecutive years, it has been the only telecommunications operator to undertake the construction of the National Education Resources Cloud Platform, aiding this platform in becoming the world's leading education resources platform. It focuses on creating unique digital and intelligent education applications, using digital transformation to advance the construction of a powerful education nation.

#### 5G Cloud Art Exams: Paving the Way for Art Students' Success

The Company has exclusively partnered with the Ministry of Education's Examination Center to launch a pioneering art exam platform characterized by innovative examreview separation approach. This platform includes smart exam setup, Al-enhanced marking, anomaly warning, and comprehensive data analysis to provide a realistic examination setting.

Working closely with the Ministry of Education's Examination Center, the Company has set four industry benchmarks, including standardized guidelines for art examination hall and scoring, fostering a more regulated and efficient evaluation process.

By the end of 2023, the Company has developed more than **160** examination halls for music, dance and other fields had been built in seven provinces including Sichuan and Hebei, benefiting over **100,000** teachers and students.

#### Digital Student IDs: Simplifying School Life for Primary and Secondary School Students

The Company has developed an extensive digital student ID ecosystem, addressing essential needs such as communication and location services, and extending into digital identity, smart fitness, and transportation applications, impacting over 20 million students.

Participated in drafting the Ministry of Education's Guide to the Application of Student Digital Identities and implemented the first trusted digital identity pilot in Guangdong nationwide, establishing a benchmark in the industry.

By integrating various educational and familial ecosystems, the Company has streamlined the digital student ID supply chain, building an ecosystem of "Hardware Entry + Platform + Applications + Resources" that drives forward industry progress.

#### Cloud Employment: Revolutionizing Job Search for Graduates

The Company has curated an expansive database with over **1.8 million** job listings, leveraging advanced big data and blockchain technologies to offer the largest job pool for campus recruitment.

Introduced AI–powered tools and resources for resume building and interview preparation, tackling the challenge of inadequate employment skills among college graduates.

Built a professional on-campus employment hubs providing an intelligent, convenient, and private written examination and interview environment.

Exclusively cooperated with the Ministry of Education, the Company launched a significant online job matchmaking event, bridging the gap between graduates and potential employers on a large scale.

#### Undertaking the Construction of the Education Metropolitan Network to Improve the Level of Regional Education Informatization

The Company actively participated in the formulation of technical specifications for educational metropolitan area networks and project construction, deploying basic network capabilities for educational metropolitan area networks. By the end of 2023, the Company had completed the construction of a total of 10 sets of educational metropolitan area network core aggregation and security equipment in 8 cities in Guangxi, covering 87 districts and counties, providing high–speed and secure dedicated educational network services to 1 million teachers and students throughout the region.



Guangxi Wanxiu District Educational City Network Achievement Exhibition.

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#### Elevating Healthcare Service Excellence

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Utilizing the OneHealth smart healthcare cloud platform, the Company has crafted a comprehensive 5G smart healthcare suite aimed at boosting the efficiency of medical operations and fulfilling the healthcare needs of the population. This initiative significantly contributes to the *Healthy China initiative* and the development of a superior, efficient healthcare service system.



#### Leading the Way in Transforming Hospitals from "informatization" Towards "Intelligentization"

In 2023, the Company took a significant step by deploying the first 5G medical dedicated network within Hebei province and establishing the nation's inaugural 5G-enabled dual-domain network for healthcare at the First Hospital of Hebei Medical University. Leveraging this advanced network, it developed several 5G-powered solutions, including ambulance services, emergency dispatch, drone-assisted medical deliveries, remote medical consultations, and VR-based remote visitations, setting a new standard in healthcare innovation.

- Securing Critical Time in Emergencies: The 5G-enabled ambulances are equipped with real-time tracking, automatic route optimization for the quickest possible arrival, and predictive time-of-arrival calculations. Additionally, 5G drones extend the reach of medical supplies, ensuring that patients receive hospital-level care the moment they board the ambulance, thus safeguarding their wellbeing during critical moments.
- Elevating Patient Care Experience: The introduction of portable 5G diagnostic tools allows for bedside patient examinations, with results quickly shared with the attending physician in as little as 15 seconds. This technology, combined with the use of 5G for rounds, remote diagnostics, and order management, substantially enhances the efficiency of patient care and treatment processes.



Utilizing the advanced 5G+VR panoramic high-definition camera technologies provided by China Mobile, the First Hospital of Hebei Medical University offers a close-to-live experience for remote visits by family members or healthcare workers, where patient safety permits.

#### Empowering Traditional Chinese Medicine Innovation with 5G

In November 2023, the Company played a crucial role in setting up the pioneering 5G Smart Hospital Innovation Lab at the Changzhou Traditional Chinese Medicine Hospital. This lab introduces patients to advanced treatments and diagnostics through smart healthcare applications such as VR acupuncture, tongue and pulse diagnostic devices, and a comprehensive TCM diagnostic support system. These technologies automate the gathering and intelligent analysis of key diagnostic data like facial expressions, tongue appearance, and pulse, which is then stored in the cloud for easy access. This innovative approach enables specialists to offer direct consultations to patients remotely, overcoming common challenges such as long waits and difficulty in finding qualified practitioners. It's a step forward in making premier TCM healthcare resources more widely shared and accessible.

#### Smart Elderly Care for Happy Senior Years

The Company is dedicated to addressing the varied requirements of elderly care by developing intelligent, tailor-made products and services, aimed at enhancing a foundational, accessible, and varied elder care ecosystem.



## **Expanding Industrial Ecosystem**

China Mobile steps up as the guiding force within the modern industrial ecosystem, serving as a pivotal leader in the symbiotic network of industrial chains. It champions comprehensive ecological collaborations across various sectors to forge an industrial framework marked by enhanced innovation, superior value, and robust reliability, thereby bolstering the advancement of societal and economic prosperity.

#### ※ Fostering a Collaborative and Innovative Ecosystem

The Company is making comprehensive efforts in industrial collaboration, technological cooperation, strategic partnership, and international cooperation, constantly expanding the depth and breadth of collaboration with partners in the supply chain, industrial chain, and value chain. It aims to build a development ecosystem that is more equitable, inclusive, and constructive.

#### Journeying Towards New Industrial Collaborations

Since 2013, the Company has held the China Mobile Worldwide Partner Conference for **11** consecutive years, gathering formidable innovative forces to accelerate the evolution and upgrade of the information industry. In 2023, the Company advanced the integrated development of the industry chain with the Common Chain Action, upgraded the " $10^1-10^2-10^3-10^4$ " Partnership Initiative, and supported high-quality industrial development with platform construction, mechanism support, and resource investment. It launched the "Mobile Love Home" ecological cooperation plan and the Mobile Preferred cooperation plan to jointly explore key areas such as smart homes and intelligent terminals. With an investment of tens of billions in resources, it introduced a multibillion–dollar product development plan and a multibillion–dollar rights pilot plan, collaborating with industrial partners to promote applications, create value, and share benefits.

#### **Broadening the Scope of Global Collaborations**

#### **Starting New Chapters in Strategic Cooperation**

By the end of 2023, the Company has signed strategic cooperation agreements with local governments in all **31** provinces, autonomous regions, directly– administered municipalities across the country, **121** large enterprise groups, and institutions. Focusing on key areas such as new infrastructure construction, network technology evolution, platform and capability building, and 5G+ application scenarios, it further promotes the complementarity of advantageous resources and the expansion into strategic emerging fields.

- \* The Company strengthens the global direct connection among operators. By the end of 2023, the comprehensive solution iConnect for the operator market has reached 1,100 cooperation clients, with 28 new direct connection operators added throughout the year, bringing the total number of direct connection operators to 359.
- \* In September 2023, the Company held the 2023 China Mobile Southeast Asia Regional Cooperation Conference in Jakarta, the capital of Indonesia, and jointly released the Southeast Asia Digital Economy Development Cooperation Initiative to promote the transformation of regional industrial digital intelligence and help the development of digital economy in Southeast Asia.
- \* The Company signed a memorandum of strategic cooperation with Singtel to establish a new strategic partnership for mutual benefit and coordinated development in 5G, Internet of Things applications, system integration solutions of both the government and enterprise markets, products and services in the personal market, overseas equity and information infrastructure construction investment cooperation, technological innovation and research development cooperation, etc. Greater economic benefits and social value were created.
- \* As a cooperative platform for global operators, the "Hand-in-Hand Plan", established in 2015, has always been committed to conducting member sharing and exchange activities, becoming an important international platform for global operators to discuss development and future together. In 2023, China Mobile International hosted the annual summit of the "Hand-in-Hand Plan" in Shanghai with the theme of 5G Digital Economy, attracting over 35 operators and more than 200 members and strategic partners worldwide.
- \* In March 2023, China Mobile International and its partners jointly launched the "iSolutions Partner Ecological Alliance", aiming to create a new digital intelligence ecosystem with innovation, symbiosis and win–win effect. By the end of 2023, the "iSolutions Partner Ecological Alliance" has more than 200 partners worldwide.



At the 2023 Mobile World Congress, Mr. Yang Jie, Chairman of China Mobile, made a virtual appearance embodying the concept of a Digital–Intelligent Human.
#### Building a New High Ground for Sci-Tech Cooperation

The Company optimizes industrial organization, aggregates industrial elements, and nurtures industrial ecology, strengthening the modern industrial chain of mobile information, driving innovation integration among upstream and downstream, large and small, domestic and foreign enterprises, continuously improving industrial base capabilities and the level of industrial chain modernization.

#### Synergizing Efforts across Academia, Industry, and Research

The Company deepens its commitment to integrating business leadership with academic and research excellence, fostering an environment where innovation thrives. This approach aims to speed up the conversion of scientific discoveries into tangible productivity gains.

- \* Takes the lead in building 5G Innovation Consortium and Computility Network Innovation Consortium, joining nearly 30 central enterprises to create an open innovation platform for element convergence and application linkage, implementing joint tackling tasks, promoting the sustained leadership of 5G and computility networks.
- \* In 2023, successively established five joint research institutes with Xi'an Jiaotong University, Harbin Institute of Technology, Hunan University, Nanjing University, and Contemporary Amperex Technology Co., Ltd., jointly conducting technical research, achievement transformation, and talent cooperation training around artificial intelligence, computility network, digital government, and smart industries.
- \* Fully upgrades the school-enterprise cooperation model, creating a co-investment, co-management, co-research and development, coownership of results, and co-sharing of benefits industry-educationresearch cooperation entity with university partners. Both parties dispatch full-time and part-time staff for localized management and operation in a quasi-entity form, selecting project teams through a competitive process to strengthen the implementation of outcomes.

- High-quality operation of the National Natural Science Foundation and the Ministry of Education funds, releasing guides for 26 corporate innovation development joint fund projects in 2023, supporting 20 top university research teams to carry out applied basic research topics.
- \* Jointly establishes the Pengcheng Laboratory Science and Education Foundation – China Mobile Sci–Tech Special Project with the Shenzhen Pengcheng Laboratory Science and Education Foundation, focusing on research and innovation in the field of information science, serving the national strategic scientific and technological objectives.



Kick-off ceremony for China Mobile's Co-Creation+ initiative that blends industry and education.

#### Three–Dimensional Mass Innovation and Entrepreneurship Incubation System

China Mobile has deeply promoted the development of the Mass Innovation, Mass Entrepreneurship industrial incubation system, aiming to build an interconnected innovation ecosystem. By the end of 2023, **10** AndSpaces have been established, covering **9** cities including Beijing, Shanghai, and Chengdu, incubating nearly **400** projects, and facilitating **nearly RMB 300 million** in financing for projects within the incubation. Additionally, the Company has developed two major event brands, the Independent Development Competition and the Hackathon, to gather forces both internally and externally, enhancing the impact of technological innovation.



- Independent Development Competition: Aimed at internal employees, the nine sessions of the competition attracted over 8,000 proposals, from more than 30,000 person-times and a total of more than RMB 7 million were paid in rewards.
- \* Hackathon: Aimed at external enterprises and university innovation and entrepreneurship teams, the eight sessions of the competition attracted over 27,000 teams, and relevant units of the Company reached cooperation with more than 150 teams.

#### ※ Fostering a Self-reliant Industrial and Supply Chain

The Company is intensifying its efforts to bolster the resilience and competitiveness of its industrial chain. It's committed to creating a self-reliant, secure, and efficient industrial and supply chain, with the aim of developing a top-tier supply chain management framework.

#### Boosting Self-sufficiency through Demand-driven Initiatives

The Company is driving towards self-sufficiency in its industrial and supply chain by enhancing demand-driven strategies to encourage innovation at critical stages of the supply chain.

- \* Comprehensive Planning for Self-reliance: Drawing up a detailed map of the mobile information industry chain to outline the present scenario, obstacles, and the pathway for future growth with a focus on autonomy.
- \* Strengthening Support for Independent Policies: As a leader in the industry chain, the Company is setting the pace by implementing specific guidelines for the adoption of independent standards and technology ratings, thereby fostering the extensive application of indigenous products.
- \* Facilitating the Adoption of Independent Products: Concentrating on upstream suppliers of networkcoordinated products and equipment to systematically carry out compatibility tests for autonomous products across different network segments.

Refining Evaluation Strategies for Autonomy: Employing both quantitative and qualitative assessment techniques to review technical expertise, R&D prowess, industry integrity, innovation capacity, and the robustness of applicable legal frameworks, thereby enhancing the Company's innovation and control capabilities.

#### Reserving Key Resources to Enhance Supply Chain Risk Prevention and Control Capabilities

The Company has formulated the *China Mobile Supply Security Guide*, systematically constructing a layered defense system from demand design to order delivery. Comprehensive and dynamic risk management strategies are established for different categories, including the establishment of risk analysis and evaluation factors and weights, models and calculation methods. Various risk response tools such as component diversification and strategic reserves are developed to implement a supply business continuity management system at the operational level in a phased, scenario–specific, and tiered manner. This effectively reduces the risk of supply business interruptions, minimizes the time, scope, and impact of supply interruptions, and enhances the resilience and security level of the industrial and supply chain.

#### Strengthening Supply Stability to Boost Supply Chain Resilience

In refining its approaches and strategies to collaboration with key supply chain participants, the Company amplifies the role of policies and incentives, clearly defines roles and duties, and ensures supply stability through a comprehensive control and assessment process, thereby fortifying the resilience of its supply chain.

#### **Diverse Supplier Ecosystem**

- \* Forge long-term, strategic relationships with key industry players, and ensure that our main products are sourced from at least three different suppliers. Deepen our collaboration with crucial and strategic suppliers, refine the management of our diverse supplier base, and explore more effective and quality-driven cooperation frameworks.
- \* Diversify our components and working closely with our suppliers to manage exclusive materials right from the design stage, with alternative plans available for more than 20 product categories.

#### **Entire Process Supply Chain Collaboration**

\* Construct a unified China Mobile supplier portal to achieve one-point access, collaborative operation, data sharing, create a convenient Mobile Journey, realize full-process online interaction with strategic partners, and achieve key business online interaction with basic suppliers.

#### Pilot New Supply Chain Management New Model

- \* Establish a networked supply chain management model, build a global supply network collaborative mechanism, and improve the response speed and flexibility of the supply chain.
- \* Strengthen data-driven supply chain management, accelerate the construction of intelligent supply chain integration systems and capabilities.
- \* Establish a flexible supply chain procurement model to ensure rapid response and stable supply of key products, and improve satisfaction of demand for components.

#### **Refining Supply Chain Operations**

\* Demand Forecasting: Collaborate with multidimensional databases, differentiate product demand forecasting models, improve product demand forecasting accuracy, and ensure accurate and timely supply. Procurement Review: Implement a product price linkage mechanism for some raw materials and components. Delivery Execution: Carry out intelligent supervision of product raw material manufacturing, production capacity, quality standards, etc., to improve supply quality and stability. Evaluation Management: Based on the evaluation results of suppliers, develop a differentiated incentive reward and punishment mechanism.

# **Ensuring a Solid Security Development**

China Mobile remains unwavering in its role as a foundational support for security, fully dedicated to providing emergency communication services during significant events, and steadfast in its efforts to combat telecom fraud and illicit content. The Company is committed to enhancing the protection of customer personal information, contributing to the creation of a safer online environment, and offering comprehensive support for the secure development of both the nation and society.

#### ※ Emergency Communications Support

Throughout 2023, the Company has developed a highly efficient and cooperative emergency communication system, maintaining a cautious approach to successfully support major events like the China–Central Asia Summit, the 31st FISU Summer World University Games in Chengdu, the 19th Asian Games and Asian Para Games in Hangzhou, and the third Belt and Road International Cooperation Summit Forum. The Company achieved its support goals of zero major network failures, zero major network security incidents, zero significant customer complaints, and zero negative focus events.

#### China Mobile's New Emergency Communication Support System



#### Fully Committed to Ensuring Communication for the Hangzhou Asian Games and Asian Para Games

During the 19th Hangzhou Asian Games and Asian Para Games (referred to as Hangzhou Asian Games and Asian Para Games), the Company efficiently arranged the Asian Games Information System (AGIS) special network, Wi–Fi network, venue internet, fixed telephone special network, etc., "Ten Star" special networks, and applied multiple new technologies in this emergency communication protection.

- \* The World's First 5G "Self-Breathing" Elastic Network: Based on new technologies such as distributed multiple input multiple output (D-MIMO), multi-frequency layering, ultra-large uplink, ultra-narrow beam antenna, etc., China Mobile built the super dense elastic "selfbreathing" 4/5G network of the opening ceremony stadium of the 19th Asian Games in Hangzhou. The stand area is divided into 134 blocks, which can meet the extreme network needs of 100,000 audience and cast members.
- Constructed the Strongest Brain Unified Network Management System for Communication Networks: A single screen overlooks all communication network visual information, fully satisfying the network monitoring, personnel scheduling, joint command, and protection display needs during the Hangzhou Asian Games and Asian Para Games, ensuring the event's flawless operation.

- \* Introduced Operation and Maintenance Large Model for the First Time: By utilizing the large operational model, "chat-based" operational maintenance was achieved, and the efficiency of data extraction and analysis in key protection areas was improved by more than 10 times.
- \* Used 5G walkie-talkie for the first time in a large international event: Connected more than three thousand terminals across six cities, covering 2.2 million square meters of Hangzhou Asian Games and Asian Para Games venues.

Furthermore, the Company, around the organizing, watching, participating three core areas of the Hangzhou Asian Games and Asian Para Games, created 103 iconic achievements of the Intelligent Asian Games, such as the metaverse intelligent service platform, the world's first 5G–A boutique demonstration deployment, and the Asian Games ticket expanded reality (XR) interactive experience, helping the Hangzhou Asian Games and Asian Para Games to be smarter, more exciting, and more popular.



China Mobile team monitoring network conditions in real-time at the Hangzhou Asian Games' main stadium.

#### Pursuing Dreams Amongst the Stars: Safeguarding Shenzhou-17's Journey to the Cosmos

On October 26, 2023, Beijing time, the Shenzhou–17 manned spacecraft entered its predetermined orbit, and the launch was a complete success. The fail–safe achievement was inseparable from the meticulous organization and dedication of the China Mobile's communication support team. A month before the launch, China Mobile had formed a hundred– person emergency support assault team, comprehensively testing and optimizing the network signals and optical cable lines around the viewing area and transportation hubs, activating 2 5G base stations, and inspecting and maintaining 158 kilometers of lines. During the spacecraft launch, field tests showed that the China Mobile's 5G network download speed in the key support area reached 815Mbps, and the upload speed reached 81Mbps; the 4G network download speed reached 78Mbps, and the upload speed reached 11Mbps, ensuring unobstructed network connectivity.

From 2003 to 2023, from Shenzhou–5 to Shenzhou–17, China Mobile personnel have accompanied and witnessed the twenty–year glorious journey of China's manned space mission from dreaming, pursuing dreams to fulfilling dreams, and will continue to escort the development of China's aerospace industry.

#### ※ Enhancing Central Management on Inappropriate Content

The Company has deepened and enhanced its capability to manage undesirable information. By the end of 2023, it intercepted **13.421 billion** junk SMS/MMS messages, cumulatively identified and blocked **1.6277 million** non-compliant domains, and obstructed access **2.52 trillion times**.

#### Monitoring and Sharing

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Compiled eight types of case collections such as the *Compilation of Network Attack Cases*, accumulating over six thousand cases with typical representativeness. A rapid linkage and sharing model covering more than 90 departments of the Company was established, forming a trinity sharing and alert mechanism that covers email, text messages, and WeChat. Throughout the year, **3,802** risk clues and **1,018** hot fraud events were discovered, with information shared internally more than **181,600 times**.

#### Management of Production

Production Management System: A production management evaluation matrix in the realm of inappropriate information governance has been formed around three dimensions: personnel, system, and practical operations. This matrix scientifically assesses the health of production processes, promptly identifies and corrects weaknesses in regions, and improves the overall governance level across the network.

Campaign Against International Spam: Dedicated teams across all 31 provinces, autonomous regions, directly–administered municipalities, and the China Mobile International were established. Hourly data analysis and time–segment strategy deployment were conducted, with traffic restrictions and complaint handling for illegal transfer operators. The annual reported volume of overseas spam SMS was 83,100, with an average monthly complaint volume decreasing by 98.89% compared to before the campaign.

**Technical Innovation** 

On the basis of handling illegal caller numbers, illegal advertiser numbers reserved in the messages were identified and extracted through automated means, and advertiser numbers that did not pass secondary real-name verification were shut down. Throughout the year, 16,600 advertiser numbers were identified, 7,642 numbers that failed verification were handled, with a handling rate of 48.31%.

For messages that only contain symbols or are unclear in meaning, scenario-based cluster analysis was used. The signature associated with the number's WeChat was automatically obtained through intelligent dial testing and pushed to the manual review team. Combined with sending behavior and signature information, judgment and disposal were implemented. In 2023, a total of **12,938,900** drainage text messages were identified and handled.

#### ※ Protecting Users' Personal Information

The Company places great emphasis on the protection of users' personal information security. Led by the Cybersecurity Leadership Group, it coordinates the work of protecting users' personal information under the data security management system framework. On the basis of sound organizational leadership, system construction, technical means, and supervision and inspection for data security management, the Company has made explicit requirements regarding the scope of protection for users' personal information, principles of use, and the norms of collection and use. In 2023, 94 business personal information protection impact assessments were completed.



Regularly carries out training on user personal information security management, ensuring five 100% coverage for five types of personnel including network operations personnel, system operations personnel, front desk service personnel, complaint handling personnel, and third–party personnel.



Special inspections on external cooperation situations by all affiliated units, establishing a list of data external cooperation, signing eight security confidentiality agreements; conducts commercial reviews of big data, ensuring informed consent or anonymization for big data involving user personal information.



Monitors third-party user personal information events and conduct onsite evidence collection of monitoring results; track and verify suspicious events of selling user personal information in mainstream media and submit triager reports.



Continuously carries out the enhancement work of personal information protection of own Apps, establish a management ledger for own Apps, conduct special assessments on personal information protection and centralized testing for Apps on the shelf, with over 2,500 own Apps tested throughout the year, identifying over 1,200 issues, all of which have been rectified.

#### ※ Creating a Sound Cyber Environment

The Company is proactive in mitigating content-related risks by enhancing its middle platforms capabilities for content safety risk control and review. It has built content audit platform, content monitoring platform, position ledger management platform and content security situation awareness system to establish a comprehensive system for content security assessment and management, comprised of three major platforms and one major system, aimed at fostering a clean and vibrant cyberspace.

#### Promoting Safe Internet Practices Among Minors

China Mobile MIGU earnestly protects the mental and physical health of young people by launching a youth mode, enhancing self-discipline and content management, etc., striving to provide a safe and healthy online environment for young users.

- MIGU Video: The youth mode has been refined to limit daily screen time to 40 minutes and deactivate the service from 10 PM to 6 AM, requiring a guardian's password for access outside these restrictions. It aims to curb minors' online spending with features like viewing–only and blank screen modes, besides curating exclusive content pools for children and teens, regularly refreshed to ensure engaging and appropriate material.
- MIGU Digital Reading: The youth mode of MIGU Reading, incorporates features designed to prevent excessive use among younger users, such as reminders about usage duration and disabling social and promotional content, making for a safer and more userfriendly interface. Vigilant in screening its book selection, MIGU Reading applies rigorous standards to content that could expose minors to harmful material like cyber-bullying, cyber-violence or privacy issues, and investigate more than 20,000 recommended books throughout the year to ensure a vast yet vetted library conducive to a positive online ecosystem.

(റ്റ)

# Highlight

#### **Tackling Telecom Fraud**

scam dens were cracked down

with the collaboration with public

related to scams were seized

20,600 devices

criminals were arrested

15,000

was prevented

financial losses to the public

RMB 24.012 billion

security organizations

7,890

Confronting the serious challenge of telecom network fraud, the Company is steadfast in safeguarding the public's financial security and rights by utilizing our technological edge to enhance our fight against telecom fraud. The Company has developed comprehensive strategies, including the *China Mobile Deepening Efforts to Combat Telecom Fraud Action Plan (2023)* and the *China Mobile Guidelines for Combating Telecom Fraud*, focusing on dismantling the fraud ecosystem through targeted initiatives like Cut–Off Operation, Modem Fraud Crackdown Operation and Peace–of–Mind Operation, establishing robust measures and a sustainable approach to eradicating telecom fraud.

#### Cut-Off Operation: Purifying the Source and Mitigating Risks

Enforcing Real-Name Authentication Policies: The Company has introduced a secondary verification process for high-risk cards to address the issue of inaccurate real-name registrations. Leveraging our anti-fraud data analytics, the Company is able to quickly identify and address potentially fraudulent numbers based on their network activity, call patterns, and roaming data.

Implementing Credit Penalties: To counteract the misuse of SIM cards in fraud schemes, the Company has set up a first-of-its-kind nationwide management system for individuals with poor credit across all 31 provinces, autonomous regions, directly-administered municipalities, limiting their ability to acquire new SIM cards, effectively cutting off a key tool used in fraudulent activities.

#### Peace-of-Mind Operation: Prioritizing Prevention to Benefit Society

Innovating Anti-Fraud Security Services: A nationwide scam alert service provides SMS notifications to users when they receive international calls; offers users a high-frequency call harassment and scam call blocking service without the need for installing an app; super SIM cards ensure messages that can instantly interrupt scam calls, or redirect the calls to an anti-fraud center or to friends and family, blocking fraudulent activities.

**Carrying Out Anti–Fraud Promotional Activities:** Through diverse methods such as anti–fraud quality short videos, celebrity anti–fraud public service announcements, online anti–fraud promotions are carried out; distributing materials like *Anti–Fraud Propaganda Handbooks*, in collaboration with the police, 180,700 anti–fraud promotional activities were conducted, sending out 459 million pieces of promotional materials, reaching 591 million people. The *Beauty's Stratagem in the World of Anti–Fraud* was honored by the State Council Joint Office as one of the Top Ten National Quality Anti–Fraud Short Videos.



China Mobile proactively collaborated with local police stations in Jiaxing to conduct anti-fraud propaganda activities on campuses.

# Modem Fraud Crackdown Operation: Technical Management Combined with Police-Enterprise Cooperation

To tackle the problem of foreign criminals using wireless voice gateways (GoIP) and VoIP technology within the country for scam calls, the Company has developed a cutting–edge GoIP monitoring system. This tool swiftly identifies and addresses fraud–linked SIM cards and the locations housing such devices, enabling quick action against these fraud mechanisms.

scam calls were intercepted

371 million

scam text messages were intercepted

279 million

scam websites were intercepted

8.8924 million

of the spread of scam-related apps being blocked

**1.9798** million times

sent anti-fraud public welfare text messages through 10086

27.041 billion

The case study Innovative Intelligence Monitoring and Management, Fortifying Cyberspace Information Security Defenses was selected as a Enterprise ESG Outstanding Case by the China Enterprise Reform and Development Research Association.

# Inclusive Growth

China Mobile adheres to its "people–centered" development ideology, and is devoted to quality and effectiveness in serving national strategies and fulfilling social responsibilities. It earnestly integrates its corporate development with the wider pictures of national economy and people's livelihood, and persists in safeguarding and improving people's livelihood in the course of its development. It enhances the equitability and accessibility of information services, and applies next–generation information technology to bridge the digital divide, promote rural revitalization, and serve national strategies. It builds a solid team of high–quality talents, and constantly satisfies the public's a spiration for a better life.



#### Striving for Common Prosperity



Cultivating Well-Rounded Talents



# **Striving for Common Prosperity**

China Mobile actively leverages its strengths to bridge the digital divide, continues to strive for rural revitalization, supports coordinated regional development, persistently engages in philanthropy and charity, and endeavors to contribute "Mobile Power" towards achieving common prosperity.

# **Bridging the Digital Divide**

China Mobile has been proactive in making network services accessible in remote areas, launching "speed upgrade and tariff reduction" initiatives, and providing specialized services to meet the needs of special communities, so that the benefits of developments in information technology can reach everyone.

#### Popularizing Network Coverage

China Mobile continues to popularize telecommunications services, especially focusing on expanding network coverage in rural villages and remote areas, and promotes equal access to basic public services.

#### **Digital Inclusion Efforts**

The Company has built 3,647 4G base stations and 381 5G base stations in remote areas and rural villages, and 911 4G base stations at borders and on islands; its 4G network has covered 99.6% of Chinese administrative villages, and its 5G network has generally been able to provide continuous coverage in all townships nationwide, as well as effective coverage in large administrative villages and developed rural villages.

The Company has steadily expanded broadband support for town and rural households, with 95.4% of Optical Line Terminal (OLT) equipment having gigabit capability, household broadband transmission line coverage reaching 260 million households, 13.74 million more since the beginning of 2023, and household broadband users reaching 100 million households, 15.40 million more since the beginning of 2023. Its wired broadband services has covered 507,100 administrative villages. A total of 68,500, including 4,000 in 2023, remote rural villages have been connected to broadband under our "Universal Telecommunications Services Project".

#### Launching 700 MHz 5G Ultra-Long-Range Base Station on Desert Highway in Xinjiang

In May 2023, the Company overcame the challenges from heat and sandstorms in the desert to launch the first 700MHz 5G ultra-longrange base station on a desert highway in the Taklamakan Desert, Luntai County, Bayingolin Mongol Autonomous Prefecture, Xinjiang. This base station is capable of providing network coverage beyond eyesight within a range of 30 kilometers, and makes smart navigation, live broadcasts and high-definition calls possible, even from a distance. This has brought a 45% increase in network coverage area. After the base station was completed, average daily number of users increased by 70% and mobile traffic grew by 38%. By the end of 2023, 20 5G base statements were built along the Luntai County to Qiemo County section of the Taklamakan Desert Highway.



bile launched the first 700MHz 5G ultra-long-rand

#### Building a Communications "Skyway" to the Snowy Plateau in Yunnan

On 26 November 2023, the Lijiang to Shangri-La Railway (the "Lixiang Railway") was officially inaugurated, marking the end of the "no-railway" era for Diging, Xizang Autonomous Prefecture. In sync with the completion of the Lixiang Railway, the Company overcame the construction challenges posed by high altitudes at highlands, and achieved 100% 4/5G coverage at various types of stations and surroundings along the Lixiang Railway. Field tests confirmed a 100% success rate for voice calls along the entire railway with an average download speed of over 300Mbps. enabling uninterrupted voice calls, live broadcasting and mobile gaming on high-speed trains, and revolutionizing the way we connect and communicate.



#### ) 5G at Sea

China Mobile responds to the national strategy to become a maritime power by launching 5G network expansion projects across coastal and open sea areas. These initiatives extend 5G connectivity to the sea, support better maritime supervision, boost the marine economy, and facilitate sea travel for fishermen and tourists.

#### In Shandong

The Company set up the "Yellow River to Sea" 700M network, leveraged a "Dual AAU + Dual 700M" structure to enhance base station transmission capabilities, and applied technologies such high/low frequency coordination and time/frequency domain aggregation, to deliver a comprehensive maritime network coverage solution. By the end of 2023, we built 416 coastal 5G base stations, pioneering the continuous coverage of 3,345 kilometers of coastline and offshore areas with 5G networks, effectively meeting the needs of marine ecological protection and economic development.

In Zhejiang

In collaboration with partners, the Company launched the industry's first integrated machinery room (CO+X) model switch for commercial use on the Zhoushan Islands. This switch, based on our partner's CO+X solution, extends several innovative outdoor mini Optical Line Terminal (OLT) to surrounding islands such as Lvhua Islands, resolving the usual challenges with deployment, operations and maintenance, and stability of network on offshore islands, achieving rapid network deployment and simplified network operations and maintenance on offshore islands. Being connected to our gigabit networks, residents on Lvhua Islands can now enjoy TV and other smart applications and services on gigabit broadband, greatly improving their quality of life and happiness.

#### In Guangdong

The Company strengthened innovation in maritime communication technologies, carried out special initiatives to enhance sea area coverage, and undertook research and innovation in coverage enhancement technologies, including the use of dual 700M RRUs, shore–based high–gain antennas, sea–based miniaturized antennas and other new technologies and products to enhance coverage. By the end of 2023, we built 802 700M sites and achieved continuous 5G network coverage in the coastal area (0–20 kilometers) and effective 5G network coverage in the near sea (20–40 kilometers) and offshore (40–50 kilometers) areas. The smooth 5G network supported the entry of marine ranches into an era of intelligent management, offered an integrated solution for offshore wind power, and increased the overall operational efficiency of smart ports by 30%, empowering the high–quality development of the maritime economy.



Construction of a 5G base station on the offshore wind power platform in Yangjiang City, Guangdong Province.

#### ※ Exclusive Tariff Concessions

The Company has carried out initiatives to increase speed and reduce fees, benefiting a total of 6.204 billion people. Special tariff discounts are provided for three key groups: the elderly, the disabled, and those lifted out of poverty. Through targeted fee reductions, we strive to achieve affordable digital services for everyone.

Tariff concessions have been offered to (cumulative)



5.6908 million disabled individuals

**17.8673** million individuals overcoming poverty

#### ※ Warm and Personalized Services

China Mobile provides heartfelt, personalized services to the elderly, the disabled, and ethnic minorities, ensuring these groups could enjoy seamless access to digitalintelligent services.

## Elderly Group

- \* Upgraded the EasyOwn Happy Filial Card, focusing on the core needs of the elderly group, and launched three types of precise and differentiated warm-hearted services: Carefree Love, Carefree Health, and Carefree Safety.
- \* MIGU Video has featured a one-button Elderly Mode, enhancing the viewing experience with larger text and icons, catering specifically for the older audience. MIGU Music has introduced a featured phone version that offers content favored by the older audience, such as nostalgic hits, square dancing tunes and traditional operas, with senior-friendly features like voice song search, alarm tones and favorite lists, to enrich the leisure life of our elderly customers.



In Chongqing, the Company has initiated the Caring for the Elderly, Warming the Hearts of the Silver– Haired service.

# Disabled Group

- The Company has introduced a special video service desk for those with hearing loss, offering barrier–free access and direct communications in sign language with our 10086 customer service team
- Ethnic Minority Groups-
- \* The Company has established service desks for several languages, including Uyghur, Kazakh, Tibetan, and Mongolian, embedding these multilingual options across various service platforms.
- \* For minority ethnic customers, multilingual bills are issued, and multilingual video services are provided.

#### Enhancing Elderly-Friendly Services, Warming "Slow Population" in "Fast Era"

China Mobile has launched digital-intelligent elderly-friendly services on both the 10086 hotline and its internet service, providing elderly customers with more comprehensive, direct, convenient and personalized customer service.

#### Intelligent strategy for proactive identification, one-click access to the Elders Priority Service Desk

The Company introduced an Elders Priority Service Desk, whereby individuals aged 65 or above can get direct access to an agent when they dial the 10086 hotline, to address issues such as not being able to hear the voice instructions clearly or pressing the wrong keys. By the end of 2023, the 10086 hotline provided direct agent service to 70.9302 million elderly customers on a total of 320 million occasions.

#### Video customer service for an intuitive service offering "see, hear, speak and touch" - integrated interaction

The Company launched the 10086 video customer service, providing elderly customers with "see, hear, speak and touch" – integrated services through face–to–face video guidance and remote assistance.

#### Exclusive App page design, one screen display of important information

The Company upgraded China Mobile App's elderly–friendly services, setting up pages with larger font size and icons exclusively for the elderly, and adding support for voice navigation, effectively reducing the probability of mis–operations. By the end of 2023, the China Mobile App Care Edition had 10.3778 million monthly active users, providing elderly–friendly and accessible services on 42.9072 million counts per month.



#### Enhancing Accessibility with Smart Subtitles for an Inclusive Viewing Experience

In 2023, during the 19th Asian Games and the Asian Para Games in Hangzhou, MIGU Video debuted advanced subtitle technology featuring low-delay, scrolling subtitles to make sports more accessible. A pioneering move in the industry, it introduced live intelligent subtitles in major Chinese dialects such as Minnan and Cantonese, significantly enriching the viewing experience for those with hearing impairments and promoting cultural exchange across different regions.

# Actively Improving the Welfare of the Community

#### ※ Thoroughly Promoting Rural Revitalization

The concept of digital villages plays a crucial role in the strategy of rural revitalization and is a key part of constructing a digital China. In advancing its "Digital–Intelligent Rural Revitalization Plan", China Mobile is committed to a "broad support" framework that involves coordinated efforts across different levels, targeted assistance, collaboration with internal and external parties, and a blend of focused and comprehensive approaches. It has established a streamlined workflow for planning, executing, monitoring and enforcing accountability, thereby powering rural revitalization with digital–intelligent solutions.



#### Diligently Organizing and Enhancing Support to Achieve Effective Rural Revitalization

rengthening Organizational Sup

Conducted specialized meetings and strategy sessions on rural revitalization, to explore and launch targeted support and assistance projects and overall rural revitalization initiatives. Announced the 2023 demonstration sites for rural revitalization support.

Introduced a recognition system for rural revitalization, awarding 30 outstanding individuals and 15 outstanding groups for their contributions in each of 2021 and 2022. Updated management guidelines for targeted support projects to achieve seamless process oversight.

Mandated that provincial companies conduct at least quarterly inspections in supported counties, to uncover and address any issues with policy execution and provide relevant recommendations.

Organized quarterly meetings to coordinate project efforts, ensuring timely progress and adherence to planned timelines.

#### Assisting in Consolidating and Expanding the Achievements of Poverty Alleviation

In 2023, the Company steadfastly upheld a supportive ecosystem, deploying multifaceted initiatives such as talent development, financial aid, knowledge and training services, consumer support, industrial growth and livelihood improvements across 3,100 localities in 1,486 counties nationwide. The concerted effort aimed to reinforce the fruits of poverty alleviation, invigorate rural economies and enhance community prosperity.



By the end of 2023, more than 2,520 on-post seconded officials, first secretaries, and village-stationed work team members contributed their efforts on the frontline of targeted assistance.

Established a comprehensive, regular and professional

training system, and provided training to 73,000 grassroots

officials, 18,000 leaders in rural revitalization and 115,000

technical personnel in 2023, significantly boosting the local

ability to support economic growth.



Financial RM Enhancement RM

In 2023, assisted the parent company in donating RMB 287 million in gratuitous aid funds to eight headquarters-supported counties, accumulating to RMB 2.935 billion in gratuitous aid funds by the end of 2023.



Consumption Support Launched the "EasyOwn Special Product Campaign — Consumption Support Special Action", creating a fullchain consumption support system connecting consumers, distribution channels and supply side, boosting the sales of agricultural products, and directly purchasing and assisting in the sale of RMB 586 million in agricultural products in 2023.



**Knowledge and** 

Training

Enrichment

Initiated the "Intelligence Empowers Wellbeing—Pillar Industry Revitalization Support Action", supporting counties in developing their signature industries. In 2023, the Company introduced or supported 680 projects or companies, with investments reaching RMB 1.225 billion. These efforts facilitated the employment transition for 9,312 individuals and benefited 4,014 individuals from poverty–alleviated families.



Supported the second phase of the Silk Road Jia Yuan kindergarten relocation project for poverty alleviation in Qarlung Town, Akto County, Xinjiang, which could accommodate 360 children; supported the construction of village health rooms and medical supplies in Lop County, Xinjiang.





#### **Driving Agricultural Innovation with Comprehensive Digital Intelligence Strategies**

The Company is delicately advancing the "Digital-Intelligent Village Project", encompassing seven key digital intelligence projects related to new rural infrastructure, industries, governance, education, healthcare, culture and financial services. Our goal is to continuously advance new information infrastructure upgrades in rural areas, broaden application of online, intelligent and cloud-based products, and deliver high-quality and efficient information services to rural residents, rural families and agricultural enterprises. This initiative is designed to ensure that millions of farmers could better benefit from the collective achievements in internet development.



#### 5G New Infrastructure Reshaping Motuo County in Xizang

Motuo County in Xizang was the last county in China to be connected by road and was alleviated from poverty in 2019. By the end of 2023, Xizang Mobile built 23 5G base stations across Motuo and expanded fiber optic internet coverage to every administrative village in the county, overcoming difficulties such as construction challenges, short construction periods and high maintenance costs with an optimized construction and maintenance team. This boosted the number of broadband–enabled households from just over 1,500 to 3,774. Leveraging the launch of these base stations, Motuo' s villagers have turned to short video clips and live broadcasts to showcase and sell their unique cultural products and agricultural products, effectively doubling their incomes without leaving their homes.

#### China Mobile (Chengdu) Industrial Research Institute Strengthening Digital Safeguards for Food Security

#### Fortifying High-Standard Agriculture

At its facility in Shangshui County, Zhoukou, Henan, China Mobile (Chengdu) Industrial Research Institute was pioneering the fusion of cutting–edge technology with traditional farming practices. Leveraging 5G, IoT and big data analytics, the Institute has rolled out a suite of 12 smart farming applications, from remote irrigation to pest surveillance, enabling precise management of diverse farmland and fostering a tech–driven agricultural ecosystem. By the end of 2023, this approach had boosted efficiency in Zhoukou' s farmland, slashing water use by 75%, cutting fertilizer use by 20%, reducing irrigation costs from RMB 80 to RMB 15 per Chinese acre, and bolstering wheat yields by an impressive 220 catty per Chinese acre.

#### Pioneering a Model for Smart Farming

In 2023, China Mobile (Chengdu) Industrial Research Institute established a smart agriculture production demonstration base in Xinfuli Community, Dayi, Sichuan. The base, through the "Gufengdeng" precise planting management system and integrated water and fertilizer technology, created efficient water–saving farmland. By extensively applying technologies such as 5G and Beidou high–precision positioning, it built an integrated agricultural data collection network from space to ground, achieving mechanized, precise and unmanned operations throughout the entire process, from plowing, planting, managing to harvesting, driving increased grain production, farmer income and land use efficiency.



#### 5G + Smart Village Doctors – Launching a New Model for Rural Healthcare in Jilin

Village doctors, the frontline protectors of rural health, often bear the brunt of considerable professional stress. China Mobile has stepped in with a holistic digital solution, significantly enhancing the efficiency and quality of grassroots medical services.

- Developing a tailor-made mobile application with partners and empowering village doctors to effortlessly manage and update villager health records on-the-go.
- Leveraging an Al-based diagnostic system, village doctors can now make more accurate assessments of their patients' conditions. In addition, the system's prescription verification feature elevates standards of prescriptions issued by village doctors.
- Integrating with Jilin's remote healthcare service platform through the 5G network, minor ailments can be treated locally while more serious or complex conditions can be addressed through teleconsultation.

#### Unlocking Livestock Financing Challenges through "Inclusive Finance + Technological Empowerment" in Hainan

The Hui Niu Cooperative in Chengmai, Hainan, established in 2016 and dedicated to yellow cattle breeding, faced a common hurdle as it sought to grow: the need for more capital. Traditionally hampered by the absence of tangible assets for collateral, securing bank loans was a steep challenge for the cooperative.

Now, with the "Hainan Mobile Smart Livestock Management Cloud Platform", financing in the agricultural industry is no longer a problem. By deploying sensor nodes such as Bluetooth ear tags, Al video, and wireless networks at the livestock breeding sites, the Company can provide banks with unique identifiers and risk monitoring for the livestock. This has enabled an innovative financing method of "live cattle mortgage", assisting Hui Niu Cooperative in successfully obtaining a loan of RMB 2 million in working capital.

#### Supporting Public Welfare and Charitable Causes

China Mobile continues to deepen the operation of the "China Mobile Charity" platform, deeply cultivates brand charity projects, actively supports volunteer services, and aids in the pursuit of common prosperity with utmost sincerity.

#### **Fostering an Inclusive Platform for Philanthropy**

The China Mobile Charity platform is one of the internet public fundraising information platforms designated by the Chinese Ministry of Civil Affairs. Since its launch in November 2021, the platform has actively explored a new model of "Mobile + Public Welfare + Internet", using the China Mobile App as the main carrier. It provides charitable organizations with services such as fundraising information publishing and information management, and offers the public safe, convenient, and transparent internet donation services, covering multiple fields including disaster prevention and relief, educational assistance, poverty alleviation, medical aid for serious illnesses, support for the elderly and disabled, and environmental protection. Starting from the "9 · 5 China Charity Day" in 2023, we launched the "Do Good With China Mobile" donors' welfare event and distributed 64,900 sets of exclusive "love" benefits to participating users, motivating more of the public towards charitable causes.

#### **Performance of the China Mobile Charity Platform**

In 2023		By the End of 2023	
<ul> <li>9 charitable organizations joined</li> <li>27 new charity projects were launched</li> <li>310 million visits were recorded</li> </ul>	<ul> <li>874,700 donors</li> <li>Cash donations amounted to RMB 2.7742 million</li> <li>Points donations amounted to 209 million</li> </ul>	<ul> <li>A total of <b>38</b> charitable organizations joined the platform</li> <li>A total of <b>71</b> charity projects were launched</li> <li>A total of <b>380 million</b> visits were recorded</li> </ul>	<ul> <li>A total of 2.112 million donors</li> <li>Total cash donations amounted to RMB7.3128 million</li> <li>Total point donations amounted to 577 million</li> </ul>

#### United for Three Years, Pursuing Dreams Together - "GoTone Blue Dream Charity Program"

In October 2020, China Mobile launched the "GoTone Blue Dream Public Welfare Program" in collaboration with the Ministry of Education and China Education Development Foundation, to improve the learning environment of children and support the development of basic education in rural areas. By partnering with the GoTone brand customers, through various means like point donations, cash donations, etc., we are committed to empowering children to embrace a brighter future.

By the end of 2023, more than 20 million customers had made donations through the "GoTone Blue Dream Charity Program". The Company had raised cumulative donations valued at RMB 28.7 million (including tax) in technological materials and RMB 11.85 million (including tax) in teaching materials and supplies for 240 schools across 31 provinces (autonomous regions and directly–administered municipalities), effectively improving the teaching conditions at local schools.





#### **Deeply Cultivating Brand Charity Projects**

The Company has been carrying out the "One Red and One Blue" branded program through the China Mobile Charity Foundation for many years, spreading good will to all sectors of society with concrete actions.



#### **Supporting Volunteer Services**

The Company actively supports employees to participate in various public welfare and volunteer service activities, driving new norms for a more civilized society.

#### Volunteer Teaching with Love, Helping the Youth Prosper

The Company is committed to building the "And Youth" brand for voluntary teaching and youth volunteer services. The Company organizes its employees to offer volunteer teaching at rural schools and urban schools for migrant workers' children. The employees developed extracurricular courses to motivate interest in learning and expand students' vision and knowledge. By the end of 2023, 800 employees have participated in 68 "And Youth" voluntary teaching sessions to 4,047 impoverished students.

#### Donating to Aid Learning, Building Dreams and Setting Sail

In 2023, the "And You" Education Aid Program provided one-to-one targeted assistance in five provinces and eight counties, including Gaize County in Xizang, Maqin County in Qinghai, Aktau County in Xinjiang, Shule County in Xinjiang, Luopu County in Xinjiang, Huanan County in Heilongjiang, Tangyuan County in Heilongjiang and Baisha County in Hainan. By the end of 2023, 4,114 people have participated in donations, raising RMB 960,000 for 800 students.

#### Illuminating Hope: WANG Yong from China Mobile Jiangsu Subsidiary Received the China Youth Volunteer Outstanding Individual Award

For many years, WANG Yong, an employee of China Mobile's Jiangsu subsidiary, has been passionately engaged in public service, establishing volunteer teams in five areas: educational support, elderly assistance, disability aid, community service, and a love art troupe. He has organized 379 volunteer events, helped over 600 special-needs children, cared for more than 2,000 elderly individuals, rescued 41 children with serious illnesses, and served over 60,000 people. In 2013, he was honored with the "China Mobile Star of Charity" award.

In 2023, WANG Yong was awarded the "China Youth Volunteer Outstanding Individual Award", the highest honor in the field of volunteer service in China.



ANG Yong is organizing volunteers to carry out activities for patients

# Lighting-Up the Path of Youth with the Beacon of Science

Since 2018, the China Mobile Research Institute has led the initiative of the "Little Scientist" children's science popularization series. This initiative organizes young experts from the Company to teach science and technology knowledge to teenagers from urban villages in Beijing and remote mountainous areas across the country through both online and offline courses. The content covers communication, computer programming, artificial intelligence, and nature, reaching millions of children nationwide.

In 2023, at the "2023 Annual Science and Technology Volunteer Service Advanced Models" selection organized by the China Association for Science and Technology, the main initiator of this event, LIU Weidong, was honored with the "Most Beautiful Science and Technology Volunteer" award.



Teaching a course on The Past, Present, and Future of 5G for the migrant workers' children in Zhufang Village, Beijing.

**China Mobile** Annual Stars of Responsibility



#### The life guardian across borders

XUAN Qiwei has been involved in public welfare volunteer work for ten years and made donations to hundreds of impoverished children. In 2017, he joined the Blue Sky Rescue team and participated in dozens of major disaster rescue missions, directly rescuing more than a dozen people. He participated in rescue missions after an earthquake in Turkey on 6 February 2023, conducted searches and rescues for eight consecutive days, demonstrating excellent personal ability and dedication.

# Jiangxi

#### **ZHANG Bing**

HU Xiling

subsidiary

Fujian

China Mobile

China Mobile subsidiary

#### Stay true to the original aspiration and keep true feelings forever

ZHANG Bing has been voluntarily donating blood for 25 years, making a total of 159 donations and a total blood donation volume of 66.400 milliliters. He has also participated in over 90 community civilization-building activities, and volunteered to assist in community population census, covering approximately 1,000 households in total. He has received multiple honors from the National Health Department, Pingxiang City Government, the Red Cross Society of China, and in 2023, he was honored with the National Uncompensated Blood Donation Dedication Award Lifetime Honor.



HU Xiling has been involved in public welfare for 12 years, and her public welfare footprint covers all counties and districts in Luoyang, Henan. She has visited 78 poor, mountainous area primary schools (teaching points), organized 263 volunteer teaching activities, and supported more than 7,000 students in 45 poor schools . She has helped 87 left-behind children and children in need in rural areas, and organized donations of study supplies and necessary materials amounting to RMB 640,000 and recording a total public welfare service time of 2,661 hours.



LIN Yandong China Mobile subsidiary

#### The pathfinder on the road to revitalization

Since taking up the role of the first village secretary in Dongcuo Village, Zhangpu County, Zhangzhou, Fujian in 2021, LIN Yandong has integrated digital technology into the local big clitocybe farming industry, resolving the employment difficulties of more than 240 households in the village. He took the lead in establishing the first village-level talent station for rural revitalization in Zhangpu County, and guided returning young people to start five companies, attracting talent and wisdom for rural revitalization.



#### **Commitment and altruism**

Since 2016, CHEN Jianwei has voluntarily become a traffic auxiliary officer. He has never been absent from duty over these seven years. He donated materials to care for the elderly and disabled children. With affection for those affected by disaster, he took the initiative to join our flood relief and rescue team and raised rescue supplies worth more than RMB 500,000 through various channels after the Shantou "8.30" flood in 2018.

# China Mobile Combating Natural Disasters at Full Strength and Safeguarding the Lifeline of Information Services

## Safeguarding Communications at Avalanche Sites under Snowstorms

On 17 January 2023, several avalanches occurred along the Paimo Highway in Linzhi County, Xizang. After the disasters occurred, Xizang subsidiary quickly responded, immediately activating emergency disaster relief plans. Xizang subsidiary restored out–of–service base stations by foot and set up temporary ones, deploying a total of 82 person–times, providing emergency power banks, tents, satellite phones, and other emergency equipment to ensure the normal operation of the mobile network in the affected areas.

#### The Resilient Mobile Defense

From July 27 to August 2, 2023, due to the impact of Typhoon Doksuri, many areas across the country experienced severe rainfall. In Beijing and Hebei, the Company established a collaborative emergency response team, with a total investment of RMB 510 million in funds and equipment, actively responding to difficulties caused by heavy rain, such as power outages, road disruptions, and flash floods. A total of 61,000 personnel deployments, 33,000 vehicle deployments, and the repair of over 7,000 base stations and more than 12,000 kilometers of optical cable were executed. Utilizing innovative solutions such as drones and satellite backpack base stations, in conjunction with innovative methods like inter-provincial base station coverage adjustment and satellite link-up to macro base stations, the team swiftly restored communication "lifelines" for obstructed towns and administrative villages in the shortest time, maximizing the guarantee of communication needs for command and dispatch in disaster areas and the public. In Fujian, the Company deployed 1,332 personnel on the day the typhoon made landfall, rapidly restoring 129 base stations, and conducted nearly 25 million video color ring back tone notifications for disaster early warning, typhoon flood prevention consultation, and safety self-rescue knowledge, fully ensuring the "vital artery" of national and people's communication.



Emergency Communication Cable Repair Across the Juma River in

Rising to Meet the Flood Season, Strengthening Communication Defense



In August 2023, a once-in-fifty-years flood occurred in the Lalin River basin in Jilin. The Company coordinated with the local government to send evacuation notices immediately, effectively ensuring the safety of the lives of people in the flood area. Emergency communication vehicles were dispatched to support the flood area, providing network support for key areas such as the emergency command center and emergency shelters. The power of the flooded sites near residential areas was increased to expand the coverage area of the small community, compensating for the coverage blind spots caused by the disconnected stations. Through temporary expansion, the network capacity in the shelter area was increased to efficiently support the communication needs of the flood area, ensuring smooth communication and a positive experience for the public, safeguarding the lives and property of the people in the flood area.

#### Overcoming Cold Fronts and Snowstorms, Collaboratively Ensuring Uninterrupted Communication

In mid–December 2023, Shanxi experienced extreme snowfall and low-temperature rain, snow, and freezing disasters. Shanxi subsidiary quickly responded and activated a provincial and municipal level coordination mechanism for protection, providing additional cold–proof clothing, safety helmets, goggles, and other equipment for network maintenance personnel involved in communication protection. With the safety of front–line personnel as a priority, Shanxi subsidiary patrolled important transmission lines, cleared snow and ice, effectively preventing the damage caused by accumulating snowfall.



Conducting emergency cable repairs in Taiyuan's Xinghualing District amidst a

Responding Swiftly to Secure Communication and Prioritizing Reconstruction Efforts



At 23:59 on December 18, 2023, a 6.2 magnitude earthquake occurred in Jishishan County, Linxia Hui Autonomous Prefecture, Gansu. Immediately after the earthquake, Gansu subsidiary reached the affected area. After about 17 hours of continuous work by a rescue assault team of 255 people, all 62 communication base stations out of service due to the disaster in Jishishan County were restored to operation, and the 4/5G wireless connection rate in the disaster area reached over 99.6%. At the same time, Gansu subsidiary provided the people in the disaster area with warm services and green channels such as suspension of service termination, direct human access to the 10086 customer service hotline, and on–site services, helping to accelerate the restoration of production and living order.



Deploying drone-based emergency communication equipment for conducting communication support and disaster assessment operations in Jishishan County

# **Supporting Coordinated Regional Development**

China Mobile actively undertakes and implements China's major regional strategies and coordinated regional development strategy, forming a 1+N model of "one set of closedloop work mechanism, serving a series of national regional development strategies". The efficient services support the positive results of the regional economic and social digital transformation and high-quality development.

nproving the People's Livelihood

#### **Optimizing Network Quality**

Continuously advancing the 5G private network coverage and the fine optimization of network quality in key areas such as the Beijing–Tianjin–Hebei region, the Yangtze River Delta, and the Chengdu–Chongqing dual–city area along with high–speed railway lines. By the end of 2023, more than 40 key sections of high–speed rail lines including Beijing–Tianjin, Beijing–Shijiazhuang, Beijing–Shanghai, Shanghai–Hangzhou, Nanjing–Hangzhou, Hefei–Wuhan, and Chengdu–Chongqing have achieved 5G private network coverage.

#### **Strengthening Product Service Coordination**

Throughout the year, the total number of cross-provincial broadband business handling reached 107,300, and the number of nationally available rights products for basic necessities reached 1,418. The convenience and consistency of cross-provincial product service processing have been significantly improved, and the richness and influence of products have been continuously enhanced.

#### Strengthening Information Empowerment

In key regions such as Beijing–Tianjin– Hebei, the Yangtze River Delta, Guangdong–Hong Kong–Macao Greater Bay Area, and the twin cities of Chengdu and Chongqing, we are orderly promoting the implementation of 49 key tasks and major regional projects in key areas such as regional capability layout, business development, and technological innovation, further strengthening the empowerment and support of informatization for high– quality regional development.

# )≫ Beijing−Tianjin−Hebei

#### From 0 to N: Based on the Network, Helping the Future City Xiong'an New Area Grow Rapidly

The Company is steadfast in implementing Xiong'an New Area's development philosophy of simultaneously developing its digital and physical infrastructures, aiming for an early and strategic deployment of smart infrastructure to establish a world–class digital city. We accelerate the construction of new information infrastructure, promoting the rapid development of the digital economy in Xiong'an New Area.

Contributing to the Modern City in its Nascent Stage: By the end of 2023, 2,217 5G base stations had been built in Xiong'an New Area, achieving continuous 5G network coverage in the urban area; aiding in building a gigabit city in Xiong'an New Area full coverage of gigabit home broadband; opening an international Internet data dedicated

channel with an 80G bandwidth access capability.

#### Supporting a City for the People Suitable for

Living and Business: Keeping pace with the construction schedule of the new area, network coverage includes indoor and outdoor areas of newly built regions such as Xiong'an Station and the Beijing–Xiong High–Speed Railway, achieving village–wide 5G network coverage and full coverage of dual gigabit networks in key villages and towns; assisting in the settlement of companies, designing network plans for China SatNet, Sinochem Holdings, China Huaneng, to support high–speed network demands. Aiding in Creating a Model City of Green Innovation: For different coverage scenarios, innovatively adopting large-scale antenna warehouses, wall-mounted antennas on glass curtain walls, and other customized network construction modes; creating a Triple Precision Model of precise network layout, refined operation management, and accurate troubleshooting to reduce optical cable loss and later-stage operation and maintenance costs, saving 50,000 kWh of electricity annually.

#### Solidly Promoting the Integrated Development of the Yangtze River Delta, Composing a Symphony of Development

In 2023, China Mobile, closely following the two key words of integration and high quality, helped to transform the integrated development of the Yangtze River Delta from a "blueprint plan" into a real scroll.

**Improving the Level of New Infrastructure Construction:** By the end of 2023, the Yangtze River Delta region has newly built 75,000 5G base stations throughout the year. The total capacity of the data centers and communication hub service rooms that have been put into production exceeds 330,000 racks, and the total computing scale is 2.2 EFLOPS.

Promoting the Digital Innovation of Information Service in the Yangtze River Delta: Promoting a 5G full–connection factory collaborative intelligent manufacturing model, promoting the demonstration of intelligent transformation of traditional wharves, 5G innovative applications in areas such as smart finance benchmarks, etc. By the end of 2023, more than 2,070 5G industry private network projects and more than 4,700 5G+DICT projects have been implemented in the Yangtze River Delta region.

#### Drawing a Beautiful Picture of High-quality Development of the Digital Bay Area

In 2023, the Company has made great efforts to serve the construction of the Digital Bay Area, and empowers the digital construction of the Greater Bay Area with the digital strength of information and communication.

#### Promoting Tariff Integration in Guangdong, Hong Kong, and Macau

To meet the cross–border communication and business interconnection needs of customers in the Guangdong, Hong Kong, and Macau regions, the company has launched a variety of cross–border services such as Link Home Number, One Card, Multiple Numbers, Guangdong–Macau tariff integration and Cross–border All–in–one. Among them, the Link Home Number service can bind the user's domestic mobile number with the Hong Kong mobile number, allowing users in Hong Kong to receive calls and text messages from the domestic mobile number through the CMHK number; the One Card, Multiple Numbers service has added an online instant activation function, which supports users to carry out online real–name authentication and service activation in real time, conveniently solving the difficult problem of Hong Kong users being unable to use mobile payments in mainland China.



#### Establishment of Joint Innovation Laboratory

Guangdong subsidiary aims at the forefront of world science and technology and industrial development, jointly constructs the Metaverse Joint Innovation Laboratory with the Hong Kong University of Science and Technology (Guangzhou), and launches the HPC+AI Fusion Intelligent Computing Center with AI computing scale ranking among the top in the country. In addition, China Mobile Internet and the School of Computer Science of Sun Yat– sen University (National Supercomputing Guangzhou Center) jointly established the Sun Yat–sen University–China Mobile Internet Supercomputing Application Research Joint Laboratory, focusing on scientific research and industry–academic–research cooperation in the fields of artificial intelligence application research and development, and communication big data mining, thereby helping the Guangdong–Hong Kong–Macao Greater Bay Area become an international technology innovation center with global influence.

#### Creating and Operating the Land and Sea Premium Platform, Assisting the Construction of the New Land-Sea Channel in the West

China Mobile created the Land and Sea Premium public service platform, providing full-process one-stop operation services such as visual design, event planning, and live broadcast promotion. The Platform opened up the entire chain from "production place" to "consumption place" with "first-class Service, first-class quality", promoted the "going global" of Chinese time-honored brands, local characteristics, and intangible cultural heritage products in the provinces, autonomous regions and municipalities along the western region and China Mobile's designated assistance areas, and served the "bringing in" of high-quality products such as Malaysia durian and Vietnamese fragrant rice.



Logistics Expo exhibition site

By the end of 2023, it has served more than 1,600 agricultural products, with a cumulative sales volume exceeding RMB 200 million, fully demonstrating the important role and strong vitality of the New Land–Sea Channel in the west in global trade

# High–Quality Overseas Fulfillment of Responsibilities

2023 marks the tenth anniversary of the Belt and Road initiative. Over the past decade, China Mobile has actively integrated into the construction process of the Belt and Road and the Digital Silk Road, establishing an office of the leading group for promoting the Belt and Road initiative led by our company management, continuously promoting the high-quality development of the Belt and Road initiative.

#### ※ Opening up Information Channels

The Company promotes the construction of international information infrastructure, continuously optimizes the resource layout along the Belt and Road and globally, and deepens the interconnection between China and the rest of the world. In 2023, it improved the new digital infrastructure layout of Route (submarine and terrestrial cable), Station (network access point), Island (data center), accelerated the linking of calculations and networks, and promoting the evolution of the global computility network architecture toward integration from Route, Station, Island to Cloud, Network, Computing.

Information Highway (Submarine and Terrestrial Cable Transmission Resources)	Focus on improving the resource layout along the Belt and Road, upgrade and build the Seven Seas and Five Lands global transmission channel. By the end of 2023, there are more than 80 marine and terrestrial cable resources with global reach, and a total international transmission bandwidth of 145Tbps.	
Information Post Station (POP Network Access Point)	New nodes in Oman, Mombasa, Mexico, etc. were added in 2023. By the end of 2023, the global POP point reached 235, and more than 100 POP points were set up along the "Belt and Road", greatly improving the connection capacity of the regional facilities.	
Information Distribution Island (IDC Data Center)	Five data centers have been built globally, including Hong Kong (China), Singapore, London UK, Frankfurt Germany, etc. We continue to promote the construction of the Hong Kong Fo Tan and Mong Kok Bay data centers, supporting Hong Kong to build a new type of artificial intelligence data center.	

#### ※ Fulfilling Overseas Responsibilities

The Company actively participates in local community construction in its international operations. While fulfilling its responsibilities as an employer, it pays attention to the development of communities in its operational areas, actively assumes overseas social responsibilities, and shares the good life of the digital era with the countries/regions along the "Belt and Road" and their people.

#### Supporting Hong Kong Police in Anti-telecommunications Fraud Work

In 2023, Hong Kong subsidiary, in conjunction with the Hong Kong Police Force's Anti–Deception Coordination Center, sent anti–fraud educational 5G messages to all users for free and assisted in blocking fraudulent website links provided by the police. Through an SMS firewall, it proactively intercepted suspicious SMS messages, built its own system to check and block fake CMHK official SMS messages from external channels. Throughout the year, it supported the Hong Kong Police in arresting over a thousand suspects involved in criminal activities, with the total amount involved in fraud cases exceeding HKD 3 billion.



#### Spreading Love and Care



# **Cultivating Well-Rounded Talents**

China Mobile adheres to implementing the "Talent Strengthening Enterprise" strategy, considering talents as the first resource to drive innovation and lead development. It exerts all efforts to build an excellent talent team, comprehensive training system, accessible development path, and harmonious workplace environment.

# **Building an Excellent Talent Team**

China Mobile furthers reforms its key talent mechanism, accelerates talent capability transformation, effectively builds talents into the Company's core competitiveness, and promotes the talent team to fully match the Company's transformation and development needs.

#### ※ Creating an Equal, Inclusive and Diverse Organizational Culture

The Company respects and protects internationally recognized human rights, never participates in any acts of disregard for or violations of human rights. The Company scientifically set recruitment conditions based on job requirements, without setting discriminatory conditions and unrelated qualifications to the job duties such as race, ethnicity, gender, religious beliefs, height, appearance, and so on. The Company strengthens employee privacy management, creating a fair, efficient and harmonious working environment.

In 2023, the Company actively recruited excellent talents in various fields, carrying out recruitment activities through online recruitment platforms, campus presentations, and professional talent exchange meetings. The Company adhered to the principle of "Open Information, Open Process, Open Results" in recruitment, regulated the standards and procedures of job application screening, written tests, interviews, and other recruitment links to avoid employment discrimination and strive to ensure employment fairness; expanded channels for introducing talents, fully creating a good atmosphere for recognizing, loving, respecting, and using talents.

Scene of China Mobile's 2024 Campus Recruitment Event

#### Expanding Recruitment Channels

Executed the "Outstanding Talent Plan" for campus recruitment, "Dream+" intern plans, and social recruitment, continuously enhancing talent attraction efforts, fully combining job promotion and company's transformation and development talent reserve.

Optimized mechanisms of attracting talents such as the "Top-notch Plan" and the "Golden Seed Plan" continuously increasing the introduction of highquality, specialized and high-potential talent, scarce talent and excellent young talent.

#### **Optimizing Recruitment Process**

Unified issuance of recruitment information, carried out promotional lectures, and provided the talent with good experiences of written examination, and interview experiences.

Established a Recruitment Cloud Platform of China Mobile, realizing the entire online process of job application submission, "Virtual Presentation", free vocational course guidance, and other tasks.

Total number of employees

**451,830** 

Total number of new employees

17,577

Percentage of women among all employees

52.34%

Percentage of women in senior management

15.14%

Percentage of minority staff

7.35%

Labor contract signing rate

100%

#### Deepening the Construction of Talent High Ground

The Company strengthens the main position of corporate scientific and technological innovation, deepens the "Two Inputs Two Outputs" policy system of giving policies and resources, and delivering results and talents. In 2023, the Company established the Science and Technology Committee to strengthen the top–level planning of scientific and technological innovation and enhance the scientific validity and effectiveness of scientific and technological decision–making; improve the strategic layout of high–level talent, accelerate the forging of a technologically talented team with broad perspectives, excellent capabilities, and courage to innovate.

#### Talent Quality and Quantity Increased Simultaneously

- » Deepened the construction of an expert team, the scale of "Ten, Hundred, and Thousand" provinciallevel experts exceeds 5,000 people, among which there are 300 senior experts, nearly 80% in fields of "BASIC6" technology innovation plan, 285 people in field of AI, continuously strengthen the backbone force in key areas of technological innovation.
- » A total of 95 "golden seed talents" with engineering doctoral degrees from prestigious universities such as Tsinghua University and Peking University have been introduced.
- » Selected exceptional engineers in the four major fields of network, information technology (IT), cloud, and security, highlighting capability certification and value contribution, more than 10,000 people were selected and entered the database, accelerating the solidifying of the last mile of technical application.

### Continual Optimization of Talent Mechanisms

- » Optimized the use of talent mechanisms, forming a "Chief Technology Officer (CTO) System" implementation plan, pilot selection and matching of CTO, promoting significant scientific and technological project tackling across organizations, fields, and disciplines, and accelerating the cultivation of the leading technology talent team.
- » Formulated the construction guidelines for talent highland demonstration zones, strengthened policy resource supplying, created differentiated "One place, One policy" construction plans, and fully bring into play the leading role of reform "model room".

#### Rapid Emergence of High-End Talent

- » Appointed 2 chief scientists for the first time and 14 chief experts in the second batch at the corporate level, realizing full coverage in the "BASIC6" technology innovation plan area, gradually forming a leading talent array representing the highest level of the company's technology innovation.
- » Actively integrating into the national talent project, 11 people were awarded special subsidies by the State Council, introduced 1 "Thousand Talents Program" expert in the field of artificial intelligence, steadily enhancing the comparative advantage of high-end talent.

#### ※ Employee Honor Incentive

The Company improves the employee honor incentive system and, by quantitative assessment and rewards, strengthens the employees' sense of responsibility, brings together their collective efforts by quantitative assessment and rewards, letting employees have more sense of attainment and fulfillment in their career life.

#### Striving Towards a New Journey, Making Contributions to the New Era – The Fourth "Most Admirable China Mobile Personnel" Thematic Publicity Campaign

Since 2013, the Company has continuously carried out "Most Admirable China Mobile Personnel" thematic publicity campaigns to commend employees who have made significant contributions to promoting enterprise innovation and development, maintaining economic and social prosperity and stability, and protecting people's better life quality, especially in various difficult and extreme tasks. In the fourth "Most Admirable China Mobile Personnel thematic campaign" held in 2023, the Company awarded the title of "Most Admirable China Mobile Personnel" to 51 advanced individuals and collectives.



#### Dedication and Diligence Creates a Bright Future – The Recognition of China Mobile Artisans and Service Stars (Teams)



The Company carried out the recognition of China Mobile artisans and service stars (teams), selected 197 China Mobile artisans, 200 China Mobile service stars and 100 service star teams. The artisans and service stars have worked diligently and devotedly in their positions, creating extraordinary results in different fields, demonstrating China Mobile employees' excellent qualities of dedication, focus, and constant pursuit of precision, and showcasing the uplifting spirit of China Mobile employees' courage and dedication.

# **Unblocking the Multilevel Training System**

China Mobile continues to optimize the employee training system, precisely implementing training through the combination of online and offline, training and work practices, effectively improving employee vocational skills, and meeting the occupational growth needs of employees at different levels.

#### ※ Leadership Development

The Company carries out leadership development training for senior managers, outstanding young managers, and middle grassroot managers, normalizes the training and selection of outstanding managers, strengthens the systematic training of leadership in digital transformation, and builds a high–quality professional cadre team.

#### Senior Managers

Special training classes for senior managers Combining offline teaching of high–end exteriors with online learning area courses, to select and strengthen training resources. Leadership development training projects for new deputy senior managers — Adopting the concentrated face-to-face instruction+on-the-job practice method to help new deputy senior managers strengthen role cognition and improve management efficiency.

#### **Outstanding Young Managers**

#### "Digital Transformation Leadership Improvement" training projects —

For the first time, the "MOOC + flipped classroom" learning method was adopted, inviting 16 top teachers to teach, and improving the effectiveness of training by producing course knowledge cards, sorting out course notes, designing course arrangements, and introducing teacher posters. It covered **129** trainees.

#### Cadre Refresher Courses for Middle-aged and Young cadre -----

Using concentrated face-to-face teaching, discussion, case-sharing, action learning, and on-site teaching to set up 82 training courses, while introducing third-party multi-dimensional evaluations as a reference for the selection and appointment of managers.



China Mobile s "Digital Transformation Leadership Improvemen

#### Middle and Grassroots Managers

#### International Management Personnel Training -

Design a hybrid learning plan combining concentrated face-to-face teaching, onsite learning, action learning, student forums, and theme salons, and organize classbased learning to meet personalized needs.

#### Demonstration Class for Main Responsible Persons in City Branch Companies

Introduce a tabletop simulation course on high-performance team building and leadership improvement for the first time, focusing on building outstanding leadership during the transformation period. The course is simultaneously available on the China Mobile Talent Development Center's "Online Special Class for Middle and Grassroots Managers" online learning area, covering approximately 29,300 middle and grassroots managers.

#### Manager Business Management Skills Improvement Training -----

Carry out eight major theme trainings in the form of "theory class (required course) + extended class (optional course)", to improve the business management skills of managers.



I rainees in the International Management Personnel Training Program attending a calligraphy experience lesson.

#### ※ Professional Capability Cultivation

The Company provides various types of professional capability training according to the specialty of each employee, thereby enhancing the occupational skills of employees, and merging employees' self-improvement with the Company's development.

#### Scaling Up Empowerment for Tech Talent

Carrying out core technology talent skills, reshaping project system, refreshing workshops, and constructing 229 courses and 74 key capability role learning zones.

Advancing the skill enhancement of core technology talents in cloud, 5G, security, software development, etc., with 52,500+ trainees undergoing online training.

Developing the "Star Knowledge Collection" series of courses in the field of computility, 6G, artificial intelligence, accumulating 141,900 learning times, facilitating the rapid popularization of advanced technology to the frontline.

#### Cultivate Product Talents through Combination of Combat and Training

"Empowering Products" series training project: "All-Employee Digital Product Knowledge Empowerment Action Area" has reached 470,000 learning times, with a participation rate of 99%. For the first time, two periods of "Product Marketing Elite Simulation Training Classes" were carried out, training 133 product marketing battle trainers, with 4,100 actual sales.

"Empowering Grid" series training project: By the end of 2023, two periods of "Excellent Grid Leader Ability Enhancement Demonstration Class" and grid manager government and enterprise ability enhancement demonstration training were held, helping frontline personnel to improve their small and medium–sized enterprise expansion capabilities; Deepen the implementation of the grid leader qualification exam certification project, with 27,300 people being certified; carry out four periods of senior customer manager elite special training camps in the directions of agriculture and commerce, education, transportation, and integrated innovation, creating a co–creation exchange platform for customer managers in various industries.

# China Mobile's "2023 Excellent Grid Leader Capacity Enhancement Demonstration

# Stimulate the Potential of Talent Development Through Diverse Skills Competitions

In 2023, the Company significantly enhanced the "Empowering Contributing" competition brand, organizing a skill competition focused on network maintenance skills. This event aimed to identify exceptional talents in wireless network upkeep and optimization, core network technology specialists with hands-on experience, and leading talents in smart home service and maintenance. We also hosted the ninth edition of our network security skills competition, rigorously assessing our security experts' real-world offensive and defensive skills, and strengthening our network security professionals. Further, we acknowledged the "China Mobile Technology Masters" and "China Mobile Business Masters", encouraging the workforce to aim for continual advancement in both technical and business domains. The year saw the roll-out of 11 "Empowering Contributing" skill competitions alongside 2 labor contests.



China Mobile's "Empowering Contributing" Network Maintenance Skills Competition 2023.

#### Establishing Premier Platforms for Advancing Digital-Forward in Talent Development

In 2023, the China Mobile Talent Development Center launched 55 learning functions, deeply cultivating ten major smart learning applications such as intelligent subtitles and intelligent notes, creating core learning capabilities like expert studios, short videos, live broadcasts, and virtual spaces, ensuring the effective implementation of online learning and training. Throughout the year, 1,992 new courses, 197 short videos, 1,348 knowledge documents, over 26,500 questions were created, 92 learning topics were developed, 75 live events were held, and the total learning time reached 38,898,500 hours.

#### ※ Cultivating New Employees

In 2023, the Company initiated the Sailing Plan for new employee orientation, a comprehensive online training program. Beyond traditional classroom instruction, we innovatively introduced a virtual reality (VR) course on basic telecommunications infrastructure, aimed at delivering a highly immersive and interactive learning experience. The engagement in online learning reached a full 100%, with 99.71% of participants successfully passing their certification exams.

# **Creating a Harmonious Workplace Environment**

China Mobile attaches great importance to employee communication and participation, respects the legitimate rights and interests of employees, provides humane employee care, focuses on and guarantees the physical and mental health of employees, and continuously enhances employees' sense of gain, happiness, and security.

#### ※ Caring for Employees' Lives

The Company adheres to the concept of people-oriented, strives to create a balanced and happy working environment, enriches employees' leisure life and increases employees' happiness by providing humane care services and organizing all kinds of cultural and sports activities.

#### **Employee Care and Support**

#### Caring for Female Employees

#### **Cultural and Sports Activities**

"Five Small Spaces" Program: For the eighth consecutive year, it has promoted the construction of "Five Small Spaces" elements – small canteens, small bathrooms, small rest rooms, small activity rooms and small book houses. It provides front–line grid personnel with heart–warming fortification packages and other necessary living and emergency facilities and materials. The annual investment is RMB 428 million, of which the investment in front–line grid construction accounts for more than 70%.

Assistance for Special Groups of Employees. Increase support for retired cadres, employees with serious illnesses, employees affected by disasters, and other special groups. In 2023, RMB 2 million of condolences allocated to 40 "old, young, border, difficult" companies in 12 western provinces (including autonomous regions and municipalities) to further improve the production and living conditions of local employees.

Unions at all levels help female employees to relieve stress through the construction of software and hardware facilities such as Mommy's House, yoga room, fitness reading, and various thematic activities for female employees. For the eighth consecutive year, the "Happiness 1+1" MIGU series of fun activities were held, carrying out a variety of online and offline employee sports and cultural activities. In 2023, the number of participants in the "Health Walk" event was 279,500, the number of participants in the "Reading Walk" activity was 255,700, and the number of participants in the "Music Walk" event was 344,500.

#### Building "Union Service Points for Outdoor Workers"

The Company is a fervent advocate for the All–China Federation of Trade Unions' Dual 15 Initiative<sup>1</sup>, leveraging its network of retail outlets to create service points for outdoor workers. These points offer amenities such as seating, first aid supplies, water fountains, complimentary internet access, and microwaves, designed to address common hardships of outdoor workers like finding food and water, resting, and restroom access. By the end of 2023, 13,600 of the Company's retail outlets were providing these public services to outdoor workers, with 39 being recognized as Most Beautiful Union Service Points for Outdoor Workers.

1: The Dual 15 Initiative refers to establish 150,000 service stations by the end of 2023, ensuring that major cities and key urban districts have a 15-minute access radius to these support services.



#### ※ Opening Channels for Employee Communication and Participation

The Company regularly convenes employee representative congresses, enhances the level of democratic management, opens up employee communication channels, respects and guarantees employees' right to know, participate, express and supervise.

#### **Regulation System**

Formulated the Guiding Opinions of China Mobile on Further Strengthening the Construction of the Employee Representative Congress System, to further improve the standardization of the Employee Representative Congress, and provide institutional guarantee to protect the rights and interests of employees.

#### **Enhancing Mechanisms**

Established CEO mailbox and union chairman mailbox to accept employee feedback. In 2023, a questionnaire survey was conducted on the union chairman's mailbox, and a total of 1,440 valid comments or suggestions were collected, providing important references for further protecting employee rights and promoting our stable reform and development.

Strengthened the closed–loop management of proposals of the Workers' Representative Congress, tracking the follow–up handling of employee feedback issues, and supervising the implementation of proposals. In 2023, supervised and inspected the proposal implementation situation of more than 50 company units over the past two years, including proposals involving employee demands from the Workers' Representative Congress, motivating employees to contribute ideas and strategies for the Company's high–quality development.

#### Strengthening Training

Held democratic management work training classes, invited experts and scholars to explain the theoretical knowledge and practical application of democratic management, and at the same time, carried out the work of sharing experiences of outstanding units in democratic management work to enhance the performance ability of related personnel.

#### Safeguarding Employee Wellness

The Company focuses on both the physical and mental well-being of our staff by offering an extensive range of health management services.



Scheduled regular health screenings tailored to meet the diverse health concerns of employees at different life stages.

The headquarters' "Happiness Mobile Home" health station has been revamped to enhance our health services across the board, from the setting and equipment to medical personnel and services provided. This ensures our headquarters staff have access to preventive care, early intervention for minor ailments, and comprehensive coverage for more serious conditions.



Addressed common mental health concerns and needs among employees by conducting over 2,000 targeted activities yearly, including psychological counseling, interviews, and specialized training sessions. These initiatives have benefited over 450,000 employees and addressed more than 900 instances of psychological distress.

Partnered with third–party experts to perform psychological evaluations for thousands of our employees annually, guaranteeing both the professionalism and confidentiality of our mental health assessments and investigations.

#### Strengthening the Management of Production Safety

The Company complies with the requirements of the Safe Production Law of the People's Republic of China and the Fire Protection Law of the People's Republic of China, and formulates a series of regulations, such as the China Mobile All–Staff Safe Production Responsibility System, the China Mobile Fire Control Room Management Regulations, the China Mobile Business Place Safety Management Regulations, the China Mobile Head Office Safety Management Regulations, and the Safety Production Supervision and Inspection Standards (Scenario–Based). The Company has established a production safety management structure under the unified leadership and coordination of the Safety Production Committee, the clearly defined responsibilities of the safety management department and related departments, and the reasonable and lawful allocation of safety management personnel. In 2023, the Company promoted the supervision and inspection mechanism for production safety, enhanced the predetermined objectives without major production safety accidents throughout the year.



# Green Development

China Mobile takes the comprehensive promotion of the construction of a beautiful China as its guiding ideology, deeply implements the "C<sup>2</sup> Three Energy – China Mobile Carbon Peaking and Carbon Neutrality Action Plan" and has explored a green development model that fully exploits the advantages of new generation information technology to realize joint energy conservation and carbon reduction of enterprises and society. The Company dedicates to achieving its own green and low–carbon development, improving the efficiency of ecological environment governance, and supporting high–level protection of the ecological environment, to contribute positively to the construction of China's ecological civilization.



#### Conducting Green and Low-Carbor Operations



Supporting Social Initiatives in Energy Conservation and Environmental Protection











# Actively Responding to Climate Challenges

China Mobile supports the carbon peaking and carbon neutrality goals, actively addressing climate challenges with a clear strategic planning system, a sound governance structure, comprehensive management processes, and well–defined objectives.

# Steadily Advancing C<sup>2</sup> Three Energy Plan

In 2023, China Mobile deeply pushed the "C<sup>2</sup> Three Energy – China Mobile Carbon Peaking and Carbon Neutrality Action Plan", through three main lines of "energy conservation, clean energy, and empowerment, steadily promoting green, low–carbon sustainable development around six pathways of green networks, green energy consumption, green supply chain, green office, green empowerment, and green culture.

**Feature** 

To solidly promote the "C<sup>2</sup> Three Energy – China Mobile Carbon Peaking and Carbon Neutrality Action Plan", the China Mobile has formulated the *China Mobile Energy Conservation Management Measures* and the *China Mobile Environmental Pollution Risk Prevention and Control Management Measures*, set up the organizational structures and responsibility assignment for environmental–related issues including climate change, and put forward specific requirements for various tasks such as energy conservation planning, energy consumption monitoring and evaluation.

The case of Information Technology Empowering Lucid Waters and Lush Mountains: China Mobile Constructs Three Energy and Six Green Development Model was selected for the Excellence Practice by the China Enterprise Reform and Development Research Association.

#### C<sup>2</sup> Three Energy China Mobile Carbon Peaking and Carbon Neutrality Action Plan



# **Establishing Comprehensive Climate Governance Framework**

China Mobile has set up a three-tier governance structure of decision-making level - management level - implementation level for climate change issues.

Management Hierarchy	Governance Subjects and Structure	Job Duties and Progress
Decision- Making Level	China Mobile Carbon Peaking & Carbon Neutrality (Energy Saving and Emission Reduction) Leadership Team, led by the Chairman	Takes the main responsibility for ecological environmental protection and energy–saving work, studies and formulates overall strategies and deployments, coordinates relevant company resources to form a joint force, considers major problems and ensures a steady progress.
Manage- ment Level	China Mobile Carbon Peaking & Carbon Neutrality (Energy Saving and Emission Reduction) Work Team, led by a Deputy General Manager in charge, heads of various headquarters departments, the Information Technology Center, Supply Chain Management Center, and the IoT Company serve as members	Responsible for implementing strategic arrangements related to pollution prevention and energy saving, distributing specific tasks to relevant departments and branches according to management procedures, and monitoring and evaluating energy consumption. In 2023, the Deputy General Manager in charge heard reports on the C <sup>2</sup> Three Energy Plan assessment results for 2022 and the work points and assessment methods of the C <sup>2</sup> Three Energy Plan for 2023.
Execution Level	Planning and Construction Department of Headquarters	Responsible for the formulation and implementation of climate change-related planning, reviewing the progress of climate-related goals and indicators quarterly, and regularly reporting annual progress to the board of directors; reporting to the Vice General Manager in charge every six months through work meeting materials; preparing the annual energy-saving and emission-reducing investment budget, which is reviewed by the board of directors. In 2023, the <i>China Mobile C<sup>2</sup> Three Energy Plan 2023 Work Points</i> and the <i>China Mobile C<sup>2</sup> Three Energy Plan 2023 Work Points</i> and the <i>China Mobile C<sup>2</sup> Three Energy Plan 2023 Assessment Method</i> were formulated, which clarified the annual work goals for 2023, set up 25 key tasks, focused on key areas, created eight major projects to promote large-scale development; released guidelines for the application of energy-saving technologies in wireless networks, completed the evaluation of green data centers, solidly advanced the Data Room Renewal project, 94% of data centers and core machine buildings reached the PUE baseline value; explored the use of clean energy, photovoltaic power generation reached 210 million peak watts, zero/low-carbon sites reached 34,000; information application enabled society to reduce emissions by 310 million tons. The comprehensive energy consumption and carbon dioxide emission intensity decreased by 13.0% and 13.3% respectively year-on-year.

China Mobile's board members pay high attention to the issue of climate change. In recent years, the Company has continuously strengthened the ability of the board of directors to deal with climate change.





# **Enhancing Climate-Related Incentive Structures**

China Mobile sets up a combined financial and non-financial incentive mechanism, incorporating climate change response assessment indicators into the performance evaluation system of senior managers and employees at different levels, promoting the formation of a corporate culture atmosphere where all employees actively participate in energy-saving and emission-reducing efforts.

Incentive Subjects	Type of Incentive	Assessment Indicator	Incentive Plan Explanation
The Chairman	Financial Incentive	Reduction of Emission Intensity	The performance assessment system for the Company's Chairman includes pollution prevention and energy–saving efforts, directly linking these criteria to the Chairman's salary.
Energy Manager	Financial Incentive	Reduction of Emission Intensity	The Company has incorporated carbon emission totals and carbon intensity, along with other climate change-related metrics, into the KPI assessment system for provincial subsidiaries. Specific evaluation documents have been prepared. The compensation for the general managers and energy managers of the provincial subsidiaries is directly tied to the annual KPI assessment results. Ten specialized companies and directly managed units have been included in this assessment system to evaluate their carbon reduction efforts.
All Employee	Non-financial Incentive	Reduction of Emission Intensity	In 2022, provincial companies in Jiangsu, Anhui, Shandong, Fujian, Zhejiang, Gansu, Henan, Sichuan, Liaoning, and Hunan ranked among the top ten in assessment scores. In the first quarter of 2023, the headquarters awarded the aforementioned units the title of "Advanced Collective in the China Mobile 2022 Carbon Peaking and Carbon Neutrality Action Plan", while also awarding ten employees the title of "Outstanding Individuals in the China Mobile 2022 Carbon Peaking and Carbon Neutrality Action Plan".

# Managing Climate Risk Comprehensively

China Mobile has established an effective and comprehensive climate risk management system, incorporating climate change issues into all stages of risk management.

#### China Mobile's Climate-Related Risk and Opportunity Management Process



#### China Mobile Climate-Related Risk Materiality Matrix



# \* Climate-Related Risks and Opportunities

Short-term (0-1 year)	Regularly formulating and reviewing progress of work plans related to climate change every year or every half a year.	
Mid-term (1-3 years)	Formulating a three-year work plan related to climate change every three years as a medium-term plan.	
Long-term (3-5 years)	Every five years, a five-year strategy and work plan related to climate change is formulated, which is consistent with the national Five-Year Plan.	

Risk Category	Description	0 <sup>4</sup> Risk Response Measures
Current and Emerging Regulatory Risks	* The Company's headquarters and Beijing Mobile subsidiary, with China Tie Tong's headquarters and its Beijing subsidiary have been included in the Beijing Carbon Emission Trading System (ETS) pilot. According to the mandatory verification regulations of the ETS, if the verified emissions exceed the quota, China Mobile must bear the relevant cost.	<ul> <li>* Assess carbon emissions, the corresponding compliance cost, and the non-compliance regulatory risk cost on a quarterly basis, and notify branches and subsidiaries of the results.</li> <li>* Assess the consistency of the internal management rules of carbon trading with the regulatory agency's ETS pilot regulations every year to ensure that the Company's provisions comply with regulatory requirements.</li> <li>* In 2023, the Company's headquarters and Beijing Mobile subsidiary, China Tie Tong's headquarters and its Beijing subsidiary reduced the quota purchase in the Beijing ETS market to meet the relevant requirements.</li> </ul>
Technological Risks	* The Company has built a leading and the largest 5G SA commercial network, and the power consumption of 5G base stations is more than that of 4G. If more energy–saving and lower energy–consuming technologies are not developed and used, rapid growth in energy consumption and rapid increase in energy costs will result.	* The Planning and Construction Department of the headquarters is fully responsible for the planning and implementation of responding to climate change, and cooperates with subsidiaries to carry out energy-saving and climate change mitigation work every year.
Severe Natural Factors	* The Company is actively developing its 5G business, and the stable operation of base stations, machine rooms, and optical cables are very important for the Company to provide reliable 5G services to customers. Extreme weather can cause different degrees of damage to the Company's infrastructure and fixed assets and interfere with network quality. With the increase in the severity and frequency of extreme weather events, it may lead to an increase in the Company's capital expenditure.	<ul> <li>* Every year, a post-disaster reconstruction plan is formulated to predict the amount of investment for post-disaster reconstruction during the planning period.</li> <li>* Allocate a part of the investment budget for rebuilding post- disaster facilities when formulating the annual investment plan.</li> </ul>

#### Time Range and Definition

Opportunity Category		O <sup>*</sup> Opportunity Realization Strategies
Products and Services	* Information and communications technology (ICT) solutions can effectively aggregate resources and increase the efficiency of resource and energy use. They are deemed to be a viable pathway to reduce greenhouse gas emissions across all sectors. In response to the national Carbon Peaking and Carbon Neutrality goal, there is a huge demand within the Company's client base for green transformation. This has created substantial business expansion opportunities for the Company.	* Further delve into the opportunities presented by the emission reduction policy, fully harness the carbon reduction leverage of digital-intelligent technology, assist in enhancing energy utilization and production efficiency across all industries, promote intensive resource allocation, efficiency enhancement, and emission reduction, support the green transformation goals of the whole society.
Resource Efficiency	* With the promotion of the Carbon Peaking and Carbon Neutrality goal, the Company is set to benefit from improved energy efficiency.	<ul> <li>* Set up a special fund for energy conservation and emission reduction, achieve efficiency enhancement and emission reduction annually through the usage of the special fund.</li> <li>* In 2023, the PUE of the Company's data center and core computer building was reduced by 4.5% compared to 2022, saving 680 million kilowatt hours of electricity and reducing costs by RMB 460 million.</li> </ul>

#### ※ Climate Risk Scenario Analysis

In order to understand the impact of significant climate-related risks on the Company's business strategy and decision-making within different time ranges, the Company utilizes the industrial energy-saving scenario and model for analysis.

Scenario 1: By 2025, the comprehensive energy consumption per unit of telecom service shall decrease by 15% compared with 2020 (MIIT's requirement).

Scenario 2: By 2025, the comprehensive energy consumption per unit of telecom service shall decrease by 20% compared with 2020 (China Mobile's target).

model	Descri
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Based on forecast on network scale and the energy-saving requirements of the two scenarios, we can calculate the maximum annual electricity consumption that would meet the energy-saving requirements (the expected annual electricity consumption less the maximum annual electricity consumption equals annual electricity savings needed).

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We determined energy conservation goals at different levels by subdividing the potential impact of the different scenarios.

By 2025, the comprehensive energy consumption per unit of telecom service shall decrease by 20% compared with 2020. We devised specific strategies and measures based on this year's target, including:

Communication Network: Promoted the transformation of network architecture including C–RAN and network cloudification, took solid steps in promoting construction of all–fiber foundation, furthered deployment of wireless network energy–saving technologies, continued to raise the energy efficiency of data centers and server rooms, and phased out old 2G and 4G equipment.

Energy Use: Actively utilized clean energy and gradually reduced conventional energy use.

Supply Chain Management: Incorporated green and low-carbon technology evaluation results into the procurement scoring system, tightened procurement requirements on energy use efficiency, energy-saving functions and green manufacturing processes for 5G and other network equipment, power supply equipment, air conditioners and other supporting facilities, encouraged equipment suppliers to expand R&D and supply of green technologies and products, and recycle waste materials.

Offices: Saved office resources, reduced emissions relating to commuting and business travel, and advanced green marketing.

# **Regular Monitoring of Environmental Performance**

China Mobile has set clear, measurable quantitative targets for energy usage and greenhouse gas emissions, alongside corresponding key performance indicators. We regularly collect and analyze the energy consumption, greenhouse gas emissions, and intensity indicators of provincial companies and professional companies. When the indicators of relevant units change abnormally and there is a risk of exceeding expected targets, the headquarters will urge them to take more actions to improve energy efficiency and reduce emissions.

The Company has launched a targeted inspection campaign focused on enhancing energy efficiency and reducing carbon emissions. This includes scrutinizing the application of energy–saving technologies at base stations, evaluating the use and management of energy resources in data centers, monitoring the green and low–carbon operations, examining the progress of green energy initiatives, and assessing the setup of showcase sites for comprehensive energy use, with the goal of addressing any discovered shortcomings. Additionally, the Company has embarked on an internal carbon audit initiative, hiring external auditors to rigorously check the accuracy, authenticity, and compliance of energy usage, statistics, and CO<sub>2</sub> emissions data across its various departments.



# **Conducting Green and Low-Carbon Operations**

China Mobile exercises strict control over its own energy consumption and the increase in greenhouse gas emissions, exploring potential energy savings and greenhouse gas emission reductions across all sectors, processes, and personnel. At the same time, it is improving the proportion of clean energy supplies, steadily reducing traditional energy use, and realizing energy saving in its own production operations and clean energy in energy consumption.

**Building Green Networks** 

China Mobile is dedicated to delivering more information with less energy, even as business demands continue to grow. In 2023, the Company's base stations accounted for approximately 58% of its total energy consumption, while data centers accounted for about 24%. Targeting these two key energy–intensive scenarios, base stations and data centers, the Company takes energy–saving measures such as employing digital management tools for monitoring energy consumption and efficiency, tracking energy consumption trends and analyzing efficiency distribution.



The Company implements the requirements of the Guidance Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Old Communications Equipment and the Directory for Retiring High-Energy-Consumption and Information Technology, the Guidance Catalogue for Industrial Structure Adjustment by the National Development and Reform Commission. Regular investigation and elimination of high-energy-consuming and outdated equipment are carried out. At the same time, the Company updates the Guidance on the Determination of Inefficient and Ineffective Assets of China Mobile each year and carries out the optimization, transformation, or withdrawal of high-energy-consuming and low-energy-efficient network equipment in the current network according to the guidance requirements. By the end of 2023, a total of 157,000 sets of ineffective equipment had been decommissioned, and 111,000 sets of inefficient equipment had been integrated.
#### Research and Application of Integrated Source-Grid-Load-Storage at Zhejiang Communication Sites

The Company has developed source–load–storage coordinated linkage technology, distributed virtual power plant technology, virtual electric meter power auditing model, direct current photovoltaic technology, lead–carbon energy storage technology, storage integration technology, and energy operation platform, targeting the energy consumption characteristics of communication sites. They pioneered an integrated source–grid–load–storage energy operation system at communication sites, realizing flexible interaction between communication sites and the grid, and filling the void in the comprehensive, full–process digitalized energy– saving operation of communication sites.

By the end of 2023, Zhejiang subsidiary's source–grid–load–storage integration project has saved more than 570 million kwh of energy for communication sites, reduced carbon dioxide emissions by 325,000 tons, and saved more than RMB 350 million in electricity bills. The project has been promoted to Zhejiang Tower, maximizing the energy saving, carbon reduction, cost reduction, and efficiency enhancement of communication sites under the premise of ensuring safe operation.



Integrated Source-Grid-Load-Storage Energy Operation Platfor

#### Innovating Base Station Energy-Saving Technology Based on Artificial Intelligence in Shandong

The Company has created a new three–dimensional energy conservation model of "One Body, Dual Wings, Triple Upgrades" that refers to one management platform, two hardware refurbishment, three intelligent upgrades and solves the three major challenges of balancing energy saving at wireless base stations and user online perception, high carbon emission at base stations, and the difficulty in coordinating energy efficiency within machine rooms. This has led to the realization of intelligent energy management, clean energy supply, and efficient energy use. By the end of 2023, it had saved 221 million kWh of electricity annually, reducing CO<sub>2</sub> emissions by 125,400 tons.

#### Creating a New Benchmark for Green Energy Efficiency in Data Centers in Fujian

China Mobile (Fujian Fuzhou) Data Center is a regional ultra-large data center located in Fujian. In 2021, the average annual PUE of the data center was 1.70. To improve the comprehensive efficiency of energy utilization, Fujian subsidiary established a PUE improvement task force. By employing over ten energysaving measures such as internal circulation of cold storage tank and main engine cold pool resources, optimization of parameters of cold source equipment, and optimization of airflow organization, the full potential of existing equipment for energy saving was explored. Meanwhile, energy-saving techniques like plate heat exchangers, artificial intelligence, and frequency converters for chillers were applied to reduce PUE.

After comprehensive remediation, in 2023, the PUE of China Mobile (Fujian Fuzhou) Data Center dropped to 1.36, becoming the Company's data center with the lowest average annual PUE in warm winter and hot summer regions. The data center's energy conservation and emission reduction case has been selected into the 2022–2023 High Quality Energy Conservation and Emission Reduction Case Collection of Data Centers by the China Association of Communications Enterprises, and the relevant energy–saving technologies have been promoted and applied.



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#### Applying High-Dimensional Cooling System in Guangxi

China Mobile, in collaboration with partners, has introduced a high-dimensional cooling system in Guangxi. Through the joint operation of indoor and outdoor units, efficient heat exchange between heat sources in the machine room and natural cool sources outside the machine room is achieved. Moreover, the system is equipped with temperature sensors and remote communication modules, which can upload temperature information to the monitoring system, and the monitoring system can control the operation state according to the indoor temperature. Test results show that the average energy–saving rate of the air conditioner is about 30.24% under the 28 degrees Celsius linkage scenario and about 70.13% under the 35 degrees Celsius linkage scenario.

#### Implanting Data Center Cooling System Automatic Driving Mode in Hubei

The Company has introduced an automatic driving technology for the cooling system in Hubei, allowing refrigeration equipment to automatically adjust operation modes under different outdoor environmental temperatures, fully utilizing natural cold sources, and minimizing energy consumption of refrigeration equipment. In 2023, the Wuhan Donghu High–tech Data Center saved a total of 1.1046 million kWh of electricity and reduced CO<sub>2</sub> emissions by 627.25 tons.

Independently Developing Energy-Saving Wind Wall Product in Shanxi

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The Company has independently developed a new air conditioning terminal product, SmoothWind. By arranging the air conditioner and the cabinet in parallel, the heat exchange area is increased, achieving zero wind resistance and zero loss, and greatly improving the energy–saving level of the cabinet. In 2023, the SmoothWind product completed pilot verification, helping the Taiyuan Data Center in Shanxi to reduce its PUE to 1.26.



Innovative research and development of the new air conditioning end product SmoothWind.

## **Promoting Green Energy Use**

China Mobile actively integrates into the national energy transformation landscape, proactively enhances the utilization rate of clean energy, steadily reduces the proportion of traditional energy use, and effectively promotes the comprehensive use of energy.



Actively Introducing Green Energy

Set up small wind power and rooftop photovoltaic renewable energy power generation devices in regions with suitable climate conditions, and introduced clean energy in data centers and base stations. Combined with the characteristics of communication network load and operation assurance requirements, promoted the design and operation and maintenance innovation of the power system, properly explored the potential of battery equipment, and jointly promoted green power consumption.



Accelerated the elimination of coal heating by 2023, with the proportion of provincial (autonomous regions and municipalities) subsidiaries with near-zero direct carbon emissions reaching 74%.

Improved the operation and maintenance standards of fixed generator sets, optimize the configuration and scheduling of mobile oil engines, and effectively controlled the consumption of diesel and gasoline under the premise of ensuring network emergency power generation.



Promoting the Integrated Utilization of Energy

Increased utilization of energy cascades, construction of comprehensive energy projects that harmoniously benefit electricity, heat, cold, gas and other energies, and improved the efficiency of energy utilization.

By 2023, more than 40% of the cities have established comprehensive energy utilization demonstration areas, and at least two green energy–saving technologies have been used in these areas in power supply, heating and cold water, air conditioning, lighting, water resource utilization, energy control, etc.

## **Promoting Green Office**

China Mobile has constructed a data-driven environmental protection office system, strengthening the awareness of all employees to Cherish our Earth and Practice Green Office, encouraging employees to actively participate in daily office carbon reduction actions, advocating that everyone should be an energy-saving and carbon reduction practitioner.

#### Saving Office Resources

Through paperless and electronic office means such as "5G with e-signature", "You say, I Write Down", "AI Scan King", the smart legal affairs, smart reimbursement and smart quality inspection can be operated online and paperless anytime and anywhere, saving **13.43 million sheets** of paper throughout the year, reducing greenhouse gas emissions by **26 tons**.

Carry out energy-saving renovations for existing office buildings, optimize the operation control of refrigeration and air conditioning equipment, and set office environment fresh air and temperature and humidity according to national recommended standards. 48 provincial specialty companies with communication engineering projects have fully launched the application of all–engineering file paperless archiving capabilities. By the end of 2023, a total of 1,676 projects and nearly 220,000 document paperless archiving have been completed.

Actively develop photovoltaic power generation. In 2023, Jiangsu Mobile deployed photovoltaic power generation devices in six office buildings in Wuxi, generating 570,000 kWh of electricity throughout the year, reducing carbon dioxide emissions by 325 tons; Guangxi Mobile built a distributed photovoltaic power station in the logistics warehouse center in the High-tech Zone, generating 1.77 million kWh of electricity throughout the year, reducing carbon dioxide emissions by 1,009 tons. Optimize the configuration and operation management of office space energy use facilities, improve the energy supply scheme and facilities, and save all kinds of energy consumption.

In the canteen of the headquarters office area, they distribute "Carbon Reduction With Me · Green Movement First" seed cards and pure natural organic compost made from kitchen waste collected by the restaurant, spreading the green concept of turning waste into treasure.





"Green Box Comes to You"

Reducing Commuting and Travel Emission



**Reducing Commuting Emissions** 



Encouraging employees to opt for green commuting methods such as walking, shared bikes, public transportation, and new energy vehicles, considering their commuting distance.

In 2023, the per capita commuting greenhouse gas emissions decreased by 22% year-on-year.

Promoting online meetings and training to reduce unnecessary travel. For essential travel, employees are encouraged to choose lower–emission options like high– speed rail, with the Company's information technology platform tracking employees' travel–related greenhouse gas emissions. In 2023, the Company's headquarters hosted 778 inter–provincial video and telephone conferences.

# Supporting Social Initiatives in Energy Conservation and Environmental Protection

China Mobile actively promotes the deep integration of emerging technologies such as 5G and the green low-carbon industry, plays a leading role in the supply chain, stimulates the leverage of information technology, and cooperates with all parties in the industry chain to build a green supply chain. It promotes the intelligent transformation and upgrade of various fields with the engine of green development, driving the whole society to achieve energy-saving and emission reduction.

## Jointly Building a Green Industrial Chain

In 2023, China Mobile released the *China Mobile Guiding Opinions on Green Supply Chain*, clarified the development goals of the green supply chain, formulated implementation plans and specific measures of implementation path, and enhanced the green supply capacity of the industrial chain and supply chain.



## ※ Implementing Green Procurement

With the concept of green procurement as the guide, the Company continuously improves the green procurement standard, deepens the collaboration of industrial chain enterprises, and increases the supply of green products.

### Optimizing Responsible Sourcing System

Green energy-saving technology test results are incorporated into the purchase score, covering 102 types of equipments in the centralized procurement directory, whereby the active communication equipment's coverage proportion exceeds 90%. 345 products from 9 categories, including mobile communication network equipment, are listed in the *China Mobile Green Procurement Product Applicability Directory.*  The China Mobile Supplier Cooperation Guide is established. It requires cooperative suppliers to perform tax obligations, make active social insurance payments, and adhere to laws and regulations regarding legal labor, labor protection, occupational health safety, social responsibility, and environmental protection.

All suppliers participating in procurement are required to sign an online integrity commitment, and the Social Accountability (SA8000), Occupational Health and Safety Assessment Series (OHSAS18001) and Environmental Management System (ISO14000) certification are identified as the supplier qualification review, dynamic quantitative appraisal, and comprehensive strength assessment benchmarks.

#### **Continuously Promoting Online Procurement**

Relying on the electronic procurement and tender bidding system, standardization, online and automation of tender documents and tender templates are promoted. From the announcement, bidding, tendering, evaluation to contract signing, the entire process is automated online. By the end of 2023, the paperless procurement rate reached 99.9%, with 35,000 paperless procurement projects carried out throughout the year, thereby reducing the number of paper documents by 130 million and reducing carbon dioxide emissions by 260 tons.

## ※ Expanding Green Suppliers

The Company embeds environmental principles throughout the supplier management process, and works with all stakeholders in the supply chain to develop a sustainable ecosystem.



## Suppliers

Establishing Supplier Incentive Mechanism

Suitable incentives are given to suppliers who have outstanding performances of energy–saving and carbon–reducing in areas such as product technology innovation, process innovation, and production and distribution at the procurement sourcing stage.

## ※ Constructing Green Logistics System

The Company strengthens the use of green packaging and empowers the circulation link through technical means, which fully reduces the impact of goods packaging and logistics network on the environment.

### Application of Green Packaging

information disclosure.



In collaboration with the suppliers, design and use regenerated paper materials for equipment packaging to reduce the use of non-degradable materials such as glue. The router products of our own brand use renewable paper for packaging, and the packaging volume is reduced by changing the antenna folding method, saving about 5%–15% of the packaging paper per product. Established the China Mobile Green Packaging Enterprise Standard, achieved a green packaging ratio of over 80%, saving 278,500 cubic meters of timber annually.

### Promoting Green Circulation

The Company started the "end-to-end" label physical assets all life cycle visual management in the industry, persuading strategic suppliers to use radio frequency identification (RFID) tags, creating "digital identity cards" for 55 types of products, and lifting the utilization rate of dismantled assets to 80%.

Developing Green Warehousing

Established a green warehouse evaluation index system, actively develop smart warehousing, and reduce greenhouse gas emissions during transportation through the optimal logistics distribution method and route.

## ※ Conducting Green Recycling

The Company constructs a material recycling system, strengthens idle and obsolete materials management, and promotes cross-regional and cross-project asset revitalization. The recycling standard of materials has been established, a renewable resource reverse logistics service system has been set up, and various recycling modes such as producer recycling, third-party corporate recycling, and industry alliance recycling have been explored. In 2023, RMB 1.428 billion of stagnant materials were disposed of, and the proportion of stagnant inventory dropped to 1.84%.

The project of *Solutions to Revitalize the "Material Supermarket" of Enterprises and Institutions* won the highest project award of the 2023 World Summit on the Information Society (WSIS), the only major award won by domestic enterprises at the summit.

#### In Shandong, Exploring the Disposal of Scrapped Materials Based on a Green Collaborative Supply Chain

In Shandong, the Company has developed a green and efficient recycling system tailored to various categories of discarded materials. By implementing diverse strategies including price adjustments, auction platforms, and a unified approach to dismantling and collection, we have realized significant social and economic advantages.

Battery materials: Adopt a price linkage mechanism and conduct battery material disposal transactions through public trading, introducing full competition and effectively improving disposal income. Non-battery materials that are easy to dismantle: Disposal is carried out through a public auction platform, standardizing the auction transaction process. Non-battery materials that are not easy to dismantle: The original two links of dismantling and disposal are optimized into one integrated dismantling and recovery link, which is responsible for dismantling and disposal by the same recycler, simplifying business processes and solving the cost problems of dismantling, transit, transportation, and storage.

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## **※** Encouraging Green Innovation

The Company enhances green technology innovation, creates a greenhouse gas emission management platform based on blockchain technology, and encourages upstream and downstream enterprises to steadily disclose environmental and greenhouse gas emission information.

#### Creating a Supply Chain Greenhouse Gas Emission Management Platform Based on Blockchain in Jiangsu

To address the challenge of lacking quantified greenhouse gas emission standards in the enterprise supply chain,the Company introduced a product carbon footprint accounting standard. Based on the "end-to-end" strategy and the independently developed blockchain service platform SMBaaS, they created a quantified output capability for greenhouse gas emissions in the supply chain, achieving reliable and quantifiable output of greenhouse gas emission data in the supply chain.

By the end of 2023, a total of 631,200 key greenhouse gas emission activity data has been collected at the Lishui District Warehouse of Jiangsu Mobile. Based on the greenhouse gas emission output model, transport routes were optimized, loading methods and the size of the packaging for centralized procurement products were adjusted, directly reducing the transport volume by 16,500 tonskm, and the average volume of the optical cable products dropped by 4.89%. As a result, greenhouse gas emissions were reduced by 1,331.86 tons in total.



## ※ Deepening Green Communication

In 2023, the Company, together with its partners, issued the *China Mobile Green Supply Chain Action Initiative Proposal*. Through its six propositions, it calls on all suppliers to practice green, low-carbon, and environmentally friendly concepts in every aspect of production and operation.

#### Energy-saving and Carbon Reduction, a Journey We Embark on Together - China Mobile Green Supply Chain Action Initiative

#### Improving Carbon Management Levels

Actively participate in environmental management series standard certification, strengthen product carbon footprint management, and regularly disclose corporate carbon emission information.

## Reducing Energy Consumption

Strengthen the control of energy consumption of the enterprise itself and the upstream of the industrial chain, improve product quality, raise product green standards, actively apply green technology, use clean energy, and effectively reduce carbon emissions.

#### Implementing Green Manufacturing

Expand the research and development and supply of green products, actively promote technological innovation and process innovation in the research and development process, pay attention to energy–saving functions and energy use efficiency in the manufacturing process, achieve lean production and clean production, and improve the energy efficiency of network infrastructure.

#### **Promoting Green Packaging**

Products prioritize the use of recyclable packaging materials, replacing traditional wood packaging with eco-friendly materials, and replacing independent packaging with intensive packaging, to ensure that the design and manufacture of packaging are conducive to subsequent recycling, classification, and disposal.

### **Implementing Green Logistics**

Adopt intensive modes such as joint distribution and centralized distribution, reduce the transportation of scattered or small batch products, optimize the transportation and distribution routes, and realize nearby supply and integrated distribution.

#### Carrying out Recycling

For products with a high reusable value, actively carry out factory recycling, reduce material waste, control environmental pollution, and improve the life cycle value of the product.

## **Empowering Emission and Carbon Reduction of Society**

China Mobile fully exerts the empowering role of the new generation of information technology in green development, actively supports the society-wide pollution reduction and carbon reduction, biodiversity protection, advocates green lifestyle, releases the potential for low-carbon development, and cultivates green development kinetic energy. In 2023, the Company utilized information technology to assist society in reducing greenhouse gas emissions by **310 million tons**, and every TB of information flow helped society reduce greenhouse gas emissions by **115 kilograms**.

## Supporting the Green Transformation of Economic Society

The Company takes the digitalization, intelligentization, and green transformation demands of various industries as the guidance, accelerates the improvement of the service supply capacity of deep integration of digital technology and vertical industry applications, and assists the digitization and green transformation of economy and society.

#### Flapping the "Wings" of 5G, Welcoming the Power Transformation

Leveraging the advantages of 5G technology and core product capabilities, China Mobile IoT has crafted a Carbon Peaking and Carbon Neutrality energy consumption product ecosystem centered around the pivotal elements of source, network, load, storage, and carbon. This framework is designed to facilitate digital management and optimization in the energy sector's crucial phases, including production, transportation, consumption, and storage, significantly contributing to the development of a new electric power system.

In the context of distributed photovoltaic (PV) scenarios such as agri–voltaic systems and rooftop installations, operational challenges are prevalent, including substantial difficulties in network resource coverage, high costs, and the inability to ensure unmanned or minimally manned operations. In Guangdong, China Mobile IoT has pioneered the application of 5G RedCap technology in distributed PV settings, inaugurating a new energy management platform at the Huaneng Guangdong Control Center. This initiative leverages intelligent applications such as PV data collection and drone inspections to conduct quantitative analyses of power loss and promptly address and rectify defects, to increase clean energy generation effectively.

#### Ocean 5G Creates "Blue Granary", Exploring "Green Treasures"

In 2023, the Company initiated a pilot project in Jiangsu's Tongzhou Bay to construct a "Offshore Wind Power + Marine Ranching" 5G offshore energy complex. Leveraging offshore wind power, it provides foundational network and computility support for marine ranching, services for offshore fishermen, marine environmental monitoring, and marine regulation and emergency rescue, among others. This project has deployed a variety of underwater observation instruments, achieving real-time monitoring of marine environmental elements such as ocean currents, tide levels, temperature, and salinity. Data is transmitted in real time through a wide-coverage offshore 5G network, assisting aquaculture enterprises in staying informed about the marine ranch's ecological environment and the growth conditions of marine products. The construction of the "Offshore Wind Power + Marine Ranching" 5G offshore energy complex deeply integrates marine resources, effectively protects the nearshore aquaculture environment, and outlines a new path for marine ecological environment governance.

#### 5G Empowers Non-ferrous Metal Green Manufacturing

In partnership with collaborators, the Company has constructed a digital green smelting factory in Honghe Prefecture, Yunnan, integrating 5G and cloud technologies. This smelting factory employs China Mobile's 5G and Internet of Things (IoT) technologies for data collection and monitoring, enabling precise control over the production process. This significantly enhances energy efficiency, reduces energy consumption, and decreases the emission of waste and hazardous substances. Energy consumption has been reduced from 1,652 kg of standard coal per ton to 1,247 kg of standard coal per ton. Moreover, by utilizing technologies such as 5G+Automated Guided Vehicles (AGV), 5G+Rail Guided Vehicles (RGV), and 5G+conveyance bridge systems, the company has achieved remote unmanned control and high automation of storage, improving warehouse management efficiency by over 80%.



Automated transportation of tin ingots in Yunnan green smelting factory.

## ※ Harnessing Technology to Safeguard Beauty of Nature

The Company adheres to an eco-first development approach, promoting an integrated "Smart Environmental Protection" solution and product service that encompasses "monitoring, management, and prevention". It has established ecological monitoring systems in several nature reserves, including the Sanjiangyuan area in Qinghai, the Yellow River Delta, the Yangtze River Basin, and around Poyang Lake. Additionally, by leveraging the technological advantages of 5G, satellite remote sensing, drones, video surveillance, and the Internet of Things (IoT), the Company monitors wildlife populations, contributing to ecological management and biodiversity conservation.

#### In the Source of the Three Rivers, Witness the Beauty of Diversity

Qinghai is the source of the three rivers and the "Chinese Water Tower". In 2023, with the support of China Mobile, this "virgin land" in the hinterland of the Sanjiangyuan, which is cold and oxygen-deficient and rarely visited by people, was covered by 5G networks. The voice of ecological protection in Qinghai is being broadcasted to the world over gigabit broadband.

## Saying Goodbye to "Communication Blind Zones" and Seeing Hoh Xil

In May 2023, for the first time, high–bandwidth, long–distance microwave transmission was applied in the uninhabited high–altitude areas to connect the Chuo Nai Lake Protection Station in the heart of the Hoh Xil region and its surrounding seven kilometers to the 5G network. Through China Mobile's 5G private network, the Chuo Nai Lake Protection Station achieved real–time remote monitoring via 5G for the first time, broadcasting live the birth of Tibetan antelopes at Chuo Nai Lake.



China Mobile's base station at the source of the Yellow River.

### "Window to the Source of Rivers", Cloud Watch Over the "Chinese Water Tower"

The establishment of the "Window to the Source of Rivers" remote video network observation system in Yushu uses short, medium, and long optical paths, high-definition video, audio connections, and digital network realtime transmission to effectively overcome the slow response, high cost, and narrow coverage of human patrolling and field investigations. This further enriches and perfects the integrated terrestrial and celestial ecological monitoring and early warning system, effectively supporting the management of the Sanjiangyuan National Nature Reserve and the monitoring of biodiversity.



Wild Tibetan antelopes in Zhonai Lake captured by China Mobile's remote video network observation system.

#### Providing Intelligent Solutions for Crested Ibis Conservation in Shaanxi

The crested ibis is an important species in the protection of biodiversity in the Qinling Mountains and an important symbol of the ecological culture of the Qinling Mountains. The Company, in collaboration with the Shaanxi Hanzhong Crested Ibis National Nature Reserve Administration, has developed a "5G+ Wild Crested Ibis Monitoring and Analysis" platform. This platform integrates 5G and artificial intelligence technologies to deploy wildlife cameras and high-definition pan-tilt units in major Crested Ibis roosting sites. It utilizes bird recognition algorithms and Al superbrains on the backend to monitor key information such as the number and distribution of Crested Ibises in their habitats. This significantly reduces the frequency of manual patrols, provides accurate data for the formulation of protection strategies for staff, and pioneers the use of information technology in the conservation of wild Crested Ibises.



Images of crested ibises captured by the "5G+ Wild Crested Ibis Monitoring and Analysis" platform.



The "5G+ Wild Crested Ibis Monitoring and Analysis" platform provides monitoring and statistical analysis of key information such as the number and distribution of crested ibis populations in their habitats.

#### "Cloud-based" Mountain Patrol, Smartly Protecting Green Waters and Mountains

The Qingliangfeng National Nature Reserve in Anhui, known as the Natural Botanical and Zoological Garden and Species Gene Bank of East China. To better safeguard this precious land, The Company collaborated with China Mobile Cloud to develop the Shexian Smart Forest Chief Information Platform in Anhui. By integrating modules for forest pest control, Forest Chief system information display, forest resource management, disaster emergency response, command center displays, backend configuration management, and a mobile patrol app, forestry patrols have moved from "measuring by foot" to "management in the cloud". By the end of 2023, the Shexian Smart Forest Chief Information Platform had detected over 50 fire hazards from burning weeds at the forest edge. Forestry law enforcement personnel were dispatched to the scene in real-time based on alerts from the information platform, preventing forest fires.

## "

There has been no fire here for 39 years, a result of generations of foresters' daily guardianship. With advanced digital technology, I believe forest management in Shexian will get better.

"

----Wang Shanqing, Station Master of She County Station, Anhui Qingliangfeng National Nature Reserve

## Advocating for a Green Lifestyle

China Mobile focuses on integrating new digital-intelligent elements into green living, promoting the coexistence and integration of digital and green lifestyles. For the 15th consecutive year, the Company has carried out the "Energy Saving Publicity Week" and a series of green environmental protection themed public welfare activities. These initiatives aim to spread knowledge about energy saving and low carbon throughout society, deepen the concept of green lifestyle among the public, and encourage the active adoption of green and low-carbon living practices.

#### Piloting a New Carbon Inclusion Model in Collaboration with Government and Enterprises in Jiangxi

The carbon inclusion system is an incentive mechanism established to assign value to the energy–saving and carbon reduction actions of citizens and small and micro enterprises. China Mobile focuses on empowering new low–carbon living methods through digital–intelligent means. In collaboration with the Jiangxi Provincial Government Affairs Administration, the Company has created a new model of Green Treasure Carbon Sink Platform (provincial public institution low– carbon points system platform) + China Mobile (Jiangxi) App + Universal Green Rights + Ecological Partners. This model introduces a mobile section on the Green Treasure Carbon Sink Platform, offering users various green coin accumulation methods and green coin exchange benefits such as phone bills and data, accelerating the application and popularization of the low–carbon points model on the Green Treasure Carbon Sink Platform. By the end of 2023, the Green Treasure Carbon Sink Platform had **1.7312 million** registered people, with a daily active user count of **243,800**, accumulated carbon points of **804 million**, and achieved a reduction of **8,132.11 tons** of greenhouse gas emissions.



The Company supports the public welfare event "Green Shanghai, Together with You", which is conducted by the "Green Shanghai" special Fund of China Green Foundation.

# Advanced Governance

China Mobile continues to improve its modern corporate system, continuously optimizing the corporate governance mechanism with defined and transparent responsibilities, coordinated operation, and effective checks and balances. The Company regulates its corporate governance, actively integrating the concept of sustainability into the corporate governance process, continuously deepening reforms, consistently enhancing its risk control and compliance management system, all to ensure the Company's sustainable development through outstanding governance.



Optimizing the Corporate Governance System



Preventing and Resolving All Kinds of Risks

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# **Optimizing the Corporate Governance System**

## **Standardizing Corporate Governance**

## \* Protecting Shareholders' Rights

The Company has formulated shareholder communication policies, which are reviewed on a regular basis to ensure their effectiveness, and maintained effective communication with shareholders. We have established a securities affairs department as our "Bridge, Showcase and Information Center", dedicated to providing necessary information and services to shareholders and investors, to maintain an active dialogue with them as well as other participants in the capital markets, and to make sure they are fully informed of our operations and development. We treat shareholders and investors fairly, convene extraordinary and annual general meetings in a diligent manner, and safeguard the rights of all shareholders to attend general meetings.

### 11 January 2023

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Held an extraordinary general meeting, at which a resolution on the entering into of affiliated transaction agreements with China Tower Corporation Limited and the expected 2023 annual caps was considered and approved.

General Meetings in 2023

## 24 May 2023

Held an annual general meeting, at which resolutions on the 2022 annual reports, profit distribution plan and declaration of a final dividend for 2022, authorization to the Board to determine interim profit distribution for 2023, re–election of directors, re–appointment of auditors and authorization to the Board to fix their remuneration, etc. were considered and approved.

Our senior management highly value engagement and interaction with shareholders, investors and other participants in the capital markets, and attended the 2022 Annual Results Presentation on 23 March 2023 and the 2023 Interim Results Presentation on 10 August 2023 in person. At the presentations, our Chairman, General Manager and Chief Financial Officer offered detailed explanation on the Company's overall results, and operational and financial performance, to promote mutual trust and understanding between the Company and relevant stakeholders, and contribute to the growth of our corporate value.

In 2023, the Company revised documents including the *China Mobile Information Disclosure Internal Control System* and the *China Mobile Information Disclosure Committee Charter*, and updated the manual for key business procedures including but not limited to performance material disclosure, public announcement, and procedure for appointing directors for the listed company, ensuring all information disclosed by the Company adheres to legal and ethical standards for truthfulness, accuracy, completeness, timeliness, and fairness. The Company further improves and diversifies communication channels with investors, and actively engages with capital market through disclosing the Company's performance and business conditions via formal channels including annual reports, interim reports, quarterly results announcements and other announcements, but also via events such as results announcement conference, roadshows and reverse roadshows, large investment banking conferences, and investor meetings to foster deeper understanding towards the development strategy, current status and prospects among investors.

We also took innovative measures to reshape investor interaction. We organized joint investor engagement events with peers in our industry, and applied technologies such as extended reality (XR) and Virtual Digital–Intelligent Human in innovative investor events to showcase our development and strengths.



Published over **200** announcements and circulars in total

## Fulfilling Dividend Commitment and Creating More Value for Shareholders

To create higher returns for our shareholders and share the results of our operating gains, after giving full consideration to the Company's profitability, cash flow generation and future development needs, the Company made a commitment that, in the three–year period from 2021, the profit to be distributed in cash for each year will gradually increase to 70% or above of the profit attributable to equity shareholders of the Company for that year. The Company fulfilled this commitment and created more value for shareholders in 2023.

#### Organizing the "Inside Listed Company" Event

In October 2023, the Company organized an investor event under the theme of "Inside Listed Company" as part of its efforts to bolster relations with investors, enhance investors' and capital markets' understanding of the Company and its industry, and foster market recognition and value realization. During the event, the Company had in-depth discussions with 20 institutional investors on the Company's latest development in different markets, AI strategies, plans and developments in satellite communications and more.

## ※ Enhancing the Board of Directors' Operations

The responsibilities of our Board of Directors include formulating overall strategies and objectives, setting management targets, overseeing internal controls and financial management, and supervising the performance of our management. Day-to-day operations and management are delegated by the Board of Directors to our management.



## ※ Audit Supervision

The Company advanced a centralized, unified top-level design of internal audit, and refined our "1+3+N" audit working system. The Internal Audit Department of our Headquarters has set up branches in Tianjin, Wuhan and Chengdu. Each operating subsidiary has also set up its internal audit unit.

In 2023, the Company established a centrally unified, comprehensive, authoritative, and innovative leading audit supervision system, enhance precise audit efforts and tailored strategies, focus on the internal audit of key business areas for Company transformation, important cost expenses, technological innovation, equity investments, overseas operations, further consolidate audit rectification supervision, increase the transfer of audits, and strengthen accountability investigations. Additionally, the Company focuses on building a smart audit ecosystem, accelerating the release of digital intelligence value.

By conducting financial audits, internal control audits, economic responsibility audits, construction project audits, information system audits, data audits, and risk assessments, we independently and objectively verify the appropriateness, compliance, and effectiveness of the Company's business activities, internal controls, and risk management. We also provide consulting services to assist in improving the effectiveness of corporate governance, risk management, and internal controls.





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Established a layered and graded internal audit standardization system and a three-level internal audit system of management systems, work standards and practical guides under the *Internal Audit Charter*.

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Enhanced the meticulous control of audit quality and establish a comprehensive quality control standard for the entire audit process. Fully implemented the assessment and supervision of audit quality, continuously improving the internal audit management and practices.

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#### Promoting Data Intelligence Capability of Internal Audit



## **Advancing Sustainability Management**

Guided by globally recognized standards and best practices for sustainability management, China Mobile has set up and implemented a strategic sustainability management system since 2006. With effectiveness at the core, the system has been developed having regard to the realities of operation and management and utilized a suite of innovative management tools and approaches.

## ※ Sustainability Management Structure

The Company has established a Sustainability Steering Committee and built a three-level sustainability development management framework comprising. "Decision-Making, Organization and Implementation", with in-depth participation from senior management, horizontal coordination and vertical linkage. The Sustainability Steering Committee is responsible for decision-making, the office organizes management, specialized departments and subsidiaries implement specific tasks. With clearly defined responsibilities and specialization, our sustainability efforts are carried out efficiently.

#### China Mobile's Sustainability Management Structure



A Sustainability Steering Committee has been established, chaired by the Company's Chairman, with leaders in charge and main responsible persons from relevant units as members. This committee provides comprehensive guidance on the sustainability efforts of both the Company and its parent company.

In November 2023, the Company established a Sustainability Committee under the Board of Directors, which commenced its duties on January 1, 2024. This committee is responsible for providing recommendations to the Board of Directors on the goals, strategies, priorities, measures, and purposes related to the Company's corporate social responsibility and sustainable development. It supports the Board of Directors in making decisions on issues concerning the Company's social responsibility and sustainable development. The establishment of the Sustainability Committee will further strengthen the governance capabilities for sustainable development.







Implementation Level

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The sustainability management departments of various specialized departments and subordinate units are responsible for implementing the Company's sustainable development requirements and management standards, and for regularly reporting on the progress of sustainability efforts.

#### Enhancing the Board's Supervision and Management over Sustainability Efforts

On 14 November 2023, the Company held the Seventh Meeting of the Board of Directors in 2023. At this meeting, the Board of Directors received reports on the current status and future plans of the Company's sustainable development, provided feedback and comments, and considered and approved the resolution on *China Mobile's Environmental, Social and Governance Work.* A resolution on the Establishment of Sustainability Committee was also considered and approved, which approved the establishment of the Sustainability Committee with effect from 1 January 2024. The Committee's duties include discussing issues related to environmental, social and governance matters, proposing and making recommendations to the Board of Directors on the Company's corporate social responsibility and sustainability objectives, strategies, priorities, initiatives and goals, reporting to the Board of Directors on its decisions; reviewing and reporting to the Board of Directors on sustainability *Committee*, detailing its membership, frequency of meetings, duties and authority, through a variety of channels.

The Board of Directors considered and approved

Proposal on the China Mobile's Environmental, Social and Governance Work

Proposal on the Establishment of Sustainability Committee

## ※ Sustainability Management System

The Company has established a series of sustainability policy systems, internal control mechanisms, and management mechanisms and processes. Moreover, the Company established a strategical closed–loop management system consisting of strategy, implementation, performance, and communication. Meanwhile, the Company has built a long–term ESG promotion mechanism covering all employees and the entire process by regularly compiling and publishing sustainability reports.

In 2023, the Company actively participated in sustainability-related research, discussions, and forums organized by the Ministry of Finance, the Shanghai Stock Exchange, the China Listed Companies Association, etc. It communicated with multiple investment institutions on the sustainability-related management practices and latest developments, further promoting mutual understanding between the company and professional institutions.



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Corporate social responsibility training covered 602,600 person-times



Promoting Outstanding ESG Governance for Joint Development with the Whole Society campaign was selected as one of the Best Practice Cases of ESG in Listed Companies in 2023

by the China Listed Companies Association

### China Mobile's Sustainability Management System



### Conducting Annual Selection of Outstanding Practices in Corporate Social Responsibility For 16 Consecutive Years

For 16 years in a row, the Company has innovated in showcasing its commitment to social responsibility by launching the Exemplary Social Responsibility Practice Awards in 2007. This initiative was designed to encourage and implement sustainability efforts across all departments, boosting their motivation to act responsibility. The awards program recognizes achievements through various categories, including the Annual Excellence in Social Responsibility, Annual Outstanding Social Responsibility, Social Responsibility Star, and the Social Responsibility Evergreen Award. The selection process brings together experts from government agencies, NGOs, academic circles, and leading media, along with the Company's own specialists, to ensure the awards reflect societal expectations accurately. In 2023, the Company updated its selection guidelines for these prestigious awards. By the year of 2023, it had gathered over **1,229** submissions of practical achievements from its units, selecting **268** exemplary initiatives.

## ※ Materiality Assessment

The Company prioritizes the identification, assessment, and reporting of key sustainability issues as the heart of our sustainability management efforts. Every year, the Company systematically analyzes material issues and refines the sustainability frameworks and processes according to the findings.



#### Materiality Assessment Matrix of the China Mobile Sustainability Report 2023



High	Material Issues
4	Promoting digital-intelligent inclusion
5	Corporate governance and risk control
6	Construction of new information infrastructure and development of new information services systems
7	Business ethics and anti-corruption
8	Protecting employees' rights
9	Employee growth and development
10	Technology for disaster prevention and relief
11	Humanistic care for employees
12	Supporting regional development
13	Financial performance and tax payment
14	Research, development, and innovation
15	Enabling the green transformation of society
16	Supporting rural revitalization
17	Implementing carbon peak and neutrality goals
18	Supporting public welfare and charity
19	Sustainability management
20	Stakeholder engagement
21	Environmental utilization and natural resource use management
22	Greenhouse gas and waste emission management

Very High	Material Issues
1	Service quality and customer rights protection
2	Network quality assurance
3	Network and information security, and privacy protection

General	Material Issues
23	Responsible supply chain management
24	Deepening overseas responsibility fulfillment

## ※ Stakeholder Engagement

The Company's approach to sustainability begins with prioritizing the interests and concerns of our stakeholders, guided by principles that are strategic, holistic, systematic, and inclusive. We have chosen six key stakeholder groups whose interests significantly intersect with our business activities and operations. Furthermore, in the process of drafting our sustainability report, we proactively gather topics that matter to our stakeholders, ensuring these insights inform our decision-making and policy formulation.

Stakeholder	Expectations and concerns (top 5) <sup>1</sup>	Channels for communication and feedback		
Customers	<ol> <li>Network quality assurance</li> <li>Network and information security, and privacy protection</li> <li>Service quality and customer rights protection</li> <li>Service quality and customer</li> <li>Research, development and innovation</li> </ol>	Customer Reception DayCustomer Satisfaction Survey10086 hotlineMobile AppNew media such as Weibo and WeChatCEO MailboxOnline and mobile customer service hallKet Set Set Set Set Set Set Set Set Set S		
Employees	<ol> <li>Network quality assurance</li> <li>Protecting employees' rights</li> <li>Network and information security, and privacy protection</li> <li>Employee growth and development</li> <li>Service quality and customer rights protection</li> </ol>	Employee Representative CongressEmployee evaluation mechanismRegular trainingEmployee complaint mechanismPerformance communication mechanismCEO Mailbox and President of Labour Union Mailbox		
Shareholders and investors	<ol> <li>Research, development, and innovation</li> <li>Network quality assurance</li> <li>Service quality and customer rights protection</li> <li>A Construction of new information infrastructure and development of new information services systems</li> <li>Network, information security and privacy protection</li> </ol>	Annual reports, interim reports, Performance conference and announcements Roadshows and reverse General meetings of roadshows shareholders Investor meetings		
Value chain partners	<ol> <li>Network quality assurance</li> <li>Network and information security, and privacy protection</li> <li>Corporate governance and risk management and control</li> <li>Service quality and customer rights protection</li> <li>Stakeholder engagement Stakeholder engagement</li> </ol>	Procurement activities Training and assessment Supplier's web portal, service CEO Mailbox site and hotline Forums and conferences		
Government and regulators	<ol> <li>Network and information security, and privacy protection</li> <li>Network quality assurance</li> <li>Service quality and customer rights protection</li> <li>Construction of new information infrastructure and development of new information services systems</li> <li>Supporting regional development</li> </ol>	Regular reports and communication Specific investigations and on-site meetings Relevant forums and information exchange activities		
Representatives from communities and environmental organizations	<ol> <li>Network and information security, and privacy protection</li> <li>Network quality assurance</li> <li>Service quality and customer rights protection</li> <li>Construction of new information infrastructure and development of new information services systems</li> <li>Research, development and innovation</li> </ol>	Community activities New media such as Weibo and WeChat Public welfare platform CEO Mailbox		

1. The top 5 expectations and concerns of each stakeholder group have been identified based on the results of the 2023 stakeholder survey on key sustainability topics, which can be found on page 88.

## **Furthering Comprehensive Reforms**

China Mobile has always regarded deepening reforms as a key strategy to drive high-quality development. In 2023, the Company focused on fully unleashing the dividends of reform, with a priority on enhancing core competitiveness and strengthening core functions. It took advantage of the situation to launch a new round of state-owned enterprise (SOE) reform actions for deepening and enhancement, accelerating the establishment of productive relations that match the Company's strategy, injecting new energy and advantages into the company's digital transformation and high-quality development.

#### Continuing the New Round of SOE Reforms

The Company developed an action plan and work ledger for deepening and enhancing SOE reforms, with a vertical focus on leveraging the three major roles of technological innovation, industrial innovation, and safety support. Horizontally, it aimed to enhance capabilities, build synergy, stimulate vitality, achieve systematic integration of reforms, and penetrate the grassroots level, comprehensively promoting the implementation and execution of the plan.





## Technological Innovation

Essentially established the "Unified Five Rings" sci-tech innovation system, strengthened the advancement of the special research district mechanism, developed breakthrough scientific research achievements such as "Pofeng 8676", and outstanding experience was distilled into and promoted as "Special Zones".



Strategic Emerging Business Layout

Constructed the BASIC6 strategic emerging business system, established the China Mobile Artificial Intelligence Research Institute, and deeply pushed for specialized integration in fields such as computility, big data, and the Internet of Vehicles.



## System and Mechanism Reform

Perfected the "Three Important and One Significant" decision-making mechanism , dynamically adjusted the list of subsidiaries that the board of directors should establish, continuously enhanced the quality of the managerial personnel tenure system and contractual management, further optimized and improved the market organization operation system and product settlement mechanism, and expanded the coverage of medium- and long-term incentive mechanisms.

#### Making Solid Progress in Dedicated Reform Initiatives

Recognized as "excellent"	China Mobile Cloud Center (China Mobile S (Suzhou) Software Technology Co., Ltd.)	mart Home Center (China Mobile (Hangzhou) Information Technology Co., Ltd.)	The Shanghai Research Institute of China Mobile was awarded the "Specialized, Refinement, Differential, and Innovation"
or above in the "Double– Hundred	China Mobile IoT Co., Ltd.	MIGU Company Limited	qualification by the Shanghai Municipal Commission of Economy and Information
Action" and the "Sci-Tech	China Mobile Design Institute Co., Ltd.	China Mobile Online Services Co., Ltd.	Technology.
Innovation Action"	China Mobile Internet Company Limited	China Mobile Group Device Co., Ltd.	During the World Semiconductor Conference and the Nanjing International Semiconductor Expo, China Mobile Xinsheng
Made it to			Technology was honored as the "2022–2023 (6th) China IC
the list for the "Sci-Tech Innovation Action" for the	China Mobile Integrated Company	China Mobile Zijin (Jiangsu) Innovation Research Institute	Unicorn Enterprise". China Mobile Cloud Center (China Mobile (Suzhou)
first time			Software Technology Co., Ltd.) being selected by the State-
Four teams were established as	BiLin Intelligent (Chongqing)	China Mobile Energy Technology (Beijing)	owned Assets Supervision and Administration Commission of the State Council as one of the first batch of World-
legal entities	China Mobile ZhiJie Technology (Beijing)	China Mobile Haisuan Technology (Xiong'an)	Class Professional Leading Enterprises.

# **Preventing and Resolving All Kinds of Risks**

## **Deepening Internal Control Risk Management**

China Mobile has established an organizational framework for internal control and risk management with clear responsibilities and a well-structured system. The Board of Directors and the management layer perform their duties diligently and the "three lines of defense" composed of business and functional departments, business management and risk management departments, and supervisory departments cooperate to promote our sustained, healthy, and stable development through comprehensive risk management.

## \* Improving the Internal Control and Risk Management System

In 2023, centering on the overall operational goals, the Company embedded the basic process and system of risk management into every aspect of the Company's production and operations, striving to build and form an integrated risk management system that is unified and operates in coordination. The Company formulated and issued top-level internal control risk management systems such as the *China Mobile Risk Management and Internal Control Management Measures*, the *China Mobile Major Project Special Risk Assessment Management Measures*, and the *China Mobile Major Business Risk Event Reporting Work Management Measures* to strengthen comprehensive risk prevention and control. The internal control manual and matrix are updated every six months to resonate with the business system process. Focusing on the three foundations of risk control organization, system, and means, the Company closely monitors the two outcomes of internal control management and risk prevention and control, setting 41 evaluation items, and conducting a trial evaluation of risk control quality for five units throughout the year. Enhance the professional management ability of risk control, establish a three–level risk control course system of beginner, intermediate, and advanced, and improve the professional level of risk control personnel.

The Company has clearly defined the supervisory role and guidance responsibility of the boards of its subsidiaries in risk assessment and internal control construction. This allows us to perfect the corporate governance structure, standardize the internal control system, and integrate risk assessment and internal control construction requirements into the plans for newly established institutions, to ensure compliant operations of new enterprises and institutions.

## ※ Enhancing Significant Risk Assessment and Management

The Company conducts major risk assessment on a regular basis every year implementing risk control and strategic coordination. According to the five-step risk method, it strengthens the scientific evaluation and precise prevention and control of major risks.

<b>D1</b> Comprehensive Collection and Identification	Construct a tiered and categorized risk map, covering specific risks related to sustainability such as network attacks, data breaches, telecom fraud, unstable network operation, insufficient service capacity and quality, declining customer satisfaction or excessive complaints, non-compliance with energy-saving policies, and personnel structure not meeting the Company's business development needs. Departments and units use the risk map as a foundation to comprehensively collect and identify risk information, forming a risk inventory list.
<b>D2</b> Professional Analysis and Assessment	Gather risk assessment information and, through interviews and research by key business departments, scientific quantification of 48 assessment indicators, and comprehensive analysis of expert review opinions, identify significant company–level risks, pushing the risk assessment from experiential judgment to scientific quantification. In 2023, the Company identified five major risks: macroeconomic and international environment risks, information service transformation and market competition risks, technological innovation risks, network information security risks, and ecological construction risks.
<b>D3</b> Coordinated Response and Implementation	Build an action ledger for significant risk responses, incorporating the ledger into the annual key tasks of relevant departments, with clear time plans and management and control responsibility enforcement. In 2023, we developed 32 response measures for the five significant risks, ensuring risk control measures reach the grassroots level.
<b>04</b> Quantitative Monitoring and Tracking	Construct over 100 risk monitoring indicators, including communication customer growth rate, customer satisfaction, user real- name rate, and data security compliance assessment rate. Track the implementation of measures monthly, monitor risk changes quarterly, promptly warn of risk fluctuations, and adjust risk control strategies as necessary.
<b>D5</b> Regular Summary and Reporting	Establish a significant risk control effectiveness evaluation mechanism. Departments and units conduct a major risk management summary and review every six months, and the Company simultaneously plans the summary of significant risk control effectiveness and the next year's risk assessment work at the end of each year, achieving a comprehensive summary of risk items review, measure effectiveness scoring, and work execution.

## \* Intensifying Risk Prevention and Control in Key Areas

In 2023, the Company continues to promote special risk prevention and control in key areas, combining regulatory focuses and key business links.

Carried out standardization projects in the business market field, formulated two risk control checklists, three project control guidelines, established 30 types of risks and more than 70 risk points, include major project risk assessments, risk maps, and audits on business market management system; built 13 risk warning models, embedded the requirements of risk standardized control into the full process of project control.

Carried out governance in key areas such as false trade, business market, transnational corruption, implemented the Ten Prohibitions requirements for trade businesses, promoted special rectification of transnational corruption control, carried out overseas safety risk investigations and improve the construction of overseas safety security system.

Continuously promoted the comprehensive management of "Strict Financial Discipline, Lawful Compliance Operation" historical legacy problem rectification, implement item by item according to the management ledger, track monthly, clarify responsibilities.

Carried out special rectification of information security internal control management, established a leading team that is headed by the Company leadership, investigated and managed internal control management, business security control, data management, contract management, third-party management, internal supervision, retrospective accountability, etc.

Established tax risk identification, assessment and response mechanism, strengthened the collection, analysis and response of applicable tax policy information, the assessment and management of tax risks at the business front, statistical analysis of tax–related data, internal communication of significant tax–related matters, inspection of the implementation of tax internal control, and prevention of tax violations.

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## ※ Upgrading Digital-Intelligent Risk Control Measures

The Company strengthens the use of digital-intelligent risk control measures, relying on centralized system infrastructure and platform capabilities, actively promoting the digital transformation and upgrade of the risk control system, striving to create a risk control "Sky Eye", and improving the efficiency and effect of risk control.

The internal control requirements were integrated into the front-end system of the business, and the solidification rate of information technology (IT) is increased to 90%. Through automatic system control and process solidification, the rigidity of internal control was strengthened. Promoted the construction of centralized business and financial systems for budget, assets, costs, supply chain, network fee management, etc., through one account book, one set of forms, the automated control rules can be deployed at one point and apply to the entire network. The centralized risk control system was fully launched in domestic units, which supports centralized risk supervision and disposal.

4 () new risk supervisory models were added throughout the year

reaching a total of 121, covering fields such as market, funds,



**3,300** warning documents were distributed throughout the year

More than

engineering, and network

## Adhering to Compliant Operations

China Mobile has always adhered to the compliance philosophy of "abiding by laws, respecting rules, honoring commitments and pursuing self-cultivation", and strictly follows various laws, regulations, and industry regulatory policies and guidelines. The Company continuously enhances its capabilities in legal governance and compliance management, steadfastly becoming a practitioner, leader, and disseminator of lawful and compliant operations.

## ※ Advancing the "Rule of Law in China Mobile" Initiative

China Mobile establishes the "rule of law" culture philosophy of "operating according to the laws and following the rules", perfects the five major rule of law work systems of "leadership responsibility system, legal governance system, regulations system, compliance management system and work organization system", and comprehensively enhances the five major capabilities in legal corporate governance of "leading support ability, risk control ability, foreign-related safeguard ability, proactive rights protection ability and digital management ability". In 2023, the Company established the China Mobile Rule of Law Construction Expert Committee, set up legal research centers in specialized fields; established a long-term mechanism for legal education for leadership and management personnel, holding the National Constitution Day theme activity for ten consecutive years; carried out the "Operate According to the Law, Protect Life" education activity, relying on the "He Fa Shu" online rule of law publicity and legal education platform, to enhance the legal governance concept among all employees.

## ※ Rigorous Execution of the "Compliance Escort" Plan

The Company steadfastly promotes compliance management alongside enhancing governance and mitigating risks. In 2023, we have prepared the annual compliance management report for the sixth consecutive year, and updated the foundational compliance systems. We have finished the introduction of chief compliance officers across its divisions, and extensive compliance training and culture programs, reinforcing a strong base for sustainable, high-quality compliance practices.

#### Aiming for Global Benchmarks, Enhancing the Compliance Framework

Synergizing Compliance with Corporate Governance: The Company is committed to integrating compliance deeply within our governance structure, refining the roles and collaborative efforts between the board and executives in compliance activities; ensuring company leaders embody their roles as key drivers and enforcers of compliant practices, pushing forward comprehensive compliance initiatives; fortifying the Chief Compliance Officer's role to lead and exemplify compliance efforts.

Merging Compliance Efforts with Risk Management: Optimizing the responsibilities of the Three Lines of Defense, strengthening the linkage and system integration between compliance management and legal management, audit supervision, etc., enhancing control over key nodes to ensure effective implementation of compliance management responsibilities, solidifying a coordinated line of compliance defense; establishing and improving compliance risk identification, assessment, early warning, compliance reporting and evaluation mechanisms, perfecting compliance review and risk response mechanisms; focusing on key areas, key links, and key personnel in compliance management, driving and promoting overall compliance by focusing on key points.

#### Boosting Compliance Management and Fostering a Law-Abiding Culture

Conducting Multi-level and Various Forms of Compliance Thematic Training: Incorporate compliance management training into the Company's key training project plans, aimed at full-time and part-time compliance managers at the headquarters and various units, international management personnel, and main responsible persons of municipal-level companies, as well as key position employees. Conduct thematic compliance training on compliance management system construction, market competition, technological innovation, and overseas operations, effectively enhancing the compliance management capabilities of employees at all levels. In 2023, the Company conducted over a thousand compliance training sessions and cultural activities at various levels.

Telling the China Mobile Compliance Story Well: Host a data governance and outlook conference, exchange compliance management work with partners, and carry out a variety of themed activities such as compliance initiative launches, compliance month, and compliance knowledge contests to create a good atmosphere for lawful and compliant operations.

### Ensuring Compliance Through Rigorous Legal Reviews

**Regulatory Framework:** Conduct legal reviews on the legality and compliance of the Company's regulations and systems, providing legal opinions and improvement suggestions to solidify the foundation of the Company's operational and management systems.

Key Decisions: Serve the Company's "six core strategies" layout, support the construction of a new type of information service system; review and control major decisions, aiding the Company's diversified business expansion; review key investment projects of the company, manage and control the legal risks of investment projects, facilitating synergy in production and investment, as well as research and investment to enhance value.

**Contract Management:** Strengthen contract review in the areas of technological innovation, international operations, strategic cooperation, etc.; achieve full coverage of domestic units through a centralized contract system, effectively promoting centralized and standardized contract management; advance the digital and intelligent transformation in contract management, independently develop the "China Mobile Xie Zhi" smart contract product system, empowering legal work to improve quality and efficiency.

# **Performance Report**

## **Economic Performance**

## ※ Direct Economic Impact

## **Management Practices and Main Actions**

Striving towards the new positioning of becoming "a world–class information services and sci–tech innovation enterprise", the Company made steady progress in implementing the development strategy of building a world–class dynamic "Powerhouse". We worked to create a new information infrastructure centering on 5G, CN, and integration platform and innovatively built a new information service system integrating "connectivity + computility + capability". The Company continued to advance the comprehensive and integrated development of our CHBN (Customer, Home, Business, and New) markets and stepped up efforts to integrate information services into all industries and serve all people. The financial subsidies received from the government by the Company in 2023 are detailed in the annual report.

## **Key Performance**

Performance indicator	Unit	2021	2022	2023
	Operati	ng Performance	)	
Operating revenues	RMB 100 million	8,483	9,373	10,093
	Se	rvice Scale		
Mobile customer base	Million	957	975	991
5G package customer base	Million	387	614	795
Wireline broadband customer base	Million	240	272	298
loT card customer base	Million	806	1,062	1,316
Corporate customer base	Million	18.83	23.20	28.37
	Net	work Scale		
Number of 4G base stations	10,000	332	334	337
Number of 5G base stations	10,000	74	128.5	> 194
Number of cities with NB–IoT	Number	337	337	337
5G SA average download speed	Mbps	> 750	> 750	> 750
5G network traffic	PB/Day	/	/	> 300
Internet backbone bandwidth	Tbps	456	519	633
	Interna	tional Services		
Number of countries and regions with 4G international roaming services	Number	212	218	229
Number of countries and regions with 5G international roaming services	Number	51	60	75
YoY growth in international data roaming charges	%	-21.21	9.82	218.57
International transmission bandwidth	G	105,683	123,000	145,000

## R&D and Innovation

## **Management Practices and Main Actions**

We have always placed R&D and innovation at the heart of our work, adhering to a strategy that prioritizes innovation for growth. We have made sustained efforts to improve the "Unified Five Rings" sci-tech innovation system, promoted enterprise-led integration of industry, academia and research, and built a dual-cycle layout for innovation characterized by solid internal capabilities and expanding external cooperation. We mobilized efforts to drive breakthroughs in key and core technologies, led the formation of the 5G Innovation Coalition, piloted the modern mobile information industrial chain, and built an industryleading base for nurturing innovative technologies. We furthered the "Joint Innovation+" plan and built a new scientific research ecosystem featuring win-win cooperation with key universities, enterprises and other partners. We stepped up efforts in entrepreneurship and innovation to foster a culture of innovation in the wider society and invigorate the ecosystem for innovation.

Patent management: The Company has initiated comprehensive patent empowerment initiatives, developing three key patent tools aimed at boosting innovation efficiency, enhancing patent quality, and strengthening competitive edge. The Company established a patent navigation system that addresses the challenges faced by the R&D team in patent searches, such as incomplete retrieval and low efficiency, used by over 7,000 individuals. Additionally, the Company has set up a patent knowledge base that covers crucial aspects like methods for infringement evidence collection, patent drafting techniques, and strategies for responding to examination feedback, creating an essential quick-reference guide and a secret handbook for writing effective patents. This facilitates a shift from merely drafting patents to crafting high-quality patents. Furthermore, the Company developed a patent arsenal to guide the strategic output of patents, significantly speeding up the process of bringing patent technologies from concept to the market.

Intellectual property protection: Adhering to the *Trademark Law of the People's Republic of China*, the *Copyright Law of the People's Republic of China*, and other legal frameworks, the Company has developed comprehensive guidelines for trademark and copyright management. The *China Mobile Trademark Management Methods*, the *China Mobile Copyright Management Methods* and related management standards are set to guide the trademark and copyright management of the whole company. Furthermore, for 14 years in a row, the Company hosted an annual Intellectual Property Awareness Week for all employees to strengthen the awareness of protecting independent intellectual property rights.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023		
R&D and Innovation						
R&D investment <sup>1</sup>	RMB 100 million	186	217	341		
Proportion of R&D investment to operating revenues	%	2.5	2.7	3.9		
Number of patent applications	Number	4,760	5,186	6,452		
Number of newly granted patents	Number	1,886	2,258	2,958		
Number of valid patents	Number	/	/	15,149		
Number of valid patents per million in revenue	Number	/	/	0.02		
Number of software copyrights	Number	/	/	7,098		
O	pen Coope	eration				
Average number of daily authentication requests processed on the mobile authentication platform	100 million	17.77	18.73	19.85		
Number of developers on OneNET	Number	247,507	292,641	349,177		
Number of enterprises on OneNET	Number	15,049	15,414	16,384		
Number of devices connected to OneNET	10,000	21,647.17	22,180.81	23,781.61		
Number of developers on Lianying platform	Number	153,300	190,610	195,064		
Number of enterprises on Lianying platform	Number	1,384	1,716	2,007		
Number of devices connected to Lianying platform	10,000	22,400	37,100	49,210		
Number of capability requests on Lianying platform	10,000	11,105,908	47,766,823	60,252,530		
Number of GTI operator members	Number	141	142	146		
Number of GTI industry partners	Number	250	254	257		
Number of China Mobile's Smart Home Cooperation Alliance members	Number	473	515	560		
Number of China Mobile's IoT Alliance members	Number	1,743	2,000	2,048		
E	Intreprene	urship				
Investment in entrepreneurship and innovation support	RMB 10,000	5,692	3,770	3,300		
Number of users of the entrepreneurship and innovation platform	10,000	17.9	19	19.3		
Number of projects created from entrepreneurship and innovation events	Number	3,528	3,575	3,795		
Number of teams participating in entrepreneurship and innovation events	Number	3,616	3,744	3,859		
Number of teams participating in "HeChuang Incubation"	Number	191	238	284		
Number of people participating in "HeChuang Incubation"	Number	645	786	1,148		
Number of jobs created	10,000	217	205	161		

1: R&D (research and development) investment includes both expense-based R&D investment and capital-based R&D investment.

## Cybersecurity, Information and Data Security

### **Management Practices and Main Actions**

In alignment with the Cybersecurity Law, the Data Security Law, the Personal Information Protection Law, the Anti–Telecom and Online Fraud Law and the Regulations on Critical Information Infrastructure Security Protection of the People's Republic of China, the Company has established over 40 protocols, such as the China Mobile Network Security Threats and Disposal Management Methods, the China Mobile Data Security Management Methods (Trial), and the China Mobile Information Security System Maintenance Management Methods. These measures are in place to mitigate the growing risks of critical information infrastructure attacks, the rising threat of cybercrimes including hacker activities, malicious software, and data theft, as well as new challenges posed by advancements in big data, IoT, and AI technologies like automated attacks and distributed denial of service (DDoS) attacks, amidst the ongoing shortage of skilled cybersecurity professionals. In 2023, the Company did not encounter any significant cybersecurity breaches or any major incidents of information or data leaks.

Management framework: The Company has formed a dedicated Cybersecurity Leadership Team, headed by the Chairman with the General Manager serving as the primary deputy. This team is tasked with enforcing the government's network security regulations (encompassing both customer and data security), endorsing the cybersecurity strategic direction, and overseeing significant policies and decisions. To facilitate these efforts, an office has been established within the Information Security Management and Operations Center to ensure seamless coordination across all cybersecurity initiatives. In 2023, the Company took significant steps to enhance our cybersecurity accountability, including the introduction of a quarterly reporting system for cybersecurity tasks to foster best practice sharing; executing thorough cybersecurity inspections that led to the identification and amendment of over 500 issues; and refining the security assessment metrics to hold relevant parties accountable for any shortcomings in their responsibility execution.

Critical information infrastructure security protection: The Company has developed the China Mobile Communications Network Critical Information Infrastructure Network Security Protection Guidelines to clearly define management roles and enhance the defensive measures. Additionally, the Company put together the China Mobile Communications Network Critical Information Infrastructure Network Security Emergency Handling Plan to systematically categorize and address security breaches, ensuring a structured approach to crisis management. Through rigorous security assessments of the critical information infrastructure systems, the Company has tailored specific improvement and protection strategies to reduce or nullify potential threats.

**Cybersecurity emergency response drills:** In 2023, the Company launched two phases of the *Guardian* · *Spring Ploughing Action*, a cybersecurity drill that employed a dynamic offense and defense approach, engaging "cloud experts" in remote penetration testing and defensive surveillance of 50 internal divisions. This extensive exercise resulted in the collection of 2,084 attack and 565 defense reports, rectified 718 cybersecurity vulnerabilities, thoroughly validating and improving the network's readiness in responding to emergency, improving the actual combat ability of cybersecurity talents and effectively strengthening the awareness of cybersecurity risks.

Cybersecurity talent cultivation: Leading the charge, the Company has established a comprehensive system for nurturing cybersecurity talents. propelling the Cyber and Information Security Technical Skill Enhancement Initiative to forge a robust team of 6,802 security experts, with 1,334 members joining the foundational talent reserve in cybersecurity. The Company has launched the Talent Genius Program to develop an elite team of engineers in cybersecurity, successfully qualifying 1,126 individuals as "outstanding engineers" in this critical field. The Company also initiated a pioneering incentive program targeting cybersecurity vulnerabilities, leading to the creation of the Security Talent Empowerment and Development Demonstration Units. This incentive program aims to align the growth and efforts of the security professionals closely with the core business operations, ensuring a harmonious synergy. Over the course of the year, the Company hosted six major training events including cybersecurity certification courses, hands-on cybersecurity workshops, and preparatory training for cybersecurity competitions, reaching over 650 individuals. In 2023, professionals in the national security sector earned a total of 126 professional skill certifications and 49 international certifications. The Company released the Cybersecurity Watch think tank series, delving into the forefront of cybersecurity technologies and strategic movements. This publication offers in-depth analyses on 19 pivotal subjects, such as AI and cloud security, among others.

## **Key Performance**

Performance indicator	Unit	2021	2022	2023		
Emergency Communications Support						
Number of times emergency communications support was provided	Number	6,173	4,743	7,879		
Significant event support	Times	5,620	3,973	7,663		
Significant natural disaster support	Times	304	334	194		
Significant accident or catastrophe support	Times	44	39	14		
Public health incident support	Times	192	394	5		
Social safety incident support	Times	13	3	3		
Number of emergency vehicles dispatched	Vehicle- times	8,709	6,155	9,957		
Number of emergency support equipment installed	Set-times	10,549	11,128	15,803		
Number of personnel involved in emergency support	Number	212,317	471,709	307,026		
	Spam Govern	nance				
Number of customer complaints about spam handled	10,000	94	77	68		
Number of scam phone numbers handled	10,000	15.21	15.13	23.42		
Average monthly number of spam SMS and MMS messages blocked	100 million	5.23	5.91	11.18		
Average number of illegal 5G massages handled per month	10,000	39.38	486.46	2,768.65		
Number of nuisance call numbers handled such as	10,000	> 18.23	>7.68	>8.47		

Number of illegal websites handled	10,000	>34.83	>53.31	>72.79
Number of malwares monitored and handled	10,000	>37.17	> 21.24	>75.71
Number of malware control terminals handled	Number	49,466	19,764	55,115
Number of SMS fraud alerts sent	100 million	81.85	348.94	282.17
Number of targeted covert fraud incidents identified and successfully intervened	10,000	1,301.95	2,734.37	4,578.47
Number of users covered by the scam caller alert service	100 million	2.20	1.97	1.97
Annual cumulative number of scam caller ID reminders sent	100 million	32.13	34.32	45.34

## Service Quality Management and Standardized Marketing

### **Management Practices and Main Actions**

The Company steadfastly implements the "Sunshine Action" for customer rights and interests protection, as outlined in the *2023 Sunshine Action for Customer Rights Protection Notice*. The "Sunshine Action" emphasizes stringent controls and measures to firmly protect against any actions that could harm customer rights.

Standardizing marketing and promotion: The Company has established a dedicated group tasked with refining the marketing strategies, focusing on three key areas: improving business rule fairness, reducing fee disputes, and ensuring ethical marketing practices. The Company introduced the *China Mobile Telecom Misconduct Supervision and Accountability Standards*, streamlined the broadband cancellation process, improved oversight of telemarketing, and standardized notifications and data service reminders. The Company also made clear guidelines for service phone number usage and seriously addressed any actions that disrupt market fairness. By the end of 2023, complaints regarding our marketing efforts had significantly dropped by 41.20% compared to the average in 2022.

Maintaining marketing integrity: Aligning with the national updates to the *Internet Advertising Management Measures*, the Company has provided cutting–edge training in market communications and integrated marketing strategies, focusing on ensuring that our advertising activities are both ethical and compliant. The Company emphasized the importance of compliance in promotional content and, regarding the promotions of significant sporting events, developed comprehensive guides like the *Advertising Compliance Manual and Legal Guidelines for Event Rights*, ensuring all our event–related promotions adhere strictly to legal standards.

### **Key Performance**

Performance indicator	Unit	2021	2022	2023
Overall customer satisfaction	Point	81.80	82.05	82.57
First call resolution rate via hotline	%	89.7	92.0	95.17
Annual complaint rate per million customers	%	516.5	860.5	557.5
Annual number of customer complaints	Number	616,997	1,072,291	721,354
Number of customers receptions on general manager's reception days	Person– times	93,520	91,305	135,978
Number of customer inquiries and complaints handled on general manager's reception days	Number	86,735	85,710	53,803

"Husini"

## ※ Product Quality Management

### **Management Practices and Main Actions**

The Company is dedicated to refining its product experience and enhancing its "Two Firsts" (customer first, frontline first) product quality assessment system. At the same time, the Company has adopted a stringent quality control system that scrutinizes products both before commercial release and throughout their iterative development.

**Product quality evaluation system:** The Company has clarified product quality standards by formulating 23 customer perception standards (KEI) for key products, 659 quality standards, 400 internal operation support standards (KQI). By the end of 2023, the satisfaction score of 23 key products was 91.32, increasing 1.25pp compared with 2022. Furthermore, we have included the key-products-benchmarking-improvement and iterative-improvement into business performance assessment, engaging closed-loop product management and evaluation.

**Product quality control system:** Before launch, the Company will ensure commercial readiness. In 2023, the Company launched the closed beta version of 3 products, 5G New Call, mobile cloud phones, and healthy elderly care products, adhering to the "no standard, no launch" assessment criterion. After launch, focuses on continuous improvement, with over 970 updates across our key products, introducing more than 15,400 new features and achieving a product overall iterative improvement rate of 99%.

For terminal products like mobile phones, pan-terminals, cloud computing terminals, and industry intelligent hardware, the Company has implemented a closed-loop quality management system that includes pre-testing/checking and post-evaluation. Additionally, the Company has established the last quality barrier before the launch of proprietary brand products, and a dual-level incoming inspection mechanism of local inspections plus headquarters' random checks, adhering to the Inspect Every Batch principle, providing quality assurance for unified supply.

## **Social Performance**

## ※ Employment and Compensation

## **Management Practices and Main Actions**

The Company is committed to upholding the Labor Law of the People's Republic of China and the Labor Contract Law of the People's Republic of China, among other legal standards, by implementing the China Mobile Employee Recruitment Management Procedures. These procedures mandate that the Company's recruitment process is conducted in an open, transparent, fair, and equitable manner, aiming to raise our employment management standards. The Company focuses on attracting talent across various genders and age demographics to foster a workforce that reflects diversity. In doing so, the Company prioritizes hiring graduates from impoverished and ethnic minority regions, assuming all other qualifications are equal.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023		
Employee Structure <sup>1</sup>						
Total number of employees	Number	449,934	450,698	451,830		
Number of male employees	Number	/	213,527	215,343		
Number of female employees	Number	/	237,171	236,487		
Number of employees in the mainland of China	Number	447,849	448,226	449,390		
Number of employees in Hong Kong, Macao, Taiwan and overseas markets	Number	2,085	2,472	2,440		
Employees under 30 years old	Number	/	/	58,086		
Employees between 30 and 50 years old	Number	/	/	362,469		
Employees over 50 years old	Number	/	/	31,275		
Number of employees with master degree or higher	Number	/	55,904	60,380		
Employees with bachelor degree	Number	/	300,644	306,579		
Number of employees with associate degree or below	Number	/	94,150	84,871		
Proportion of employees under 30 vears old	%	14.7	13.62	12.86		
Proportion of employees between 30 and 50 years old	%	79.15	79.76	80.22		
Proportion of employees over 50 years old	%	6.15	6.62	6.92		
Proportion of technical personnel	%	34.87	36.8	38.83		
Proportion of marketing personnel	%	47.2	45.35	43.74		
Proportion of management personnel	%	7.02	7.35	7.26		
Proportion of general affairs personnel	%	9.98	9.71	9.37		
Proportion of others	%	0.93	0.97	0.79		
Employe	ee Introduct	ion				
Number of new employees	Number	15,775	16,808	17,577		
Number of new female employees	Number	6,032	6,747	7,157		
Number of new male employees	Number	9,743	10,061	10,420		
Number of new employees in the mainland of China	Number	/	/	16,485		
Number of new employees in Hong Kong, Macao, Taiwan and overseas markets	Number	/	/	1,092		
Number of new employees under 30 years old	Number	/	/	10,972		
Number of new employees between 30 and 50 years old	Number	/	/	6,414		
Number of new employees over 50 years old	Number	/	/	191		
,						

Employ	yee Turnove	er		
Employee turnover rate <sup>2</sup>	%	2.53	1.77	1.31
Female employee turnover rate	%	2.17	1.47	1.18
Male employee turnover rate	%	2.93	2.11	1.46
Turnover rate of employees in the mainland of China	%	2.28	1.53	1.13
Turnover rate of employees outside the mainland of China	%	23.95	21.88	15.88
Turnover rate of employees under 30 years old	%	8.93	6.92	5.51
Turnover rate of employees between 30 and 50 years old	%	1.52	1.02	0.74
Turnover rate of employees over 50 years old	%	0.18	0.21	0.22
Number of employees who resigned	Number	11,376	7,985	5,939
Number of female employees who resigned	Number	5,173	3,478	2,793
Number of male employees who resigned	Number	6,203	4,507	3,146
Number of employees dismissed	Number	1,620	1,364	2,274
Number of female employees dismissed	Number	991	717	1,193
Number of male employees dismissed	Number	629	647	1,081
Emplo	yee Diversit	у		
Proportion of female employees	%	52.88	52.62	52.34
Proportion of female employees in senior management positions	%	16.48	16.08	15.14
Number of ethnic minority employees	Number	/	/	33,222
Proportion of ethnic minority employees	%	7.24	7.30	7.35

1: By the end of 2023, all employees of the Company are long-term full-time employees, with no part-time employees, temporary employees, or non-guaranteed hours employees.

2: Employee turnover rate excludes retirees and refers to employees who quit voluntarily.

## ※ Compensation and Benefits

## **Management Practices and Main Actions**

**Compensation:** Guided by the principle of market-oriented and performancebased compensation, the Company formulated the *China Mobile Labor Cost Management Measures* and the *China Mobile Guidelines for Employee Compensation Management*, and implemented a "performance-oriented and structure-adjusted" compensation system. This approach includes a detailed nineteen-grade pay structure for staff, aiming to make the distribution of wages fair and beneficial, particularly for those on the front lines, core team members, and those in lower-income brackets, ensuring an equitable, structured, and efficient pay system. Incentives: The Company remains firmly committed to its three guiding principles of "strategy, business and innovation", and has implemented a full range of special incentive plans across different levels of its workforce. In terms of motivating its transformation and development, it has focused on key markets, key regions and key businesses, and introduced special incentives such as CHBN (Customer, Home, Business and New) markets, key regional company development plans, 5G construction, integration platform and mobile cloud performance-link incentives, to promote effective achievements in the Company's operating results and key businesses. In terms of driving its scitech innovation, the Company has formulated the China Mobile Implementation Plan for Incentive and Guarantee Mechanisms to Support Sci-Tech Innovation, systematically advanced incentive mechanisms designed to vitalize sci-tech innovation, implemented a comprehensive range of rewards for technological innovation, such as scientific research "special zones", fast-track development program for outstanding talents, internalization of core capabilities, talent incentives, and commercialization of patents and sci-tech achievements. At the same time, the Company has made an orderly launch of a series of medium and long-term incentive plans, such as share option incentives, sci-tech enterprise project bonuses, employee shareholding through mixed-ownership reforms, and virtual follow-up investments.

Benefits: A comprehensive welfare guarantee system has built for employees, including five types of social insurance, housing provident fund, corporate annuity, supplemental medical care, and other benefits, fully safeguarding employees' daily life and work needs. *The Guidelines on Strengthening the Construction of the Medical Security System for Employees* were formulated, constructing a three-pillar medical security system framework based on social basic medical insurance as the basic guarantee, enterprise supplemental medical insurance as the core guarantee, and individual commercial health insurance as the autonomous guarantee. Reasonable arrangements have made for employees' working and rest time, ensuring the right to rest and vacation for employees.

## **Key Performance**

Performance indicator	Unit	2021	2022	2023
Number of CEO mailbox emails and letters	Number	540	626	1,032
Number of Female Employees on Maternity Leave at the HQ	Number	/	17	20
Number of Male Employees on Paternity Leave at the HQ	Number	/	15	10
Proportion of Male Employees at the headquarters who returned to work after paternity leave at the HQ	%	/	100	100
Proportion of female employees at the headquarters who returned to work after maternity leave at the HQ	%	100	100	100

## ※ Labor Rights Protection

### **Management Practices and Main actions**

In compliance with the Labor Law of the People's Republic of China, the Law on the Protection of Minors of the People's Republic of China and the Provisions on Prohibition of Child Labor, and other applicable laws and regulations, the Company strictly prohibits the use of child labor and forced labor. Throughout 2023, the Company did not encounter any incidents of child labor or forced labor violations, nor did it face any major labor disputes. The Company strictly adheres to the *Trade Union Law of the People's Republic* of China, the Regulations on the Democratic Management of Enterprises, formulating the Guidance on Further Strengthening the Construction of the Employees' Representative Assembly System and the Guidance on the Implementation of Enterprise Affairs Disclosure by China Mobile, perfecting the democratic management system primarily in the form of the Employees' Congress. This ensures that the Employees' Congress can legally exercise its various powers and perform its democratic supervisory duties, providing a systematic guarantee for the protection of employee rights and interests.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Proportion of unionized contract employees	%	100	100	100
Proportion of employees covered by a collective bargaining agreement	%	100	100	100

## ※ Occupational Health and Safety

#### **Management Practices and Main Actions**

The Company is deeply committed to ensuring the occupational health and safety of our employees, closely following guidelines such as the *State Council's Opinions on Implementing the Healthy China Initiative* and the *Healthy China Action Plan (2019–2030)*. The Company strictly complies with the *Law on Prevention and Control of Occupational Diseases of the People's Republic of China*, among other relevant laws and regulations. In line with the *14th Five–Year National Health Plan* issued by the State Council's General Office, the Company has engaged in various initiatives such as hosting awareness weeks for occupational disease prevention, participating in the Healthy China Entreprise Action led by the China Enterprise Confederation and the China Entrepreneurs Association, and contributing to the National Health Commission's campaign for occupational health awareness. These efforts have earned us over 20 accolades, including being recognized as a national model for healthy enterprise development and for our innovative practices in promoting health within China, placing us at the forefront of the industry in terms of accolades received.

### **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Physical and Mental He	alth of Emp	oloyees		
Physical examination rate of employees	%	97	97	96.5
Number of employees covered by "Happiness 1+1"	10,000	42	41.2	41.2
Number of employees covered by the Employees' Mental Health Care Program	10,000	> 40	> 40	> 40
Cumulative number of Employees' Mental Health Care ambassadors trained	Number	> 3,000	> 3,000	> 3,000
Cumulative number of stress-relief rooms and care rooms built under the Employees' Mental Health Care Program	Number	> 100	> 100	>100
Work Sa	fety			
Investment in work safety	RMB 100 million	23.03	22.21	30.37

Number of safety emergency drills	Number	11,170	12,116	15,367
Security risk protection training coverage rate	%	/	/	94.29
Employee participation rate in safety emergency drills	%	94.3	92.3	97.07
Work-related	l Injuries			
Number of accidents occurring among employees in the workplace	Number	/	/	0
Rate of accidents occurring among employees in the workplace	%	/	/	0
Lost workdays due to work-related injuries	Days	39,611	32,519	37,360
Number of fatalities due to work related accidents	Number	1	0	0
Accident fatality rate per 1,000 employees	%	0.002	0	0

## ※ Development and Training

## **Management Practices and Main Actions**

The Company has formulated the *China Mobile 14th Five-Year Talent Plan* and the *China Mobile's Implementation Opinions on Further Strengthening Talent Work* to assist employees in achieving their career development goals. A 1–19 level job grade development system is built, and through the *China Mobile Standard Position Library (2022 Edition)*, non-managerial standard positions are set, stimulating the vitality of the employee team and the endogenous driving force for high-quality development of the Company. Comprehensive vocational capability training is provided for employees, and diverse labor skills competitions are organized to optimize the construction of a skilled talent team. Layered and graded training is implemented, and the Company's annual training tasks and course resource construction plans are systematically advanced.

Furthermore, the Company's approach to performance management is holistic and strategic, grounded in clearly defined roles. The Company navigates through critical stages including planning, coaching, evaluating, feedback, and application, all the while adhering to a transparent and equitable evaluation system based on a standard normal distribution. This method ensures the assessments are thorough, accurate, and fair. In 2023, the Company achieved a 100% rate in performance evaluation coverage, demonstrating our commitment to a comprehensive and fair assessment process.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Employee T	raining			
Average training expenses per employee	RMB	2,115	1,957	2,895
Number of total employee participations in training	10,000	124.2	123.4	160.1
Female employees' participations in training	10,000	/	/	78.9
Male employees' participations in training	10,000	/	/	81.1
Senior management's participations in training	Number	1,275	1,341	1,612

Middle–level management's participations in training	Number	20,214	23,103	25,799
General staff's participations in training	10,000	122.1	121.0	157.3
Average employee training time	Hour	142.4	125.0	123.8
Average training time for female employees	Hour	134.7	118.77	130.1
Average training time for male employees	Hour	153.1	131.85	118.1
Average training time for senior management	Hour	137.9	128.1	173.1
Average training time for middle level management	Hour	179.3	151.1	173.6
Average training time for general staff	Hour	141.8	124.6	123.1
Training participation rate of female employees	%	98.8	99.9	99.6
Training participation rate of male employees	%	99.2	98.9	99.4
Training participation rate of senior management	%	100	100	100
Training participation rate of middle–level management	%	99.7	99.9	99.9
Training participation rate of general staff	%	98.9	99.5	99.6
Training on Online Talent	Developmer	nt Center		
Total number of users on Online Talent Development Center	10,000	47.3	47.6	47.5
Average learning time of users on Online Talent Development Center	Hour	113.4	93.6	81.8
Number of mobile learners on Online Talent Development Center	10,000	33.9	37.5	31.9
Employees Assessed for Performa	nce and Ca	reer Deve	lopment	
Proportion of employees regularly assessed for performance and career development	%	100	100	100
Proportion of female employees regularly assessed for performance and career development	%	100	100	100
Proportion of male employees regularly assessed for performance and career development	%	100	100	100
Proportion of senior managers regularly assessed for performance and career development	%	100	100	100
Proportion of middle–level managers regularly assessed for performance and career development	%	100	100	100
Proportion of general staff regularly assessed for performance and career development	%	100	100	100

## ※ Local Communities

## **Management Practices and Main Actions**

The Company adheres closely to the *Charity Law of the People's Republic of China* among other relevant regulations when making external donations. The Company works in tandem with the parent company to offer financial and consumer support, contributing to the sustained success of poverty eradication efforts. The Company is deeply committed to the public welfare sector, spearheading initiatives like the Heart Caring Campaign and the Blue Dream-China Mobile Education Aid Plan, and engaging in a wide range of volunteer efforts. Additionally, the Company has placed a significant emphasis on fulfilling our responsibilities abroad by actively contributing to the development of local communities.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Public W	elfare Activi	ties		
Total number of registered employee volunteers	10,000	11.31	7.78	7.39
Total employee volunteer hours	10,000	80.62	57.78	54.89
Number of "And You" volunteer activities	Number	/	1,920	800
Cumulative amount of funds donated by "And You" volunteer activities	RMB 10,000	/	134.24	96
Cumulative amount of funds donated by the China Mobile Charity Foundation	RMB 10,000	42,110	45,940	50,070
Cumulative amount of funds donated under the "Blue Dream" Program	RMB 100 million	2.198	2.451	2.704
Cumulative number of primary and secondary school principals in rural areas trained under the "Blue Dream" Program	Number	> 129,000	> 130,000	> 130,000
Cumulative number of libraries constructed under the "Blue Dream" Program	Number	2,310	2,310	2,310
Cumulative number of multimedia classrooms constructed under the "Blue Dream" Program	Number	4,029	4,360	4,725
Cumulative amount of funds donated under the "Heart Caring" Campaign	RMB 100 million	2.013	2.143	2.24
Cumulative number of impoverished children receiving free CHD screening under the Heart Caring Campaign	Number	61,898	63,850	68,591
Cumulative number of impoverished children receiving free CHD screening under the "Heart Caring" Campaign	Number	7,069	7,446	7,745
Cumulative number of impoverished children with CHD assisted under the "Heart Caring" Campaign	Number	1	48	48
Cumulative number of non–profit funds on MIGU Running platform	Number	/	700	700.46
Cumulative number of participants in public benefit activities on MIGU Running platform	10,000	/	2,848	3,002
Cumulative number of corporate entities on MIGU Running platform	Number	/	36,521	36,707
Employe	ee Localizati	on		
Proportion of local employees in Hong Kong subsidiary	%	86.5	84.4	79.6
Proportion of local management- level employees in Hong Kong subsidiary	%	65.0	60.6	62.8

Paired-up Support and Assistance				
Paired–up support and assistance funds allocated by the headquarters within the year	RMB 10,000	27,600	28,700	28,700
Cumulative paired–up support and assistance funds allocated by the headquarters	RMB 100 million	13	15.9	18.74

## **Environmental Performance**

## Energy Use, Greenhouse Gas Emission and Exhaust Emission

## **Management Practices and Main Actions**

The Company rigorously follows the *Energy Conservation Law of the People's Republic of China*, alongside specific guidelines issued by the National Development and Reform Commission, such as the *Management Measures for Energy Conservation in Key Energy–Consuming Entities and the Energy Conservation Review Measures for Fixed Asset Investment Projects*, as well as the national carbon peaking and carbon neutrality goals and the "1+N" policy model. The Company has established pertinent policies and procedures to steadfastly advance the development of eco–friendly networks, embraced the utilization of renewable energy sources, engage in sustainable office practices, and enhanced the efficiency of our energy consumption. Our efforts are also focused on minimizing the greenhouse gas emissions resulting from the energy usage.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Investment on Energy S	aving and Enviro	nmental I	Protectior	ı
Investment on energy saving and environmental protection	RMB billion	/	/	72
	Energy Use			
Total energy consumption	MWh	/	/	63,067,608
Green electricity purchase volume	100 million kWh	/	/	1.58
Average data center power usage efficiency	/	/	/	1.32
Direct energy use				
Natural gas consumption	Million cubic meters	13.4	12.8	12.6
LPG consumption	100 tons	1.6	1.5	1.5
Coal gas consumption	Million cubic meters	0.01	0.01	0.03
Coal consumption	10,000 tons	0.05	0.04	0.03
Gasoline consumption	Million liters	84.7	77.9	74.7
Diesel consumption	Million liters	10.5	9.3	8.4
Indirect energy use				
Purchased electricity consumption	100 million kWh	570.4	592.5	610.8
Purchased heat consumption	10,000 GJ	404.6	405.0	392.0
Energy use intensity				
Comprehensive energy consumption per unit of telecommunications services	Kg of standard coal/RMB 10,000	/	/	64.5

Rate of decrease in total energy consumption per unit of data traffic	%	21	15	13.16
Rate of decrease in total energy consumption per unit of total telecommunications services	%	21	14	12.99
Energy conservation				
Total electricity savings	100 million kWh	43.5	64.3	89.90
Equivalent cost savings reductions of the electricity savings	RMB 100 million	28.0	43.09	60.63
Equivalent GHG emissions reductions of the electricity savings	10,000 tons	265.4	366.70	512.65
Greenhouse	Gas (GHG) Em	issions		
GHG emissions (Scope 1 + Scope 2) <sup>1</sup>	Million tons	33.82	34.46	35.40
Total direct GHG emissions (Scope 1)	Million tons	0.24	0.22	0.22
Total indirect GHG emissions (Scope 2)	Million tons	33.58	34.24	35.18
GHG emission intensity per unit of data traffic (Scope 1 + Scope 2)	Tons CO2e/ TB	0.018	0.015	0.013
Rate of decrease in GHG emissions intensity per unit of data traffic	%	21	16	13.3
Scope 3 GHG emissions – Category 6: business travel <sup>2</sup>	10,000 tons	4.72	3.47	7.05
Scope 3 GHG emissions – Category 7: employee commuting <sup>3</sup>	10,000 tons	40.24	37.13	29.05
Exh	aust Emission			
SO <sub>2</sub> emissions <sup>4</sup>	Tons	11.36	8.16	5.17

1: The Company adopts the operational control method for accounting greenhouse gases, including all related operational entities within the accounting scope. The type of greenhouse gas accounted for is carbon dioxide. The accounting standards are sourced from the *Accounting Methodology and Reporting Guidelines for Greenhouse Gas Emissions for Other Industrial Enterprises* published by the National Development and Reform Commission. The average greenhouse gas emission factor of the power grid is obtained from the *Notice of the Ministry of Ecology and Environment on the Management of Greenhouse Gas Emission Reporting of Enterprises in the Power Generation Industry from 2023 to 2025.* The carbon dioxide emission factor of outsourced heat is taken from the *Notice of the General Office of the National Development and Reform Commission on Issuing the Third Batch of Greenhouse Gas Accounting Methods and Reporting Guidelines for Enterprises in 10 Industries (Trial).* The carbon dioxide emission factors for natural gas, liquefied petroleum gas, coal gas, gasoline, diesel were taken from the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, where gasoline density was 0.72Kg/L and diesel density was 0.83Kg/L.

- 2: The scope of greenhouse gas emissions statistics for business travel covers domestic units. The method of calculation is based on financial travel expense data, accounting for the starting and ending distances of domestic travel expense documents and modes of transportation. The carbon emissions are calculated by summing up the emissions based on the United States Environmental Protection Agency's corresponding unit mileage carbon emission factors. Among them, the carbon emissions from air travel are provided by the Company's suppliers, based on the International Air Transport Association's pre–flight standards, calculated by aircraft type and distance for the corresponding flight segment's greenhouse gas emissions data.
- 3: Employee commuting greenhouse gas data utilize an internally developed commuting carbon emission inventory mini-program, encouraging employees to regularly submit information on commuting mileage and modes of transportation. Based on the number of employees participating in the inventory (valid inventory participants exceed 355,000, with a coverage rate of nearly 80%) and the total greenhouse gas emissions inventory, the annual average commuting carbon emissions are derived. Then, based on the total number of employees under labor contracts, the Company's total commuting carbon emissions are estimated.
- 4: The theoretical value estimation is based on the emission calculation formula stipulated in the Notice on Issuing the Statistical Report Form for Energy Conservation and Ecological Environmental Protection of Central Enterprises (State–owned Assets Comprehensive [2019] No. 19).

## ※ Water Resource Usage

### **Management Practices and Main Actions**

The Company strictly adheres to the relevant requirements of the *Water Law of the People's Republic of China* and the *Water Pollution Prevention and Control Law of the People's Republic of China*. In our daily production and operation, the Company promotes water conservation, encourages rainwater harvesting, rigorously controls sewage discharge, reduces unnecessary water resource consumption, and aim to achieve the established goal of zero growth in per capita managed water use.

The Company's routine office activities and production processes rely primarily on water supplied by municipal systems, eliminating any risk associated with water resources.

#### **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Total water consumption	Million tons	43.32	35.97	37.41
Fresh water consumption	Million tons	/	/	37.12
Water use intensity	Ton/ RMB 10,000	0.51	0.38	0.37
Reclaimed water usage	Million tons	/	/	0.29

## ※ Waste and Material Use

### **Management Practices and Main Actions**

The Company continues to strengthen the management of various types of solid waste, strictly adhering to national relevant laws and regulations in every aspect, including storage, transportation, and disposal, in order to prevent and control environmental pollution risks and continuously improve the overall utilization rate.

### Key Performance<sup>1</sup>

Performance Indicator	Unit	2021	2022	2023
Non-ha	azardous Waste	e <sup>2</sup>		
Amount of general solid waste generated	10,000 tons	7.67	4.46	6.17
Amount of general solid waste comprehensively utilized	10,000 tons	7.88	4.63	6.35
Amount of general solid waste carried over from previous years comprehensively utilized	10,000 tons	0.45	0.68	0.18
Comprehensive utilization rate of general solid waste <sup>3</sup>	%	96.89	88.61	100
Discharge intensity of general solid waste	Kg/RMB 10.000	0.90	0.48	0.61

Hazar	dous Waste <sup>2</sup>	2		
Amount of hazardous waste generated	10,000 tons	2.10	2.74	3.9
Amount of hazardous waste disposed of	10,000 tons	2.35	2.63	4.09
Amount of hazardous waste carried over from previous years disposed of	10,000 tons	0.35	0.37	0.18
Disposal rate of hazardous waste <sup>4</sup>	%	95.45	82.35	100
Discharge intensity of hazardous waste	Kg/RMB 10,000	0.25	0.29	0.39
Ma	aterial Use			
Total amount of materials used in production of terminal equipment	Tons	14,521	12,308	12,270
Total amount of non-renewable materials used in production of terminal equipment	Tons	12	11	11
Total amount of renewable materials used in production of terminal equipment	Tons	14,509	12,297	12,259
Total amount of toxic and hazardous materials used in production of terminal equipment	Tons	0	0	0
Proportion of recycled feedstock used in production of terminal equipment	%	43.72	43.72	43.72
Proportion of recycled products and their packaging materials used in production of terminal equipment	%	99.91	99.91	99.91
Amount of packaging materials used per production unit of terminal products	Ton/ production unit	0.00041	0.000408	0.000409

1: In the coming years, China Mobile will make efforts to reduce general waste, electronic waste, and hazardous waste in its office and marketing activities. However, it is currently unable to anticipate specific targets due to the direct correlation between waste generation in network operations, the rapid development of the network, and the continuous iteration of equipment.

- 2: The solid waste generated by the Company's production and operations mainly consists of three categories: general waste, electronic waste, and hazardous waste. General waste mainly includes household waste, kitchen waste, office and marketing paper waste or packaging, construction waste, etc. Electronic waste mainly refers to electronic components and equipment replaced in base stations and machine rooms, as well as discarded equipment such as printers, copiers, fax machines, and computers in office and business operations. General waste and electronic waste are collectively referred to as general solid waste. Hazardous waste mainly includes exposed circuit boards and batteries discarded from base stations and server rooms, printer toner cartridges, ink cartridges, fluorescent tubes, and damaged or discarded smartphones, smart terminals, batteries, SIM cards, etc. in office locations.
- 3: The comprehensive utilization rate of general solid waste refers to the ratio of the comprehensive utilization volume of general solid waste in the reporting period minus the volume stored in previous years to the generation volume of general solid waste.
- 4: The disposal rate of hazardous waste refers to the ratio of the disposal volume of hazardous waste in the reporting period minus the volume stored in previous years to the generation volume of hazardous waste.

## \* Green Supply Chain

### **Management Practices and Main Actions**

The Company is committed to green procurement practices, actively working to develop environmentally friendly suppliers. Additionally, the Company has enhanced the use of sustainable packaging and engaged in recycling efforts. Through these actions and technological advancements, the Company aims to lead the supply chain towards more energy–efficient and emission–reducing practices.

### **Key Performance**

Performance Indicator	Unit	2021	2022	2023
E-commerce transaction volume	RMB 100 million	5,717	6,339	7,910
Number of electronic procurement projects implemented	10,000	approx. 3.2	approx. 3.2	approx. 3.5
Amount of paper documents reduced due to the application of fully electronic procurement processes	10,000	approx. 69.9	approx. 69.2	approx. 75.7
Proportion of new main equipment with green packaging	%	> 80	> 80	> 80
Amount of wood saved	10,000 cubic meters	26.2	26.81	27.85

## ※ Environmental Compliance

#### **Management Practices and Main Actions**

The Company carries out the national decision–making and deployment on fighting pollution prevention and control, clarifies the responsible departments and establishes emergency response plans and preventive and control measures for the environmental management of major risk points, such as air, water and soil, solid waste, electromagnetic radiation, noise and so on.

## ※ Eco-Friendly Products and Services

### **Management Practices and Main Actions**

The Company develops various digital applications and services to meet the information needs of various industries and individual users, improving efficiency in production, daily life, and social governance, and contributing to energy conservation and carbon reduction in the economy and society. Through products such as MIGU Reading, ViLin, Mobile Cloud, Big–Screen Video–on–Demand, MIGU Video, Cloud Games, and And–Education, we not only provide online convenience to users but also reduce the energy and resource consumption associated with traditional reading, meetings, entertainment, and learning methods. The Company seizes the opportunity of the development of new–generation technologies and creates digital application demonstrations for multiple industries, helping them optimize production methods and management models, effectively improve resource utilization efficiency, reduce costs, and actively promote the reduction of greenhouse gas emissions in various sectors.

## **Governance Performance**

## ※ Corporate Governance

## **Management Practices and Main Actions**

The Company is dedicated to advancing the governance modernization efforts. By the end of 2023, our board of directors is comprised of 8 directors, overseeing various committees such as the Audit, Nomination, Compensation, and Sustainable Development Committees, each playing a crucial role in the governance structure.

## **Key Performance**

Performance indicator	Unit	2021	2022	2023
Number of directors	Number	8	8	8
Number of executive directors	Number	4	4	4
Number of independent directors	Number	4	4	4
Number of female directors	Number	0	1	1
Number of male directors	Number	8	7	7
Proportion of female directors	%	0	12.5	12.5
Average tenure of Board members	Year	5.6	4.8	4.0
Number of Board meetings held within the year	Number	11	12	7
Average attendance rate of Board meetings	%	89.0	85.0	96.5
Number of proposals reviewed by the Board throughout the year	Number	71	50	51

## ※ Tax Management

### **Management Practices and Main Actions**

The Company is committed to adhering to the tax laws and regulations in China and wherever we operate, upholding principles of integrity and legality in our tax practices. The Company has established a dual-level tax management structure where the headquarters oversees overall tax management activities, and the individual units are tasked with their specific tax responsibilities and supporting tax-related aspects of their operations. Aligning with both our internal and external development realities, the Company has made "compliant taxation to support strategic transformation" our guiding principle in tax affairs. The Company has developed policies like the China Mobile Tax Management Measures and the China Mobile Invoice Management Measures to ensure meticulous compliance with tax obligations and the application of tax reduction strategies, alongside tax planning in business management. In 2023, the Company proactively monitored and analyzed significant financial and tax policy impacts, offering yearly updates and training on financial and tax matters to ensure the tax practices meet legal standards. The Company also embarked on a digital electronic invoicing pilot, enhancing the tax calculation and risk management processes and leveraging digital technologies to boost the efficiency of the tax operations.

### **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Taxes paid	RMB 100 million	359	373	386

## 8 Business Ethics and Anti-Corruption

## **Management Practices and Main Actions**

The Company is committed to upholding the highest standards of business ethics, taking a firm stance against corruption with a zero-tolerance policy for any detected corrupt practices.

Improvement of policies and procedures: The Company has introduced the *China Mobile Integrity Commitment System (Trial)* to widen the integrity commitment's scope, specifically targeting the contract signing process, integrity management for exiting and retired staff, and the procedures for handling breaches of this commitment.

Enhancement of the integrity culture: The Company focuses on critical sectors like marketing, business market, network, and the supply chain, to provide targeted integrity education. The Company has compiled a *Collection of Typical Cases of Misconduct by China Mobile Employees and Their Relatives* to make our cautionary education more relevant and effective. Additionally, the Company recognizes and promotes outstanding integrity culture practices within the company.

Strengthening integrity risk management: The Company has paid special attention to areas prone to integrity issues, integrated risk management strategies across all levels of operation to tackle potential integrity, operational, and management risks. By leveraging digital solutions for risk management and sharing successful case studies, the Company aims to address and prevent various forms of corruption, enhancing our grassroots governance and integrity risk management capabilities.

**Opening channels for reporting:** Postal mailbox, address: Building A, 29 Financial Street, Xicheng District, Beijing, 100033; onsite receipt of reports during supervision and inspection work; CEO mailbox, for employees and members of the public to report any improprieties.

In line with the regulatory guidelines, information on corruption incidents within the Company is confidential. For details on corruption cases and outcomes that have been made public, please refer to the Central Commission for Discipline Inspection and National Supervisory Commission's website.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
Anti-corruption and integrity education events held	Number	11,390	11,524	13,705
Anti–corruption and integrity education employee coverage rate	%	> 90	> 90	> 90
Number of people receiving anti- corruption and integrity education and training	Number	786,085	724,519	833,181

## ※ Value Chain Management

### **Management Practices and Main Actions**

The Company has implemented a comprehensive suite of 32 supply chain management policies that encompass areas such as procurement, logistics, compliance, risk control, supplier relations, quality assurance, and digital transformation. This framework is underpinned by a closed–loop management approach of planning, execution, assessment, and optimization, aimed at elevating the efficiency, standardization, and detail–oriented management of our supply chain.

Efficiency in procurement: The Company has adopted multiple procurement strategies including batch, consolidated, and centralized procurement, alongside collaborative execution to bolster the intensive management approach. In 2023, the Company achieved a remarkable centralization rate of over 99.9% in the procurement activities, reducing the average time for procurement projects to 40 days, marking a 4-day improvement from the previous year.

Smart procurement initiatives: A centralized supply chain management system is built, forming six core capabilities: e-commerce guidance, fullprocess structuring, centralized order center, warehousing standard management, centralized unified portal, and quality closed-loop management; a unified electronic procurement and bidding system is constructed to support the digitization of sourcing processes for all procurement methods such as bidding, selection, inquiry, competitive negotiation, and single source.

Strengthening compliance in procurement: Adhering to the principles of "openness, fairness, justice, and honesty", efforts are made to create a fair and healthy business environment and a transparent and standardized procurement environment. In 2023, bid collusion identification rules were first issued in the industry, clarifying the principles and work requirements for directly identifying collusion and suspected collusion, striving to curb improper market competition behaviors such as bid collusion (response); applying smart compliance digital platform, checking procurement documents before procurement, assisting in discovering improper behaviors such as supplier bid–rigging and fraud during procurement, and checking the implementation process after procurement, effectively supervising procurement work; promoting standardized bid evaluation rooms in bidding and selection projects to ensure the review process is transparent.

Quality management: The China Mobile Centralized Procurement Product Quality Management Measures and the China Mobile Implementation Rules for Tier 1 Centralized Procurement Quality and Contract Fulfillment and other guidelines are formulated to strengthen product quality management of cooperative suppliers. In 2023, factory inspections were carried out for tier 1 centralized procurement products in 6,697 batches, arrival inspections in 8,809 batches, and flight inspections in 25 batches.

Supporting SME growth: Through electronic procurement, the payment cycle is shortened by more than 55%; supporting small and medium–sized enterprises, reducing or waiving bid security deposits by RMB 320 million throughout the year. By the end of 2023, among the suppliers of centralized procurement, more than 85% are private enterprises, and over 90% are small and micro enterprises.

## **Key Performance**

Performance Indicator	Unit	2021	2022	2023
	Numb	er of suppliers		
Number of centralized procurement suppliers <sup>1</sup>	Number	20,600	18,798	15,681
Number of suppliers by r	egion			
Number of procurement suppliers in Eastern China	Number	6,074	5,592	4,857
Number of procurement suppliers in Northern China	Number	3,292	2,967	2,899
Number of procurement suppliers in Central China	Number	1,909	1,813	1,468
Number of procurement suppliers in Southern China	Number	2,391	1,746	1,755
Number of procurement suppliers in Southwest China	Number	2,169	1,899	1,496
Number of procurement suppliers in Northwest China	Number	2,286	2,000	1,920
Number of procurement suppliers in Northeast China	Number	2,479	2,781	1,283
Number of overseas centralized procurement suppliers	Number	0	0	3
Number of suppliers by c	ategory <sup>2</sup>			
Number of Tier 1 centralized procurement suppliers	Number	842	754	671
Number of Tier 2 centralized procurement suppliers	Number	20,432	18,580	15,444
	Supplie	ers localization		
Proportion of local suppliers <sup>3</sup> in Tier 1 centralized procurement suppliers	%	100	100	99.7
Proportion of local suppliers <sup>4</sup> in Tier 2 centralized procurement suppliers	%	62.92	67.40	62.6
	nformation ve	erification of su	opliers	
Number of information verifications on Tier 1 centralized procurement suppliers	Number	2,312	1,510	1,371

	E-procur	ement system		
Number of launched projects in the e-procurement and bidding system	Number	1	32,018	35,461
Number of suppliers in the e-procurement and bidding system	Number	/	339,319	371,743
Number of experts in China Mobile procurement evaluation expert pool	Number	50,617	49,901	49,446

1: The 2023 data is for newly contracted suppliers and does not include suppliers who signed contracts before 2023 but whose contracts have not expired.

2: Some companies are both Tier 1 centralized procurement and Tier 2 centralized procurement suppliers, and the number of centralized procurement suppliers is equal to the number of Tier 1 centralized procurement suppliers and the number of Tier 2 centralized procurement suppliers after the removal of weight.

3: Local suppliers in Tier 1 centralized procurement refer to domestic suppliers.

4: Local suppliers in Tier 2 procurement refer to provincial suppliers.

# **Independent Assurance Report**

## **ASSURANCE STATEMENT** SGS-CSTC'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE CHINA **MOBILE LIMITED's 2023 SUSTAINABILITY REPORT** NATURE OF THE ASSURANCE/VERIFICATION SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. (hereinafter referred to as SGS) was commissioned by CHINA MOBILE LIMITED (thereafter as "China Mobile") to conduct an independent assurance for partial data of the China Mobile's Limited's 2023 Sustainability Report (hereinafter as Specify Performance Information). INTENDED USERS OF THIS ASSURANCE STATEMENT This Assurance Statement is provided with the intention of informing all China Mobile's Stakeholders. RESPONSIBILITIES The relevant information in the China Mobile's Limited's 2023 Sustainability Report verified in this assurance process is the responsibility of the management and relevant functional departments of China Mobile. SGS has not been involved in the preparation of any of the material related to these data. Our responsibility is to express an opinion on the data within the scope of verification with the intention to inform all China Mobile's stakeholders. ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards including the principles of reporting process contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) GRI 1: Foundation 2021 for report quality, GRI 2 General Disclosure 2021 for organisation's reporting practices and other organizational detail, GRI 3 2021 for organisation's process of determining material topics, its list of material topics and how to manages each topic, and the guidance on levels of assurance contained within the AA1000 series of standards or ISAE3000. The assurance of this Specify Performance Information has been conducted according to the following Assurance Standards SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000) Assurance has been conducted at a moderate level of scrutiny. SCOPE OF ASSURANCE AND REPORTING CRITERIA The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the selected 2023 sustainability development Specify Performance Information listed below. Other data and information disclosed were not included in this assurance process. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process Number of Tier 1 centralized procurement suppliers; Number of Tier 2 centralized procurement Economic suppliers; Proportion of local suppliers in Tier 1 centralized procurement suppliers; Proportion of Indicators local suppliers in Tier 2 centralized procurement suppliers; Number of information verifications on Tier 1 centralized procurement suppliers; Number of remote rural villages with broadband service newly launched in the "Universal Telecommunications Service Project" ; Number of customer complaints about spam handled; Number of times emergency communications support was provided; Number of emergency vehicles dispatched (Vehicle-times); Number of emergency support equipment installed (Set-times); Number of personnel involved in emergency support (Number) Number of new training rural primary and secondary school principals in central and western Social China in 2023; Cumulative number of impoverished children receiving free CHD screening under Indicators the "Heart Caring" Campaign; Number of total employee participations in training; Proportion of female employees; Proportion of ethnic minority employees; Number of new employees; Number of employees who resigned; Anti-corruption and integrity education events held; Number of people receiving anti-corruption and integrity education and training

 
 Environmental Indicators
 Purchased electricity consumption; Natural gas consumption LPG consumption; Coal gas consumption; Coal consumption; Gasoline consumption; Diesel fuel consumption; Total direct GHG emissions (Scope 1); Total indirect GHG emissions (Scope 2); Scope 3 GHG emissions -Category 6: business travel; Scope 3 GHG emissions - Category 7: employee commuting; Number of inter-provincial video conferences organized by the headquarters

#### ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, on-site interviews with relevant employees and departments located at China Mobile Building of No.28&No.29, Financial Street, Xicheng District, Beijing, P. R. China, documentation and record review and validation with employees relevant by login related systems.

#### LIMITATIONS AND MITIGATION

This assurance methodology is group verification, the original data of all subsidiaries under China Mobile has not been traced.

The assurance process only involved interviews with the heads of relevant departments and certain employees of headquarters as well as validation of relevant documents. No external stakeholder involved. The GHG data within the scope of this assurance has not been verified by an external third party, and the on-

site assurance of this data is only based on sampling. The GHG data (Scope 3) of the report was estimated only.

Only Specify Performance Information selected were involved in the assurance process, other information was not involved.

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in multiple countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from China Mobile, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment.

#### FINDINGS AND CONCLUSIONS

#### ASSURANCE/VERIFICATION OPINION

On the basis of the methodology described and the verification work performed, the relevant information in the China Mobile's Limited's 2023 Sustainability Report verified in this assurance process is accurate, reliable and provides a fair representation of China Mobile sustainability activities' performance in 2023. The assurance team is of the opinion that these data can be used by the Reporting Organization's Stakeholders.

#### FINDINGS AND RECOMMENDATIONS

Good practices and recommendations for sustainability report and management process were described in the internal management report which has been submitted to the management department of China Mobile for continuous improvement.

Signed:

Koho

For and on behalf of SGS-CSTC

David Xin Sr. Director – Business Assurance 16/F Century Yuhui Mansion, No. 73, Fucheng Road, Beijing, P.R. China

Mar. 13<sup>th</sup>, 2024 WWW.SGS.COM

# **Report Disclosure Indexes**

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		ation on: (a) the policies; and (b) compliance with relevant laws and regulations that the issuer relating to preventing child and forced labor.	98
Aspect B4: Labor Standards	KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	98
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	98
		Operating Practices	
	General Disclosure: Policies	s on managing environmental and social risks of the supply chain.	76, 105
	KPI B5.1	Number of suppliers by geographical region.	105
Aspect B5: Supply Chain	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	104-105
Management	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	76
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	76
	have a significant impact on	ation on: (a) the policies; and (b) compliance with relevant laws and regulations that the issuer relating to health and safety, advertising, labeling and privacy matters vices provided and methods of redress.	96
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	97
Aspect B6: Product Responsibility	KPI B6.2	Number of products and service related complaints received and how they are dealt with.	96
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	94
	KPI B6.4	Description of quality assurance process and recall procedures.	97
	KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	95
		tion on: (a) the policies; and (b) compliance with relevant laws and regulations that the issuer relating to bribery, extortion, fraud and money laundering.	104
Aspect B7: Anti–corruption	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	104
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	104
	KPI B7.3	Description of anti-corruption training provided to directors and staff.	104
		Community	
		on community engagement to understand the needs of the communities where the ure its activities take into consideration the communities' interests.	100
Aspect B8: Community Investment	KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	100
	KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	100-101

## UN Sustainable Development Goals (SDGs)

SDGs	Practices of China Mobile	Page(s)
1 5an <b>Ayitit</b>	In the 3,310 assistance points across 1,486 counties, townships, and villages nationwide, the Company continuously promotes talent, funding, wisdom, consumption, industry, and livelihood support measures, solidifying poverty alleviation achievements, enriching rural industries, and enhancing the well–being of the populace.	46-49
2 300 Selects	The Company has accelerated the deep integration of next-generation information technology with agricultural production, creating 600 high standards 5G smart agriculture demonstration projects of high standards in 2023.	48
3 .000 M/m 	The Heart Caring action project was launched, donating 10 million yuan throughout the year to support children with congenital heart disease, offering free screenings for 4,741 children, and treating 299 diagnosed children. A remote medical platform and applications were developed, helping over 1,600 medical institutions below the county level to connect to the national remote medical platform, promoting the descent of high–quality medical resources to remote rural areas. The Company provides employees with a variety of health management options, strengthen safety production management, and ensure occupational health and safety.	33, 51, 63
4 searn Bacters	For ten consecutive years, as the sole telecommunications operator, we undertook the construction of the national educational resources cloud platform. In exclusive cooperation with the Ministry of Education Examination Center, we created the first national separation of examination and evaluation model art examination platform. The Company promotes the remote connection of high–quality educational resources with rural schools and families. By the end of 2023, internet TV educational services reached over 6.8 million rural households. An annual investment of RMB 8 million supported the Blue Dream principal training project, providing training for 1,002 principals of rural primary and secondary schools in central and western China. By the end of 2023, 4,725 China Mobile Multimedia Classrooms were donated.	32, 48, 51
5 ((m)) ()	The Company focuses on introducing talents of different genders and age groups, striving to build a diverse workforce. In 2023, 52.34% of all employees were women.	58
6 COLLAR MATTER AND LANGTINGTON	In our daily production and operations, the Company advocates for water conservation, encourages rainwater recycling, strictly controls sewage discharge, reduces unnecessary water consumption, and achieves the set goal of zero growth in per capita management water usage.	102
	Throughout the year, the green energy generation amounted to 164 million kilowatt-hours, equivalent to a reduction of 94,000 tons of carbon dioxide emissions. Actively participating in green electricity trading, the annual purchase of green electricity exceeded 158 million kilowatt-hours, equivalent to a reduction of 90,000 tons of carbon dioxide emissions.	74
8 HER COMM	The Company adheres to the Talent Strengthening Enterprise strategy, considering talent as the primary resource driving innovation and leading development, fully building an excellent talent team, comprehensive training system, smooth development paths, and a harmonious workplace environment.	58-63
9 Hostory provide Because provide	The Company deepens the construction of new-type information infrastructure, systematically creating new-type information infrastructure focusing on 5G, computility network, and capability platforms, innovatively building a new-type information service system of Connectivity, Connectivity Computility and Capability, continuously enriching digital applications for production, life, and governance scenarios, and deeply promoting the integration of information services into various industries and serving the public.	20-34
	The Company expands network coverage in rural and remote areas, promoting the equalization of basic public services. By the end of 2023, the 4G network covered 99.6% of administrative villages nationwide, and the 5G network basically achieved continuous coverage of the country's townships, as well as effective coverage of large administrative villages and developed rural areas. The Company offers exclusive tariff discounts and customized warmhearted services for three key groups: the elderly, disabled, and poverty–stricken, striving to achieve affordable digital services for everyone.	43–45
	The Company focuses on meeting the digital needs of all people, building over 390,000 digital villages and 155,900 smart communities.	48
	The Company optimizes product experience, perfect the product quality evaluation system of Customer Decides and Frontline Decides, and establishes a product quality control system of two checkpoints for commercial and iterative stages. The Company carries out the Sunshine Action for customer rights protection, firmly guarding against any infringement of customer rights. The Company actively protect the mental and physical health of minors by launching a youth mode, strengthening self-discipline and content management, and striving to provide a safe and healthy online environment for young users.	40, 96, 97
13 xxxx	The Company deeply promotes the C <sup>2</sup> Three Energy – China Mobile Carbon Peaking and Carbon Neutrality Action Plan, through three main lines of energy conservation, clean energy, and empowerment, steadily promoting green, low–carbon sustainable development around six pathways of green networks, green energy consumption, green supply chain, green office, green empowerment, and green culture.	65
14 th Data made	The Company promotes an integrated Smart Environmental Protection solution and product services that combine Monitoring, Management, and Prevention, building ecological monitoring systems in several natural reserves, including the Qinghai Sanjiangyuan, Yellow River Delta, Yangtze River Basin, and Poyang Lake area.	80
15 tilleo 4	The Company fully leverages the advantages of 5G, satellite remote sensing, drones, video monitoring, and the Internet of Things technologies to monitor wildlife populations, contributing to ecological governance and biodiversity protection.	80
	The Company establishes a corporate governance mechanism that is legally compliant, transparent in responsibilities, coordinated in operation, and effective in checks and balances. The Company proactively integrates the concept of sustainable development into the Company's organizational structure, major decisions, and production operations, implement a new round of state–owned enterprise reform to enhance actions, firmly hold the bottom line of not incurring major risks, and actively promotes the modernization of the governance system and governance capabilities.	90
17 /1900041 18 18 842	For 11 consecutive years, the Company has hosted the China Mobile Global Partner Conference. The Ten Hundred Thousand Million partner program has gathered more than 1,300 enterprises on the blockchain, creating a new pattern of industrial cooperation led by central enterprises and extensively participated in by large, medium, and small enterprises. The Company strengthens the modern mobile information industry chain, enhancing the foundational capabilities and modernization level of the industry. The Company has signed strategic cooperation agreements with the local governments of all 31 provinces (autonomous regions, directly–administered municipalities) and 121 large enterprise groups and institutions, further promoting the complementary advantages of resources and the expansion into strategic emerging fields. The Company strengthens the global direct connection of operators, and by the end of 2023, the number of customers cooperating with the comprehensive solution iConnect tailored for the operator market reached 1,100.	17, 35

## GRI Content Index CONTENT INDEX ADVANCED SERVICE

Note

China Mobile has reported in accordance with the GRI Standards for the period between January 1 and December 31, 2023.

## GRI 1

GRI 1: Foundation 2021

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1. For the Content Index Advanced Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.

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a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	68-69
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a) Describe the organization's processes for identifying and assessing	67
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Recommended Disclosures	Page(s)
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