Green Development

China Mobile is committed to fostering a harmonious co-existence between humanity and nature and strives to build a sustainable global habitat. The Company is deeply engaged in the C^2 Three Energy — China Mobile Carbon Peak and Carbon Neutrality Action Plan. Leveraging the robust advantages of new generation information technologies, China Mobile is spearheading a comprehensive green transformation. Internally, the Company is maximizing operational efficiencies to drive our own low-carbon transition. Externally, we collaborate with diverse partners to promote green development across the supply chain and facilitate societal green transition. This dual approach activates new efficiencies in ecological environmental governance, collectively advancing the construction of China's ecological civilization and contributing to the realization of Beautiful China.

Addressing Climate Change

Conducting Green and Low-Carbon Operations

Supporting Social Energy Conservation and Environmental Protection Initiatives

Addressing Climate Change

Topic Analysis: Addressing Climate Change and Energy Use

China Mobile actively responds to the national Dual Carbon strategy, integrating climate change mitigation into the Company's overarching development framework. The Company continuously refines our environmental governance structure, clarifying responsibilities at all levels and anchoring our efforts toward the Dual Carbon goals. By formulating forward-looking strategies, we are progressively establishing a sophisticated climate change risk management system. This system incorporates multi-tiered quantitative indicators to ensure the effective implementation of initiatives, thereby making a tangible contribution to addressing climate change.

Enhancing Climate Governance Structure

China Mobile has established a three-tier governance framework of Decision-Making Level, Management Level, and Execution Level to address climate change issues. This structure clearly defines the responsibilities of the Board of Directors and senior management, creating a top-down management system. The Company develops a five-year strategy and network plan every five years, identifying long-term climate-related risks and opportunities. These plans are submitted to the Board of Directors for review, ensuring the effective execution of climate change initiatives.

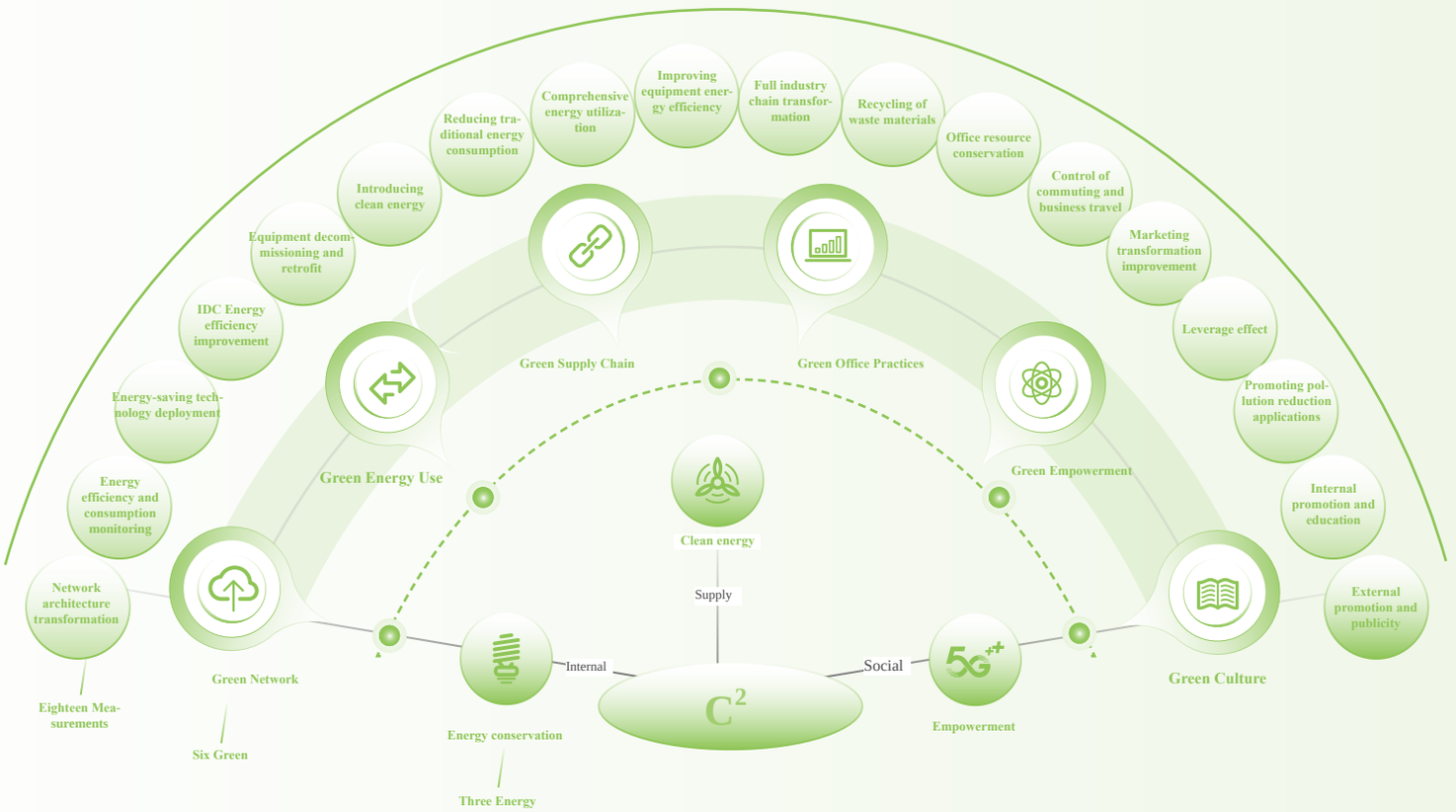
Moreover, China Mobile integrates climate-related performance metrics into the compensation policy for Chairman, which incentives management to address climate change and drive carbon reduction practices.

Management hierarchy	Governance subjects and structure	Job duties and progress
Decision-making level	Pollution Prevention and Energy Saving Leadership Committee, 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 steady progress.
Management level	Pollution Prevention and Energy Saving Working Group, led by the CEO, and comprising persons-in-charge of various departments of the Headquarters, the Information Technology Center, the Supply Chain Management Center and the IoT Company	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.
Execution level	Planning and Construction Department of the Headquarters	Responsible for the formulation and implementation of climate change-related planning, reviewing the progress of climate-related goals and indicators monthly, and regularly reporting annual progress to the Board of Directors. On the foundation of the 2021 C² Three Energy – China Mobile Carbon Peak and Carbon Neutrality Action Plan (hereinafter referred to as "C² Three Energy Plan"), we have formulated the C² Three Energy Plan 2.0. This upgraded strategy encompasses five key dimensions: vision, goals, actions, organization, and capabilities, integrating green principles into the entire production and operation process. The plan advances the Three Energy and Six Green to greater depth and effectiveness, continuously expanding its value contributions to the economy, society, and the environment. Through multifaceted measures including building green networks, promoting green energy use, developing green supply chains, deepening green empowerment, advocating green office practices, and fostering a green culture, the Company achieved a year-on-year reduction of 5% in comprehensive energy consumption per unit of telecom service and a year-on-year decrease of 15% in carbon emissions per unit of telecommunication service in 2024. Leveraging the carbon-reduction potential of information technology, we contributed to a total societal carbon emission reduction of over 350 million tons.

Deepening Climate Response Strategies

China Mobile has integrated Carbon Peak and Carbon Neutrality goals into the Company's overall development strategy. The release of the *C² China Mobile Carbon Peak and Carbon Neutrality Action Plan White Paper* outlines the Company's commitment to Energy Saving, Clean Energy, and Empowerment as our core action pillars. While meeting the growing demand for high-quality information services and accelerating the construction of 5G networks and data centers, China Mobile highlights Dual Carbon goals management. Anchoring our efforts to these goals, we continue to advance the C² Three Energy Plan, establishing a new green development model centered on Three Energy and Six Green. The Company actively implements green practices, including green networks, green energy use, green supply chains, green offices, green empowerment, and green culture. These efforts aim to increase the proportion of green energy use, enhance energy efficiency, and embed the principles of green and low-carbon development throughout all aspects of production and operations. Additionally, China Mobile is building a C² Three Power Green Development Talent System, including Green Intelligence Management, Green Intelligence Innovation, and Green Intelligence Empowerment. This initiative establishes a talent pool to support ongoing energy-saving and carbon-reduction efforts, ensuring the Company's full contribution to achieving China's Dual Carbon goals on schedule.

C² Three Energy – China Mobile Carbon Peak and Carbon Neutrality Action Plan



China Mobile's Green Energy Use Action Plan

Introducing clean energy: Develop zero-carbon/low-carbon data centers and deploy zero-carbon/low-carbon base stations tailored to local conditions, encourage the adoption of distributed renewable energy in office and production areas, and promote the procurement of green electricity through market-based trading mechanisms to increase the proportion of green electricity use.

Reducing traditional energy consumption: Increase the proportion of electricity in the energy mix and accelerate the replacement of non-clean energy sources such as coal, gasoline, and diesel.

Promoting comprehensive energy utilization: Encourage the cascading use of energy.

Zero-carbon and low-carbon base station deployment action plan and progress

It is planned to complete the green energy-saving transformation of 100 to 300 base stations in each province.

Enhancing Climate Management Capabilities

In response to the escalating global climate crisis, China Mobile is intensifying its efforts to identify, analyze, assess and manage climate-related risks and opportunities. The Company is establishing a robust and comprehensive climate risk management system, integrating climate change considerations into every stage of its risk management processes.

China Mobile's full process diagram for climate-related risk identification, assessment, and management

Collecting climate-related risk and opportunity information

Every six months, the Deputy General Manager in charge of energy-saving and emission reduction work and the Energy-saving and Emission Reduction Working Group jointly conduct a major climate risk and opportunity assessment. The collected information is aggregated, categorized, and evaluated, taking into account policies, regulations, strategies, technologies, products, operations, markets and the value chain.

Assessing and prioritizing risks

The Company populated a climate risk list, which set out key climate risks that had been identified. By benchmarking international standards, reviewing company practices, and incorporating stake-holder feedback, China Mobile determines the importance of climate-related and other environmental risks and opportunities and prioritizes risks accordingly.

Defining material impacts

The Company assesses materiality of impacts based on their scope, severity and frequency, combined with predictions of policy guidance and technological advancements. Relevant specialized departments conduct comprehensive evaluations to define the materiality of these impacts. The importance of climate-related risks and opportunities is evaluated across two dimensions i.e., financial impact and timeframe of impact on China Mobile.

Developing response strategies

Based on the identification and assessment of climate-related risks, the Company conducts specialized planning and forward-looking research on carbon peak and carbon neutrality, as well as related technologies. This forms the foundation of the Dual Carbon strategy and ensures robust risk management.

External disclosure

The Company regularly monitors key risk indicators and discloses updates on risk identification and management are disclosed to stakeholders through annual reports, sustainability reports and other periodic communications.

The Company formulates a five-year strategy and network plan every five years, identifying long-term climate-related risks and opportunities. These plans are submitted to the Board of Directors for review and approval.

	Time range and definition	
Short term	0-1 year	At the beginning of each year, the Company formulates an annual work plan, makes mid-year adjustments, and conducts a year-end review.
Medium term	1-3 years	The Company formulates a three-year work plan every three years as a medium-term plan.
Long term	3-5 years	Every five years, a five-year strategy and work plan is formulated, which is consistent with the national Five-Year Plan.

Risk category	Specific type	Time range	Risk description	Risk response measures
Emerging regulations	Carbon trading	Long term	The Company's headquarters and Beijing Mobile subsidiary, with China Tie Tong's headquarters and its Beijing subsidiary have been included in the Beijing Emissions Trading System (ETS) pilot. It is possible that the Company, its subsidiaries, and branches will be incorporated into the upcoming national ETS.	To effectively manage risks related to ETS compliance, the Company establishes internal management rules and compliance plans at the beginning of each year. We conduct quarterly assessments of carbon emissions and notifies branches and subsidiaries of the results on a quarterly basis.
Extreme natural factors	Natural disasters	Long term	Extreme weather events may impact infrastructure like base stations, disrupting the normal operation of the Company.	To proactively deploy response measures, the Company develops post-disaster reconstruction plans annually, forecasting investments required for reconstruction during the planning period. When formulating the annual investment plan at the end of each year, the Company allocates a dedicated portion of funds for the reconstruction of facilities affected by disasters.
Technologies	Low-carbon technology transition	Short term	According to a report by the International Energy Agency (IEA), global data centers' total electricity consumption is projected to reach 1,000 terawatt-hours by 2026. In the future, energy consumption and emissions from information infrastructure may pose significant challenges.The Company has established a largescale 5G and computility infrastructure network, and we may face issues such as rising electricity costs and heightened energy efficiency and emission requirements from regulatory authorities.	The Company is accelerating energy-saving technology innovation to improve the energy efficiency of 5G networks and data centers, driving the green transformation of our network infrastructure. We also propose an innovative "CN Energy" synergy design concept, deploy energy-saving wireless network technologies, to increase the proportion of clean energy supply. We actively explore energy-saving collaborations through mechanisms such as Energy Performance Contracting (EPC), leveraging both internal and external expertise to create a shared-value, win-win ecosystem for energy conservation and carbon reduction. Moreover, the Company is expanding the use of clean energy with comprehensive cost advantages, developing a series of leading clean energy demonstration projects. We encourage the cascading use of energy and strictly controls the consumption of fossil fuels.

Opportunity category	Specific type	Time range	Opportunity description	Opportunity response measures
Products and services	Development and/or expansion of low-carbon products and services	Long term	The increasing demand from customer groups for green transformation, such as low-carbon services and ICT solution products, presents significant opportunities for business expansion.	The Company is actively exploring the opportunities presented by emission reduction policies and applying them across various sectors. We have developed a range of ICT solutions to help customers reduce carbon emissions. Additionally, the Company has increased its R&D investment in low-carbon information technology products, allocating additional funds to drive innovation. In 2024, the Company leveraged new generation information technologies to continuously research and develop new products and maximized the role of digital technologies for carbon reduction, to support customers in their energy-saving and emission-reduction efforts.
Energy efficiency improvement	More efficient production and distribution processes	Long term	Sustained and steady improvements in energy efficiency will deliver ongoing reductions in production and operational costs, generating compounding financial benefits for the Company.	To further enhance energy efficiency and reduce emissions, the Company establishes annual dedicated energy conservation and emission reduction fund to achieve improvements in energy efficiency and a decline in Power Usage Effectiveness (PUE)[7], providing the Company with a competitive advantage.

[7] Power Usage Effectiveness (PUE) is a metric used to evaluate the energy efficiency of data centers. It represents the ratio of the total energy consumed by the data center to the energy consumed by the IT load. The total energy consumption of the data center includes the energy used by IT equipment as well as the energy consumed by supporting systems such as cooling and power distribution. The PUE value is always greater than 1, and the closer it is to 1, the less energy is consumed by non-IT equipment, indicating a higher level of energy efficiency.

Climate risk scenario analysis

Climate-related scenarios	IEA Beyond 2°C Scenario (B2DS)
Scope of application	Company-wide

Scenario analysis

The IEA B2DS is a scenario that anticipates the energy sector achieving net-zero emissions by around 2060. This is accomplished through the deployment of bioenergy with Carbon Capture and Storage (CCS) to achieve negative emissions, while limiting future temperature increases to 1.75°C by 2100. The scenario explores the potential of existing technologies and future technologies can be deployed to surpass the 2°C target. To achieve net-zero emissions by 2060 and maintain net-zero or negative emissions thereafter without relying on technological breakthroughs or imposing constraints on economic growth, the scenario pushes the technological improvements and deployment across the entire energy system to their maximum feasible limits. This approach results in cumulative emissions from the energy sector of approximately 750 Gt CO_2 between 2015 and 2100, consistent with a 50% probability of limiting future average temperature rise to 1.75°C.

China Mobile scenario analysis

In this case, China Mobile employs quantitative analysis to study the impact of carbon prices as a key parameter on operational cost, based on different assumptions about the Company's inclusion in carbon trading markets.

With the rapid growth in demand for digital infrastructure capabilities driven by economic and social development, China Mobile's network construction is expected to continue expanding, leading to further increases in energy consumption. However, in recent years, the Company's business growth has stabilized. As revenue growth plateaus and energy consumption rises, both the total GHG emission volumes and intensity of China Mobile are projected to increase. Under this circumstance, the Company faces significant risks in future carbon trading markets.

Based on the Representative Concentration Pathway 8.5 (RCP8.5), i.e., the high emissions scenario, China Mobile makes assumptions about future network construction and technological changes across the Company. This analysis evaluates the impact of future GHG emission volumes and intensity. Based on the analysis, the Company formulates corresponding green and low-carbon action plans.

Application of business strategy and decision-making

In alignment with the needs of economic and social development, China Mobile is proactively advancing the construction of digital infrastructure, accelerating the formation of a nation-wide integrated computility system, and fostering a computility industry ecosystem. The Company has established the first batch of 13 intelligent computing center nodes as part of this initiative. In the absence of strong initiatives, total greenhouse gas emissions are projected to grow by more than 6% in 2024. To actively address this risk, China Mobile has launched several targeted initiatives, including Green Intelligent Wireless, Green Intelligent Computility and Wind-Solar Wireless projects. Additionally, the Company has purchased over 3.5 billion kWh of green electricity. With a cumulative annual investment of RMB7.87 billion in energy-saving, the growth rate of GHG emissions has been effectively mitigated. As a result, the Company achieved a 8% reduction in total GHG emissions and a 15% decrease in GHG emission intensity in 2024, as compared to 2023.

Regular Monitor of Environmental Performance

China Mobile has established clear and measurable quantitative targets for energy use and GHG emissions, along with corresponding KPIs, to provide direction for energy management and emission reduction efforts. These targets are broken down into specific operational areas, including network base station energy efficiency, data center energy consumption reduction and office energy use reduction, driving all companies and departments to actively implement green initiatives. China Mobile regularly collects and analyzes energy consumption, GHG emissions and intensity indicators of provincial and professional subsidiaries and monitored and followed-up on their achievement status to ensure that the targets are met on schedule.

Targets	KPIs	Progress and achievements in 2024
Energy use		
• By 2025, the Company aims to achieve a cumulative electricity saving of over 40 billion kWh • By 2025, the decrease in comprehensive energy consumption per unit of total telecommunication services shall be no less than 20% compared to 2020 • By 2025, the annual average design PUE of newly-built and mega data centers nationwide will be controlled to below 1.3	• Total electricity savings • Decrease rate in total energy consumption per unit of total telecommunications services • PUE	• Cumulative electricity savings from 2021 to 2024 reached 31.3 billion kWh (including 11.5 billion kWh saved in 2024) • A reduction of 44% in 2024 compared to 2020 • The PUE for newly-built and mega data centers nationwide in 2024 achieved an operational PUE of 1.30
Greenhouse Gas Emissions		
• By 2025, the total Scope 1 and Scope 2 GHG emissions will be controlled within 46.5 million tons. • By 2025, the decline in greenhouse gas emissions per unit of total telecommunications services shall be no less than 20% compared to 2020.	• Total direct GHG emissions (Scope 1) • Total indirect GHG emissions (Scope 2) • Reduction rate of GHG emissions per unit of telecommunication services	• 210,000 tons of CO_2 equivalent • 32.26 million tons of CO_2 equivalent • 53%

Conducting Green and Low-Carbon Operations

China Mobile is committed to fostering harmonious coexistence between humanity and nature, actively pursuing green and low-carbon operations. We implement energy-saving and carbon-reduction measures across our network base stations, data centers and office facilities, driving internal energy saving, promoting green development in our supply chain and supporting societal green transformation.

Building a Green Network

China Mobile actively builds green networks, continues to promote the construction of green base stations and green data centers, standardizes environmental impact assessments and minimizes the impact on the surrounding environment of the facility. Through initiatives such as Green Intelligent Wireless and Green Intelligent Computility, we optimize network architecture, rationally deploy base stations and explore innovative energy-saving technologies. These efforts significantly improve energy efficiency, reduce carbon emissions and prioritize the use of high-efficiency and energy-saving equipment to lower power consumption. China Mobile's commitment to building a green and low-carbon network sets a benchmark for the green development of the society.

※ Green Base Stations

In 2024, the Company implemented a series of energy-saving and emission-reduction measures for base stations, focusing on low-carbon technology research, equipment and facility upgrades, energy-saving technology deployment and network architecture transformation, to further advance green development of base stations. In 2024, China Mobile added 467,000 5G base stations while achieving a 2% reduction in overall base station energy consumption, demonstrating the ability to scale operations without increasing energy use.

- **Equipment network access:** In 5G network construction, China Mobile adopted newer, energy-efficient equipment and strictly controlled the use of outdated, energy-inefficient equipment. As a result, the energy consumption per station for newly accessed equipment has decreased by 9%.
- **Existing network energy efficiency:** According to the *Guiding Opinions on the Application of Energy-saving Technologies for Wireless Networks in 2024*, China Mobile has implemented energy-saving technologies, optimized strategies and parameters and strengthened energy usage analysis and digital intelligence development. By the end of 2024, the average energy consumption per 4G station across the network reduced by 11%, and per 5G station by 9%.
- **Deployment of new energy-saving technologies:** The deployment rate of 5G energy-saving technologies has exceeded 99%. China Mobile is accelerating the large-scale application of 5G extreme sleep mode and 4G deep sleep mode, while promoting service-perception based intelligent shutdown for equipment that does not support sleep modes.
- **Intelligent energy saving:** 99% of 4G/5G base stations have been connected to the intelligent energy-saving platform, enhancing energy-saving benefits across the entire network.
- **Green transformation of network architecture:** China Mobile is actively advancing CRAN deployment and streamlining base station upgrades. By simplifying the network, equipment and machinery rooms, the Company significantly reduced site energy consumption. In 2024, nearly 60,000 minimalist base stations were deployed.
- **Research on low-carbon energy technologies for communication sites:** In 2024, China Mobile advanced research on low-carbon energy technologies, updating and refining standards for green and low-carbon sites. China Mobile conducted research and pilot validation of multi-energy complementary solutions and "source-grid-load-storage" integration for communication site scenarios. China Mobile also deepened research on AI-based intelligent management of site supporting facilities, developing intelligent technical solutions. Additionally, China Mobile updated and improved the *Application Strategy of Energy Saving Technology for Communication Sites*, providing critical technical support for further advancing green network construction.
- **Research on new energy-saving technologies for wireless networks:** China Mobile researched energy-saving technologies such as 5G/4G packet bundling scheduling and millisecond-level channel silence, along with the application strategies in existing networks. We also explored 5G-A energy-saving technologies across the air, time, frequency and power domains. Pilot projects were conducted for multi-level parameter configurations of 4G/5G energy-saving technologies, optimizing energy-saving parameter thresholds to expand energy-saving potential while ensuring service and network quality. Furthermore, we initiated research on 6G air interface energy-saving and networking key technologies, laying the groundwork for 6G wireless network energy-saving technology.

China Mobile's Zhoushan Zero Carbon Base Station

China Mobile implements green base station solar energy stacking renovation

In 2024, China Mobile advanced the photovoltaic EMC renovation project for base stations across Gansu Province. Utilizing the Energy Performance Contracting (EPC) model, the project was implemented through a cooperative profit-sharing approach for PV system upgrades. The province's plan for 2024-2025 includes the construction of PV systems at 495 base stations. In 2024, 36 sites were completed, with 24 already connected to the grid, while the remaining 12 are undergoing commissioning and testing. The installed capacity reached 252 kVA, generating approximately 62,000 kWh of electricity.

※ Green Data Centers

The Company continues to deepen technological "energy conservation" by strengthening the innovative application of technologies such as AI intelligent cluster control and cold plate liquid cooling, improving energy utilization efficiency, and striving to create a number of green data center benchmarks. China Mobile focuses on the Connectivity, Intelligence, Efficiency and Capacity data center business scenarios, integrating green and low-carbon technologies such as air-liquid cooling and flexible power supply. We continuously iterate and upgrade flexible and high-density standardized construction solutions, committing to achieving a PUE of no more than 1.3 for new data centers and no more than 1.25 in cold regions, promoting green data centers to a new level.

- Since 2017, a total of **26** data centers have been selected for the national green data center list, **18** data centers have been selected as typical cases of national new data centers, and **45** cases have been selected as high-quality development enterprise cases of big data centers or computility infrastructure.
- **Implementation of "computer room renewal":** The Company is implementing a range of energy-saving initiatives at its telecommunications towers, including replacing old constant frequency air-cooled precision air conditioners with fluorine pump air conditioners and variable frequency air-cooled precision air conditioners, air-side natural cooling transformation, and airflow organization optimization transformation.
- **Energy-saving operation and maintenance potential exploitation:** In accordance with the *Common Problems and Operation Requirements of Energy-saving Configuration in Data Centers and Core Computer Buildings*, self-correction and self-inspection of energy-saving O&M potential exploitation problems were conducted. In 2024, the PUE of the data center has been reduced by 1% compared to 2023.

Advancing green computility to build a more sustainable Hohhot

As a "national green data center", the China Mobile Hohhot Data Center is the first intelligent computing center of telecommunication operators and the largest single intelligent computing center among global operators. It has been awarded the title of Zero Carbon and Low Carbon Operation Leader. Through the three dimensions of "low-carbon driving, lean O&M, and digital empowerment", multiple measures have been taken to promote energy conservation and consumption reduction in data centers, forming a comprehensive, all-round, and systematic green energy-saving system. In 2024, the proportion of green electricity will reach 66%, and the PUE will be as low as 1.163. It is a leading green and low-carbon intelligent computing center in the industry, truly achieving greener data centers and making Hohhot more sustainable.

Promoting Green Energy Use

The Company actively promotes the large-scale application of green energy and spares no effort in developing its photovoltaic system. It leverages the wave of green development brought about by the national Eastern Data and Western Computing project, actively introduces clean energy sources such as wind power and photovoltaic power from the western China and promotes integrated green electricity direct supply from source to network, load and storage, facilitating better transformation of "green electricity" into "green computing". It also leads the in-depth promotion of energy conservation by creating green benchmark regions, to support the improvement of quality and efficiency in all links of a green, intelligent wireless network.

The annual green power generation is **290** million kWh, equivalent to a reduction of **160,000** tons[8] of CO_2 emissions

We actively participated in green electricity trading, and purchased more than **3.5** billion kWh of green electricity, equivalent to a reduction of over **1.87** million tons of CO_2 emissions

Due to changes in the carbon emission factor, the carbon emissions resulting from the same energy consumption in 2024 have decreased by over **4.36** million tons of carbon equivalent[9] relative to the carbon emission factor of the base year 2020

Carrying out photovoltaic energy construction for machinery rooms in Miao and Dong Autonomous Prefecture

China Mobile has implemented a green photovoltaic "base station stacked light" low-carbon energy supply mode in Miao and Dong Autonomous Prefecture, Guizhou Province. We have constructed a photovoltaic power generation renovation project for communication base station rooms, covering the construction of photovoltaic energy stacking facilities at 13 sites. This initiative has improved the utilization rate of green energy in communications and reduced the carbon emissions per unit of total communication business.

Promoting Green Office Practices

From conceptual innovation to practical implementation, China Mobile is taking multiple approaches to promote green office practices, initiating a digital and green office model that runs parallel to efficiency and environmental protection.

Equipment renovation and upgrading: China Mobile is conducting overhauls and digital upgrades of outdated high-energy-consuming equipment at the headquarters. Over the next three years, we plan to replace aging transformers, air conditioning units and other inefficient equipment. Within five years, upgrades will extend to water pumps and cooling tower fans, significantly reducing energy consumption. We are accelerating the procurement of green electricity for the headquarters, with plans to fully power Building A with green electricity since 2025.

Paperless office: In the financial sector, China Mobile is advancing the construction of a digital and intelligent financial system driven by both IT and DT. We have processed 6.66 million electronic documents in full compliance with standards through full process paperless workflows. In 2024, we have implemented 100% paperless service contracts across the website, app and hotline channels with our Hong Kong subsidiary.

Energy saving publicity: China Mobile launched the Low-Carbon Advocator mini-program on the Mobile Life App, encouraging employees at headquarters to adopt energy-saving practices. During Energy Saving Publicity Week, initiatives such as issuing proposals, creating promotional videos, and organizing employee participation in activities like Carbon Footprint Tracking, HeBao Travel, Empty Plate Campaign and Raise the Air Conditioner Temperature by 1°C were conducted to foster an energy saving culture.

Per capita GHG emissions from commuting decreased by **11.4%** YoY in 2024.

[8] According to the *Announcement on the Release of the 2022 CO_2 Emission Factors for Electricity* issued by the Ministry of Ecology and Environment in 2024, the carbon emission factor for electricity is calculated at 0.5366 kg CO_2 per kWh.

[9] The *China Mobile Sustainability Report 2020* calculated the electricity carbon emission factor at 0.6101 kg CO_2/kWh, while the *China Mobile Sustainability Report 2024* calculated the electricity carbon emission factor at 0.5366 kg CO_2/kWh. In 2024, China Mobile's electricity consumption, excluding the portion accounted for by green electricity/green certificates, was 59.4 billion kWh. which is equivalent to a reduction of over 4.36 million tons of carbon emissions compared to the carbon emission factor conditions of the 2020 baseline year.

Supporting Social Energy Conservation and Environmental Protection Initiatives

China Mobile actively participates in societal carbon reduction initiatives, accelerating the development of sustainable industrial chains by integrating environmental standards into procurement processes and other operations to establish a low-carbon development ecosystem. Leveraging telecommunications technologies, we empower green lifestyles and ecological protection, permeating digital services across all sectors to advocate sustainable living and disseminate low-carbon principles. This coordinated effort mobilizes society-wide collaboration in emission reduction, collectively advancing the construction of an environmentally conscious future.

Building Green Industry Chains

China Mobile comprehensively activates green potential across the entire supply chain, implementing full-chain "empowerment" measures from procurement, logistics, packaging to recycling. We collaborate with the supply chain to co-create green ecosystems and contribute to environmental protection.

※ Green Procurement

China Mobile has established the *Guiding Opinions on China Mobile's Green Supply Chain*, *Implementation Rules for Energy Conservation in China Mobile's Procurement and Sharing Services Center* and *Implementation Rules for Ecological Environmental Pollution Risk Prevention and Control in China Mobile's Procurement and Sharing Services Center*, aiming to reduce resource consumption (including energy) through managerial and technological interventions and drive green transformation across the industrial chain.

In 2024

- around **29,000** paperless projects
- about **100%** e-procurement rate
- **100** million sheets of paper saved
- **260+** tons carbon emissions reduced

Supplier access

In the procurement access link, the ESG performance of suppliers is assessed (including environmental qualifications, legal employment, prohibition of corruption, etc.), and suppliers with good performance are given priority; SA8000 (Social Ethics Responsibility Standard), ISO 45001 (Occupational Health and Safety Assessment Series) and ISO 14001 (Standards for Environmental Management Systems) certifications are used as standards for supplier qualification review, dynamic quantitative evaluation and comprehensive strength consideration. Suppliers are required to sign the *Integrity Commitment Letter.* Since 2019, the ISO 14001 certificate has been included in the scope of supplier information verification.

Supplier information disclosure

China Mobile actively participated in drafting the CCSA group standard *Green Procurement Management Guidelines for the Information and Communications Industry*, providing critical guidance for building green supply chains. Requirements for green information disclosure in supply chains include disclosing information on energy saving, emission reduction and carbon reduction of enterprises, disclosing the audit rate of high and medium risk suppliers and the proportion of low risk suppliers, disclosing information on energy conservation and emission reduction of suppliers, issuing corporate social responsibility reports (including green procurement information), and encouraging more than 38 suppliers to regularly disclose carbon emission information on their corporate websites.

Supplier evaluation

China Mobile collaborated with government regulators and industry associations to develop evaluation standards for telecommunication supplier social responsibility. We actively contributed to the review of the industry standard *Green Procurement Management Guidelines for the Information and Communications Technology Sector.* Procurement evaluations assess corporate carbon emissions and product carbon footprint certifications, and incentive mechanisms are adopted for suppliers with exemplary ESG track records.

Supplier exit mechanism

China Mobile issued *Quality and Compliance Implementation Rules for Tier-1 Centralized Procurement and Centralized Procurement Product Quality Management Measures.* These policies enforce strict quality control over partner suppliers, applying elimination or warning mechanisms to underperforming suppliers.

Supplier risk training

Procurement staff undergo targeted training programs in ESG risk identification, to enhance their compliance awareness and due diligence capabilities and safeguard our ethical procurement practices.

※ Green Logistics

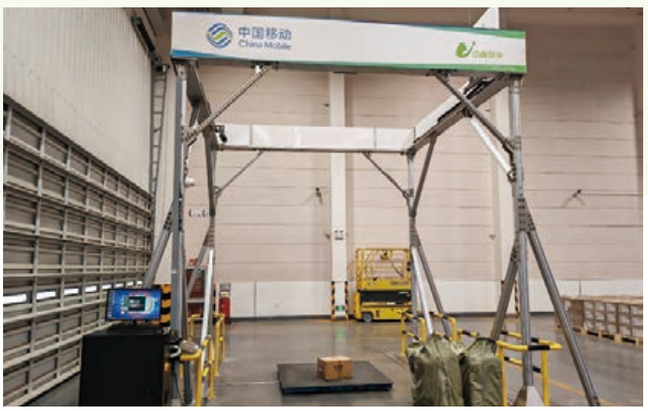
China Mobile has been actively advancing green circulation and encouraging our strategic suppliers to adopt RFID tags to enable end-to-end traceability of materials across the whole life cycle, from production to transportation, warehouse entry and exit. This “end-to-end traceability” system has been fully implemented by 31 provincial companies, implementing barcode management for 52 categories of products. In 2024, the Company managed 137 million items of materials, with a total value of approximately RMB71 billion, accounting for 57.7% of the procurement value for physical goods under centralized procurement. Additionally, the Company successfully replicated and promoted 16 exemplary cases of digital application scenarios for the “end-to-end traceability” initiative across 36 provinces, reducing the average duration of materials staying in and out of warehouses by nearly 30%.

China Mobile Logistics actively builds green intelligent supply chains, saving RMB **15.54** million annually in logistics costs, improving warehouse entry efficiency by **90**%.

The Yunnan RDC warehouse has been rated as a Level One Green Warehouse. It has won **14** Science and Technology Progress Awards from the China Federation of Logistics & Purchasing for **6** consecutive years and has been recognized with outstanding enterprise cases by the same organization for **8** consecutive years.

Green warehousing

China Mobile has established a green warehouse evaluation index system, actively developed smart warehousing, improved energy efficiency in the warehousing process and reduced carbon emissions. By optimizing the full Inbound—Picking—Outbound workflow, we have seamlessly integrated clean energy, AI, and emerging technologies such as 5G-A. These innovations enable low-carbon equipment operation, and fully automated workflows. By introducing equipment such as electric forklifts and all-in-one weighing and measuring machines, the warehousing efficiency has been increased by 90%, and logistics cost has been reduced by RMB750,000/year. The Company built seven star-level green warehouses and 17 of its warehouses were rated as green warehouses.



Green supply chain-all-in-one weighing and measuring machine (automatic collection of cargo specifications)

Green delivery

We have developed China Mobile's Digital Supply Chain Public Service Platform (Magic Platform), integrating intelligent load allocation, route optimization and electronic signature functionalities. By introducing streamlined processes for direct delivery and consolidated order fulfillment, we achieved significant operational efficiencies, including annual savings of RMB14.79 million in transportation costs and 50.70 million A4 sheets.

Green operations

China Mobile advanced the Intelligence Empowerment Program for AI-driven intelligent operations. Focusing on six major end-to-end supply chain operation links and 103 business scenarios, China Mobile Logistics has built a talent pool that advances both carbon-based industries and silicon-driven technologies.

Mobile 5G-A passive IoT empowering green and smart supply chain of Dezhou Power

China Mobile, in collaboration with State Grid Dezhou Power Supply Company in Shandong Province created a passive IoT pilot in Dezhou Inspection, Storage, and Distribution Base. By building an innovative networked passive IoT system, a new warehouse management model featuring "full quantity encoding + passive IoT" has been established. This has led to the implementation of convenient applications such as "one-click inventory" and "automatic inbound and outbound", significantly improving material management efficiency and reducing warehouse operating costs. The China Mobile material management platform provides asset inventory, positioning and inbound and outbound management. It aligns with existing business systems to achieve comprehensive O&M management. During material inbound and outbound processes, passive IoT devices automatically verify and read material label information.

Printing passive IoT tags

Compared to traditional manual verification and recording of individual materials, this increases efficiency by five times and achieves an accuracy rate of 100%. In outdoor yards, drones equipped with passive IoT reading devices scan and inventory various materials along planned routes. The time required for a complete warehouse inventory has been reduced from one week to just 5 minutes, completely replacing the traditional manual way. This achieves an accuracy rate of 100% and a full utilization rate of 100%, greatly enhancing efficiency and aiding in the creation of a green and smart supply chain.

※ Green Packaging

The Company collaborates with suppliers to design and utilize recycled paper materials for equipment packaging, thereby reducing the use of non-degradable adhesive materials. We are increasing the proportion of recycled paper materials used in the packaging of main equipment suppliers and encouraging strategic suppliers to replace EPS foam boards with paper-plastic molds for the packaging liners of complete equipment, achieving 100% degradability of materials. For auxiliary materials and components, we adopt heat-shrink film instead of carton to reduce packaging. Moreover, we replace metal-cushioned plywood pallets or wooden pallets with plastic-steel pallets for packaging carriers and promote recycling and reuse initiatives among suppliers.

281,400 m^3 **of timber saved annually**

Promoting the use of green and environmentally friendly packaging materials

Optimizing the design of self-developed intelligent hardware products

The antenna folding mechanism has been redesigned by replacing the original externally folded design with a built-in antenna. This innovation reduces the external shell cost, decreases overall machine thickness, and optimizes component layout. As a result, we reduced the packaging volume and achieved approximately 37% less paper consumption, lowering both packaging and transportation costs. We used recycled paper as the packaging material, including corrugated cardboard, white cardboard and gray board, which facilitated reduction in weight and amount and promoted recycling of packaging materials.

Before optimization

After optimization

※ Recycling and Reuse

Guided by the Dual Carbon goals, the Company is focused on building a material recycling system, significantly strengthening the management of idle and waste materials, and fully promoting the revitalization of assets across regions and projects. We are deeply committed to practicing circular economy principles to support carbon reduction initiatives and strive to enhance resource utilization efficiency.

Therefore, the Company has formulated the *Management Measures for the Disposal of Scrap Fixed Assets by China Mobile* to improve the management level of scrapped fixed asset disposal, strictly standardize disposal processes and significantly enhance disposal efficiency. We have actively established platforms, including the China Mobile recyclable Sharing Platform, to facilitate the cross-project, cross-department and cross-regional dismantling, reallocation and reuse of 4G assets. In 2024, we completed the reallocation of assets with an original value of RMB73.5764 million. Simultaneously, the Company continues to refine the idle and waste material recycling system, meticulously developing material recovery standards and actively guiding the establishment of a reverse logistics service system for renewable resources. We are extensively exploring various recycling models, such as manufacturer take-back, third-party enterprise recycling and industry alliance recycling.

Empowering through collaborative partnerships and upgrading experience with trade-in programs

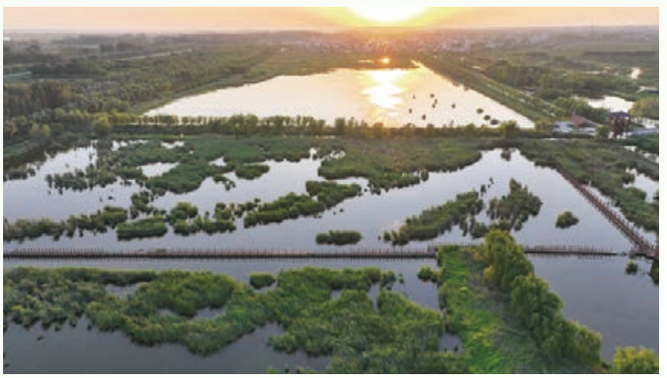
To enhance the consumer experience in device replacement through trade-in programs, China Mobile has actively sought deep collaboration with upstream and downstream enterprises in the industry chain, promoting efficient resource integration and optimal allocation. On the mobile manufacturer front, China Mobile has established long-term, stable partnerships with renowned domestic and international brands. For trade-in service providers, the Company has implemented rigorous screening and optimized cooperation mechanisms to ensure consumers receive high-quality recycling services. Additionally, China Mobile has dedicated efforts to building the China Mobile Preferred Member Platform, where consumers can easily participate in trade-in programs by choosing in-store or mail-in recycling options through the “China Mobile Preferred Member” WeChat mini-program.

Protecting the Ecological Environment

China Mobile fully leverages the industry-leading technological strengths to inject robust impetus into ecological protection. With our high-density network coverage and advanced information technology, the Company supports the establishment of intelligent environmental monitoring systems. Empowered by 5G-enabled smart management solutions, the Company helps curb ecological destruction and contributes to safeguarding ecologically fragile areas and biodiversity. Through these efforts, China Mobile helps to chart a new picture of ecological harmony.

China Mobile empowers the Yellow River ecological protection with 5G intelligence

The Xinxiang section of the Yellow River features expansive floodplain areas that once hosted numerous ecologically damaging structures and farms. Since April 2023, in collaboration with the National Nature Reserve Integrated Service Center of Xinxiang, China Mobile has deployed 5G, big data and AI edge computing technologies to create a comprehensive solution. This system provides 24/7 high-definition monitoring of illegal construction and unauthorized occupation in the Yellow River wetlands, improving regulatory efficiency by 70%. For fire prevention, our smart management platform leverages 5G capabilities and AI algorithms to enable 24/7 fire monitoring, early warning and intelligent decision-making. It automatically delivers alerts and generates detailed reports upon suspected fire incidents at monitoring points. In addition, a patrol information management platform has been established to enhance patrol efficiency. In bird monitoring, the integration of 5G+AI and infrared sensing with environmental data has enabled AI modeling of over 370 bird species, allowing real-time monitoring of their types, status and distribution with an accuracy rate of 94%. By deepening the integration of 5G with new technologies and applications, China Mobile supports the governance of the Yellow River Basin, striving to protect our harmonious waterscapes and pristine mountain vistas.



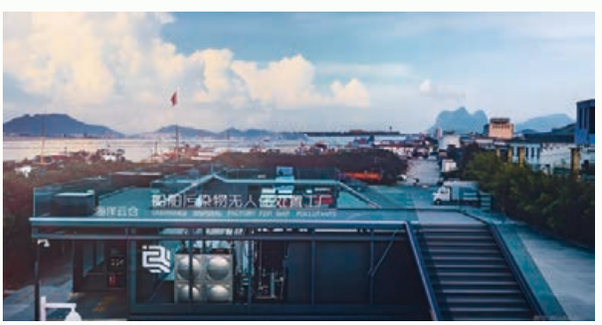
Yellow River ecological environmental protection

China Mobile safeguards the Three-River-Source region, building a robust ecological protection network

Located in Yushu Prefecture, Qinghai Province, the Three-River-Source region, also known as the Water Tower of China, holds significant ecological importance. However, its remote location and underdeveloped communication infrastructure have long posed challenges for ecological monitoring, resulting in slow responses and limited coverage. China Mobile took on this critical task, undertaking the construction of a remote ecological monitoring and 5G coverage project for Yushu Prefecture of Qinghai Province. Over three months, the construction team braved extreme conditions, including high-altitude hypoxia and harsh weather, and overcame numerous obstacles in equipment transportation and construction. By utilizing long-distance, single-fiber bidirectional transmission technology and solar-powered facilities, they successfully extended 5G network coverage within a 5-kilometer radius, enabling real-time high-definition video transmission. Since then, we have eliminated communication dead zones at the Three-River-Source region, ushering in a new era of ecological monitoring characterized by “long-distance, wide-range, and comprehensive” high-definition real-time observation. This technological “protective shield” has been draped over this precious ecological treasure, supporting the smart management of the national park.

Reshaping marine pollutant control and creating a new blue circular model

China Mobile responded to the *14th Five-Year Plan for National Marine Ecological Environmental Protection* issued by the Ministry of Ecology and Environment, implementing the Ocean Blue Circle project to explore innovative models for marine pollution control in Taizhou City. By integrating advanced new high-quality computility technologies, sophisticated algorithms, and data analysis, the project’s cloud warehouse system automatically identifies pollution sources and predicts pollution trends. It establishes a circular value chain for marine waste collection, transportation, recycling and high-value utilization, effectively addressing issues such as lack of collection, low value and sustainability of marine debris. Additionally, the project leverages the advantages of advanced new high-quality computility to promote the development of a blue economy, contributing to the circular development of regional marine blue economies and enhancing the economic benefits for local fishermen and the fishing industry. This project has provided valuable insights for transforming marine ecological governance and earned the United Nations’ Champions of the Earth Award.



Marine cloud warehouse system for ship water pollutants prevention and control

Empowering Green Lifestyle

Leveraging the robust technological and resource advantages, China Mobile actively supports the society's green transformation and empowers the public to embrace a sustainable lifestyle. By harnessing cutting-edge technologies such as 5G, IoT and big data, we have not only facilitated the seamless adoption of remote work and smart home solutions to reduce daily energy consumption, but also utilized digital tools to promote waste sorting and environmental monitoring. Additionally, through diverse science popularization events, China Mobile helps to embed green principles into the public consciousness, collaborating with society to advance toward a low-carbon, convenient, and sustainable future.

350+ million tons[10]

of carbon dioxide emission reduction facilitated by China Mobile across society in 2024

Empowering green office

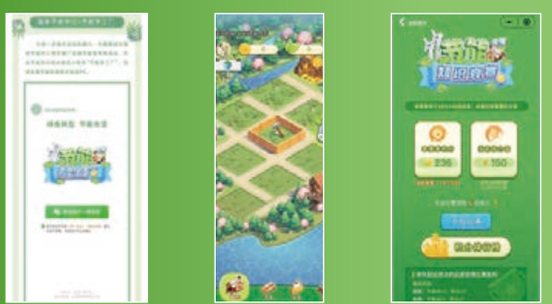
Adhering to the principles of green and low-carbon development, China Mobile has introduced innovative energy-saving technologies, such as cloud-based computers, revolutionizing traditional office models. These solutions transform into intuitive desktop interfaces for end-users, creating a multi-terminal, on-demand cloud operating system that balances security, convenience and energy efficiency. On one hand, this approach eliminates resource idle time and waste, significantly boosting server hardware utilization. On the other hand, it enables cross-terminal access, allowing people to work remotely, reducing commuting frequency and alleviating urban traffic congestion and air pollution. Furthermore, by moving data processing and storage to the cloud, users can connect via low-power devices, slashing power consumption from 180W for desktops to less than 10W, achieving a reduction of over 90%. This drastic decrease in energy loss injects strong impetus into society's green development.

Empowering green agriculture

In Zhejiang Province, the Company launched the Video Convergence Empowerment Platform, which utilizes intelligent smoke and fire recognition algorithms to integrate over 32,000 public video resources, enabling 24/7 automated monitoring and reporting of straw burning incidents. Since March 2024, the platform has successfully identified and reported 4,757 straw burning incidents with an accuracy rate of 95.8%. In the future, the platform will be integrated with the Public Intelligence Platform to enable real-time early warning notifications, improving incident detection and response efficiency and further empowering a low-carbon society.

China Mobile actively encourages society to jointly create a green lifestyle, fostering the integration of digital living with sustainable practices. The Company organizes a variety of green-themed public welfare activities and has held annual Energy Saving Publicity Week for the 16th consecutive year. In 2024, the event reached 450,000 employees and over 900 million customers, promoting the concept of green and low-carbon development and spreading knowledge on energy conservation and low-carbon practices across society. These efforts aimed to embed green living principles into the public consciousness and drive a collective shift toward a green and low-carbon lifestyle.

China Mobile promoted green and low-carbon knowledge to community residents through various forms



In collaboration with the National Energy Conservation Center, China Mobile Group Xinjiang Co., Ltd. continued to launch online knowledge challenging competition about energy conservation, providing both hardware and software support as well as full operational services. The Energy Saving Publicity Week attracted 12,000 online participants and achieved excellent results in spreading low-carbon awareness

10 In 2021, China Mobile collaborated with Beijing University of Posts and Telecommunications to conduct a study titled Quantitative Analysis of the Low-Carbon Enabling Role of Information and Communication Technology- Based on China Mobile's Practices. According to the research findings, in 2020, per terabyte of information traffic in China contributed to societal emission reductions of 115 kilograms of carbon dioxide. This conclusion was also published in the China Mobile Carbon Peak and Carbon Neutrality Action Plan White Paper. Based on this finding and using information traffic data, the Company calculated the scale of its contribution to societal emission reductions.