5G++ **Infinite Future**

2019 Sustainability Report
China Mobile Limited

Contents

Chairman's Statement

5G+, Opening a New Chapter of an Intelligent Era

President Xi Jinping has highlighted sustainable development as a "golden key" to solving global problems. In 2019, 5G commercial services were launched in China. As an information artery of society, an accelerator of industry transformation and upgrade, and a new cornerstone for building a digital society, 5G is bringing us a brand-new era of digital economy, providing new solutions to challenges faced by all mankind in the pursuit of sustainable development, and creating a new frontier for value creation. Following its strategy of becoming a world-class enterprise by building a dynamic "Powerhouse", China Mobile is committed to becoming a major force in building a "Cyberpower", digital nation and smart society and strives to fully implement its "5G+" plan to support the nation's high-quality development, help address the problems of unbalanced and inadequate development, and meet people's needs for a better life. This is being achieved by promoting the convergence, integration and digitization of 5G in every aspect of both the national economy and people's daily life, thereby making concrete efforts to contribute to the realization of the United Nations Sustainable Development Goals (SDGs).

Empowering the digital economy to jointly build the engine of a smart society. We are committed to building world-class intelligent infrastructure, continuously improving our independent innovation capabilities in 5G, and accelerating its integration with related fields, including artificial intelligence (AI), internet of things (IoT), cloud computing, big data and edge computing. We aim to strengthen the open cooperation with upstream and downstream partners in more areas and at higher levels. We strive to promote sustainable economic development by integrating 5G into every industry and every walk of life and fully releasing the magnification, superimposition and multiplication effects of 5G technology on the empowerment of economic and social development. As of the end of 2019, we were serving 950 million mobile customers, 172 million household broadband customers and 10.28 million corporate customers, put over 50,000 5G base stations in operation, and officially launched 5G commercial services in 50 cities in China. Meanwhile, our mobile authentication platform processed 1.2 billion times of authentication per day on average, and our OneNET IoT platform brought together 11,825 enterprise users and empowered nearly 150,000 developers. We also carried out 5G innovation pilot projects and collaborated with our partners to promote innovative applications in various fields, such as medical care, education, energy and manufacturing, supporting the digital transformation and upgrade of the relevant industries.

Adhering to a people-oriented approach to jointly create an inclusive good life for all. We insist on a people-centered development philosophy and strive to promote the sustainable development of society by leveraging our information technology advantages to implement the Telecommunications Universal Service Project and promote "speed upgrade and tariff reduction", ensuring equal opportunities for less developed areas and disadvantaged groups with innovative approaches, working with our parent company to intensify support for designated areas and targeted poverty alleviation programs, continuing our brand public welfare programs, and providing all-out support for China's coordinated regional development strategy and the Belt and Road Initiative. We continued to implement the Telecommunications Universal Service Project, and have provided broadband access to a total of 43,000 administrative villages, among which 38,000 villages were covered by wireline broadband and 4,564 villages were covered by 4G network. We have provided free surgical treatment for nearly 6,000 children from low-income families diagnosed with congenital heart disease with our Heart Caring program, and helped train more than 127,000 rural primary and secondary school principals from central and western China with our Blue Dream Education Aid Plan. Our parent company received the top recognition in the targeted poverty alleviation assessment of central enterprises, as well as the 2019 National Poverty Alleviation Award - Contribution Award.

Promoting green development to jointly shape a harmonious ecology. Adhering to the belief that "lucid waters and lush mountains are invaluable assets", we have been implementing the Green Action Plan for 13 consecutive years to promote environmental sustainability by researching and developing of energy-saving technologies, enhancing our climate resilience, implementing green operation and management, and driving energy conservation and emission reduction of our supply chain. We have actively developed and promoted environmental ICT solutions that support real-time collection and efficient processing of massive, multi-dimensional environmental data, and our "Blue Guardian" application provided informatization support for air pollution prevention and control in 300 regions at county level or above, helping fight the battle against pollution. In 2019, we invested RMB160 million in the Green Action Plan and achieved remarkable energy conservation and emission reduction results, reducing our overall energy consumption per unit of information flow by 43% compared with the previous year.

In the spring of 2020, the battle against the COVID-19 epidemic was raging. The prevention and control of the epidemic is not only directly related to China's future but also to the common future of humanity. "The safety and health of the people are always the first priority. Epidemic prevention and control is the most important task at the moment." China Mobile plays an active role to ensure network and service coverage, and fulfils its epidemic prevention and control responsibilities, going all out for winning the battle against the epidemic and minimizing its impact. It is worth mentioning that 5G has manifested its technological and operational strengths in the fight against the epidemic. A variety of applications including 5G-based telecommuting, remote medical services and distance education provide novel solutions to help people return to work and resume normal life, showing great potential to create value for society.

Right now, 5G has just started to demonstrate its potential in social value innovation. China Mobile is committed to serving as a leader in 5G network construction, a promoter of industry application of 5G technology and a pioneer in providing 5G services to the public. To support society's high-quality development and improve people's quality of life, we will waste no time and spare no effort in working together with innovators from different industries to jointly explore and promote 5G intelligent solutions, thereby creating an intelligent and better future for all.

March 2020

Yang Jie

Chairman

China Mobile Limited

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China Mobile: Establishing a World-class Enterprise

Incorporated on September 3, 1997 in Hong Kong, China Mobile Limited ("China Mobile", "the Company" or "we") is the largest telecommunications service provider in Mainland China. The Company serves the world's largest number of mobile customers and operates the world's largest mobile network, maintaining a leading position in the telecommunications market in Mainland China.

The Company provides full communications services in all 31 provinces, autonomous regions and directly-administered municipalities throughout Mainland China and in the Hong Kong Special Administrative Region. Its businesses primarily consist of mobile voice and data business, wireline broadband and other information and communications services. The Company's ultimate controlling shareholder is China Mobile Communications Group Co., Ltd. ("our parent company"), which, as of December 31, 2019, indirectly held 72.72% of the total number of issued shares of the Company, while the remaining approximately 27.28% was held by public investors. For more information about the Company's governance structure and the organizational structure, please refer to China Mobile Limited's 2019 Annual Report.

Operating revenue
RMB **745.9** billion

Taxation
RMB **35.3** billion

Number of employees
456,239

Number of mobile customers
950 million

Number of household broadband customers
172 million

Number of corporate customers
10.28 million

Number of IoT customers
884 million

- Ranked 27th in the 2019 Forbes "Global 2000 – The World's Largest Public Companies" list

- The "China Mobile" brand was included in the "BrandZ™ Top 100 Most Valuable Global Brands" list published by Millward Brown and *Financial Times* for the 14th consecutive year, ranking 27th globally

- Listed in the "Top Ten Model Brands of 2019" at China Media Group's 2019 China Brand Power Grand Ceremony

- Won the Gold Award in "The Asset ESG Corporate Awards 2019" held by financial magazine *The Asset*

- Awarded the accolades of "Sustainability and Social Responsibility Reporting Awards" in the H-share Companies and Other Mainland Enterprises Category in the Hong Kong Institute of Certified Public Accountants' 20th annual "Best Corporate Governance Awards"

- Awarded the accolades of "Asia's Most Honored Companies" in the "2019 All Asia Executive Team Poll" held by *Institutional Investor*

- Awarded the accolades of the Best of Asia – "Icon on Corporate Governance" in the "15th Corporate Governance Asia Recognition Awards 2019" held by Corporate Governance Asia

In 2019, China Mobile's parent company was selected by the State-owned Assets Supervision and Administration Commission of the State Council ("SASAC") as one of the ten world-class demonstration enterprises. With this historic status, we have developed a strategy for China Mobile to become a world-class enterprise by building a dynamic "Powerhouse", which summarizes the overall roadmap for our transformation and upgrade in the next stage.

The "Powerhouse" strategy: Aiming at becoming a major force in building a "Cyberpower", digital nation and smart society, and focusing on achieving high-quality development with transformation and upgrade as well as reform and innovation, we strive to build a scale-based value creation system with convergence, integration and digitization as well as an efficient and coordinated system of organization and operation with capability, collaboration and vitality. To lay a solid foundation for becoming a world-class enterprise, we will further implement the "5G+" plan, drive our business beyond communication services towards the broader information services, shift our focus from the mobile market to the CHBN "four growth engines" of the customer, home, business and new markets, and transform and upgrade our development model from being resource-driven to being innovation-driven.

Building a Dynamic "Powerhouse" to Become a World-class Enterprise

Build a world-class enterprise
Become a major force in building
a cyberpower, a digital China and a smart society

High-quality development

Transformation and upgrade
Scale-based and value-oriented operations system

Reforms and innovation
Synergetic and efficient operations system

Convergence	Integration	Digitization	Capability	Collaboration	Vitality

Fully implement the 5G+plan, maintain a leading position
and facilitate economic and social development

Scale up connection base   Strengthen connection applications   Provide premium connection services

"Customer" market (C)   "Home" market (H)   "Business" market (B)   "New" market (N)

We are fully aware that a world-class enterprise requires world-class social responsibility. As a telecommunications operator, we are obliged to provide inclusive and high-quality information and communication services for the widest group of people; as a corporate citizen, we are obliged to become a major force in turning China into a smart society; and as a member of the community with a shared future for mankind, we are obliged to innovate on the "China Plan" and contribute to the realization of the United Nations Sustainable Development Goals. The three roles and their corresponding responsibilities are both the starting point and the foothold for China Mobile to fulfil its social responsibilities.

Adhering to the people-centered development philosophy, we strive to become a world-class enterprise and a model of sustainability by leveraging our business expertise and resource endowment, and promoting the integration of sustainability into our business strategy, contributing to creating a better life for mankind with our tireless efforts.

Feature: 5G is Here

Currently, the development of the global digital economy has entered a new stage featured by cross-sectoral integration and systematic innovation and driven by intelligence. The new generation of information technology represented by 5G is rapidly catalyzing systematic, revolutionary and collective technological breakthroughs and industry changes. While injecting new vitality into economic development, 5G has also opened up vast space for China Mobile to fulfil its social responsibility and create social value. The features of 5G – ultra-high speed, ultra-low latency and ultra-wide connection – provide more ideas and solutions for helping all mankind jointly tackle the challenges of sustainable development. In order to materialize the infinite possibilities brought about by 5G, the Company has launched the "5G+" plan to speed up the integration of 5G into every industry and every walk of life. We aim to drive the gradual but in-depth integration of the ubiquitous intelligent 5G-based infrastructure with people's pursuit of a better life, industry transformation and upgrade as well as social governance innovation, among other aspects, to contribute to the delivery of more inclusive 5G services accessible to all sectors of society.

China Mobile "5G+" Plan

5G+4G
Coordinated Development

5G+AICDE
Integrated & Joint Innovations

Standard Headed the development of 61 ITU (International Telecommunication Union) and 3GPP (3rd Generation Partnership Project) international standards, ranking 1st among global telecom operators

Network Deployed over 50,000 5G base stations, and officially launched 5G commercial services in 50 cities

Industry Conducted large-scale 5G network trials, pursued a comparable level of maturity in the 2.6GHz and 3.5GHz industry chains, and promoted the development of SA (Standalone) end-to-end industry

A (Artificial Intelligence) Officially released the first self-developed AI platform (JIUTIAN) in China, integrating 42 self-developed and external AI capabilities

I (Internet of Things) Upgraded OneNET & OneLink platforms' connectivity, with 160 million OneNET connections and more than 600 million OneLink connections

C (Cloud Computing) Planned to build the "N+31+X" nationwide mobile cloud resource pool and deploy 4 centralized IDCs (Internet Data Centers) and 45 provincial-level large-scale IDCs

D (Big Data) Processed over 1,100 TB of data per day on the big data platform, and provided comprehensive and agile storage, data and tool opening capabilities

E (Edge Computing) Built a hierarchical edge computing system, introduced edge cloud products and developed edge computing service capabilities, and built the largest CDN (Content Delivery Network) in the world and increased the number of distribution websites to 93,000

June 6, 2019	The Ministry of Industry and Information Technology (MIIT) of China issued the "Fifth Generation Digital Cellular Mobile Communication Service" basic telecom operating permits to four companies including China Mobile
June 25, 2019	China Mobile officially released "5G+" plan in Shanghai
October 31, 2019	China Mobile officially launched 5G commercial services, with 5G commercial plans introduced simultaneously
November 15, 2019	China Mobile proposed five upgrades at the Global Partners Conference, namely deepening intelligent upgrade of network capabilities, facilitating industry transformation and upgrade, promoting the upgrade of information consumption experience, accelerating the upgrade of full-range user services, and achieving the upgrade of the open cooperation ecosystem
February 29, 2020	The number of China Mobile 5G package customers reached 15.4 million, maintaining an industry-leading position

5G+Ecology
Collaborative Ecology Cultivation

5G+X
Wider Applications

5G Joint Innovation Center Constructed 25 open labs with over 500 vertical industry partners

China Mobile 5G Device Forerunner Industry Alliance Brought together more than 110 partners, covering fields such as mobile devices, chips, applications, solutions, etc.

China Mobile IoT Alliance Attracted more than 1,400 members from 26 industry fields and eight major segments of the IoT industry chain

China Mobile 5G Industry Digital Alliance Gathered more than 100 strategic partners, and hosted more than 1,000 product promotion events nationwide

5G Smart Education Alliance, 5G Industry IoT Alliance, 5G+Video CRBT (Coloring Ring Back Tone) Industry Alliance, 5G Energy Internet Alliance, 5G Agricultural Digital Alliance, 5G Precise Positioning Alliance

Tariffs and Devices Released 5G ToC (customer) and ToH (home) tariff packages (including benefits), as well as 32 5G devices such as 5G smart phones, modules, chips and AR (Augmented Reality)/VR (Virtual Reality) devices

Customer service Set up 5G user service seats to provide one-stop convenient service without changing SIMs or numbers and without further registration

Public application Carried out large-scale application of 5G Ultra high-definition (HD) real 4K/8K live broadcasting, offering over 30 new industry-pioneering applications

Industry application Promoted about 50 5G industry demonstration applications, many of which were the first in their respective industries

Sustainability Strategy

Since the first mobile phone system was created in 1987, China's information and communications technology (ICT) sector has made enormous strides. China Mobile has been a witness, participant and builder of this development that has undergone "blankness in 1G, following in 2G, making breakthroughs in 3G, keeping pace in 4G, and striving for leadership in 5G". Always bearing in mind the corporate mission and founding aspiration to "Communicate a Boundless World and Construct an Information Society", China Mobile aims to become a world-class enterprise and pledges to drive and lead the upgrade and development of China's ICT sector, in order to continuously meet people's growing digital needs and become a model for advancing human civilization.

Back in 2006, China Mobile established its corporate responsibility philosophy: "With perfect sincerity and integrity, we will strive to fulfil our triple-sided responsibilities: our economic responsibility, our social responsibility and our environmental responsibility". The Company fully incorporates the requirements for fulfilling its social responsibility into its strategy and action plan for developing into a world-class company, and builds on the role of information and communications technologies to connect and empower, thereby enabling all stakeholders to play to their strengths.

The focus of China Mobile social responsibility efforts goes as follows: empowering stakeholders with ICT to achieve all-win in economic, social and environmental sustainability. Specifically, there are three layers: "Compliance" (the roots), "Competence" (the trunk), and "Coexistence" (the leaves). Interconnected and progressive, these three layers form the China Mobile "Tree of Responsibility", which embodies the conceptual core and behavioral logic of China Mobile's social responsibility efforts.
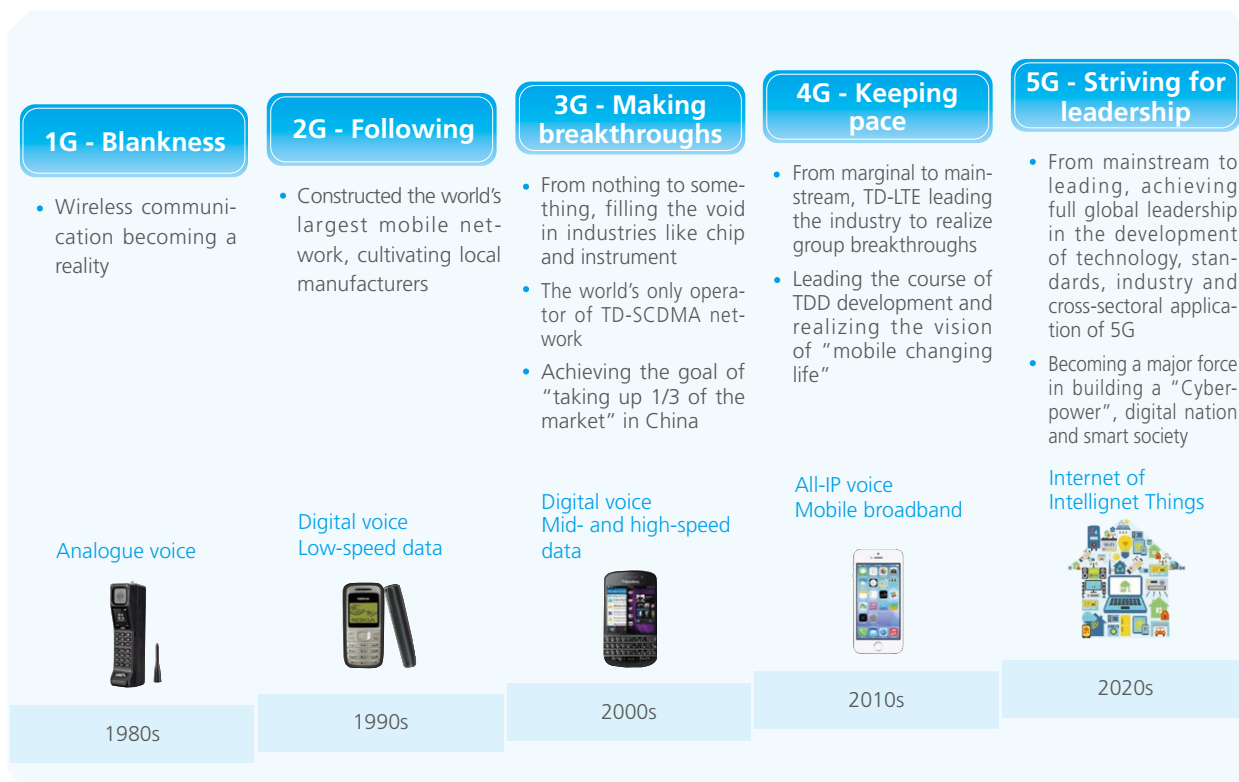
China Mobile "Tree of Responsibility"
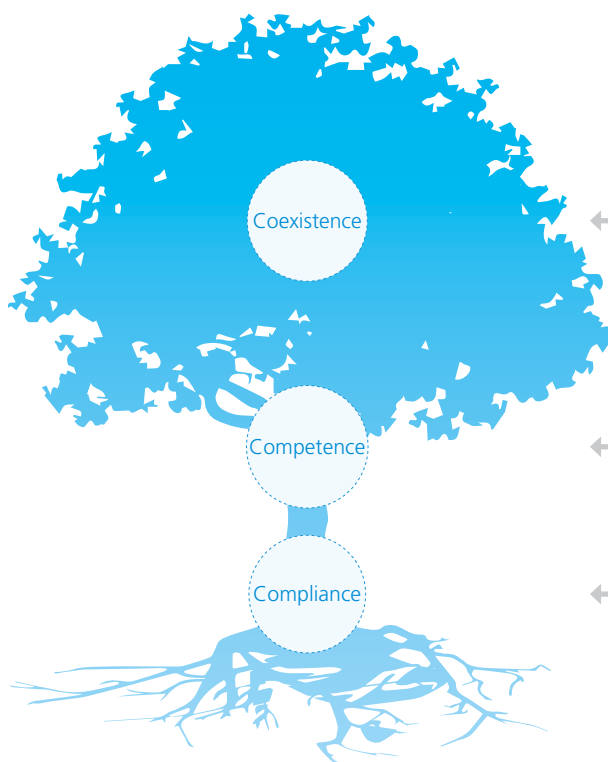
Coexistence — To facilitate the provision of equal development opportunities for a wider group of people and the harmonious coexistence of mankind and nature

Competence — To draw on the Company's expertise, provide sustainable products and services, and maximize the empowerment of stakeholders to jointly create rich social value

Compliance — To comply with laws and regulations, operate with integrity, and earnestly fulfil product and operation responsibilities

1G - Blankness
- Wireless communication becoming a reality

Analogue voice

1980s

2G - Following
- Constructed the world's largest mobile network, cultivating local manufacturers

Digital voice
Low-speed data

1990s

3G - Making breakthroughs
- From nothing to something, filling the void in industries like chip and instrument
- The world's only operator of TD-SCDMA network
- Achieving the goal of "taking up 1/3 of the market" in China

Digital voice
Mid- and high-speed data

2000s

4G - Keeping pace
- From marginal to mainstream, TD-LTE leading the industry to realize group breakthroughs
- Leading the course of TDD development and realizing the vision of "mobile changing life"

All-IP voice
Mobile broadband

2010s

5G - Striving for leadership
- From mainstream to leading, achieving full global leadership in the development of technology, standards, industry and cross-sectoral application of 5G
- Becoming a major force in building a "Cyberpower", digital nation and smart society

Internet of Intellignet Things

2020s

As 5G opens up massive opportunities, the Company is set to fully unlock its vast potential for supporting high-quality economic and social development. We will join hands with various industries and seek to combine 5G with emerging technologies such as AI, IoT, cloud computing, big data and edge computing to help build an inclusive digital economy where everyone benefits and enjoys a better, sustainable digital life. Taking "Responsible Operations & High-quality Development" as our foothold, we will strive to fully fulfil our responsibilities in economic, social and environmental dimensions. Striking out in the three directions of "Jointly Building the Engine of a Smart Society", "Jointly Creating an Inclusive Good Life for All", and "Jointly Shaping a Harmonious Ecology", we will push forward the nine key sustainability actions on all fronts and contribute to the realization of the United Nations Sustainable Development Goals.

China Mobile "139" Sustainability Action Model

1 Anchor

Responsible Operations
High-quality Development

3 Areas of Responsibility

Economic Responsibility

Social Responsibility

Environmental Responsibility

9 Actions

Jointly Building the Engine of a Smart Society

Continue to extend connection boundary, increase connectivity and empower vertical industries; make an all-out effort to make 5G the new impetus to integrated innovation and information consumption, and the new engine of industry upgrade and continued economic growth.

1. Building Digital Infrastructure
2. Leading Innovative Digital Ecosystem
3. Empowering Construction of a Smart Society
4. Ensuring Trusted Digital Consumption

Jointly Creating an Inclusive Good Life for All

Continue to embrace a people-centered development philosophy and explore the "China Mobile Solution" to address the unbalanced and inadequate development in China based on new technologies like 5G to meet society's needs and create social value; strive to be a good corporate citizen in the new era, shoulder new responsibilities and create a better life with stakeholders.

5. Supporting Poverty Alleviation and Public Welfare
6. Promoting Coordinated Regional Development
7. Growing Together with Employees

Jointly Shaping a Harmonious Ecology

Continue to embrace harmony between mankind and nature, closely study and assess the potential impact of business development on the environment, and take effective measures to manage environmental footprint; continue to develop innovative information-based green solutions, drive energy conservation and emission reduction along the upstream and downstream value chains, and spread ideas of sustainable consumption and manufacturing to the whole society.

8. Developing Innovative Green Solutions
9. Promoting Low Carbon, Circular Development

Sustainability Strategy

Jointly Building

the Engine of
a Smart Society

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Helping Win the Fight against COVID-19 in the Spirit of Solidarity

Sustainability Context

Every technological advancement in the information and communications sector produces a strong boost to economic and social development. The advent of 5G will make digital information a key factor of production. The attributes of digital information, namely duplicability, shareability, unlimited growth and free flow, break the constraints of the limited supply of natural resources on growth and augment the internal driving forces and external space of economic growth, thereby laying the foundation for continuous growth and sustainable development. In 2019, 5G commercial services were officially launched in China, providing crucial support for strengthening the role of 5G in driving the integration and application of areas such as industry development, information consumption and public services. As the development of 5G takes the fast lane, its impact on economic growth, industry innovation, and the construction of sustainable cities and communities will also be further accentuated.

China Mobile thoroughly implements the "5G+" plan. From daily activities to industrial manufacturing and from healthcare to the Internet of Everything, we are poised to join hands with industry partners to integrate 5G into all aspects of people's life and work and put well-developed 5G networks to good use, thereby fueling the development of a smart society together.

In spring 2020, a battle against the COVID-19 epidemic has taken place across China. In the face of the first "big test" in the 5G era, China Mobile quickly launched the Level 1 emergency response and formed the China Mobile Steering Group for Responding to COVID-19 Outbreak. The Group was tasked with comprehensive coordination work to ensure reliable information support for the prevention and control of the epidemic, such as ensuring reliable communication coverage and services, and providing communication support for disease prevention and control.

Reliable Communication Support

- Strengthened shift arrangements for emergency support, heightened the support level of base stations in key areas to the highest level, strengthened the monitoring and inspection of the network operation status, and continuously optimized network experience, thereby ensuring the network remained stable, reliable and uninterrupted.
- Cooperated with local governments and promptly provided full 2G/4G/5G network coverage for Huoshenshan Hospital and Leishenshan Hospital in Wuhan, fully supported the network construction at temporary hospitals in Wuhan and other cities, and provided 5G high-definition live broadcast of the construction of the Huoshenshan Hospital and Leishenshan Hospital through MIGU video which was viewed by over 490 million times.
- As of March 16, 2020, the Company had deployed emergency support personnel for over 1.24 million person-times and emergency vehicles for over 350,000 vehicle-times.

Uninterrupted Service Support
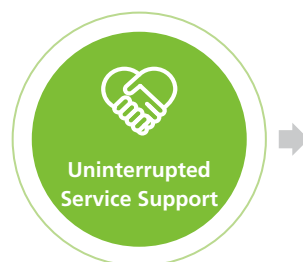
- Activated its customer service response plan to provide tariff reduction and waivers for medical staff engaged in the epidemic prevention and control efforts in Hubei; exempted epidemic prevention and control command and dispatch steering groups, frontline medical staff, and users in key epidemic or quarantine zones from service suspension; and collaborated with other telecom operators to provide each frontline medical staff in Hubei with RMB1,000 of prepaid mobile account credit for free.
- Adjusted the business hours of stores, required all service personnel to wear masks and carry out disinfection regularly, and provided walk-in customers with temperature checks and hand sanitizer.
- Expanded the service capabilities of electronic channels and disseminated over 50 billion epidemic control public announcements for government agencies; optimized online services processes such as SIM card application and broadband installation application, and integrated key operations and inquiries into a new "Convenience Service" section online, to ensure that customers could have their business needs served without leaving home; and launched new services through electronic channels such as broadband self-service troubleshooting and epidemic information inquiry, covering about 70 million customers.
- Leveraged advantages in 5G and AICDE fields to develop innovative applications to enable scientific and accurate prevention and control of the epidemic, such as applications for epidemic monitoring and analysis, infection tracing and patient tracking; and offered a variety of information services to meet customers' needs during the epidemic, such as telecommuting, remote learning and entertainment.

Comprehensive Epidemic Control Support

- Ensured prioritized supply of protective gears for key epidemic prevention and control areas and front-line employees, strengthened the epidemic monitoring, prevention and control of returned employees, devised flexible work arrangements with telecommuting and flexitime, and ensured employees on shifts were properly compensated with allowances and shift arrangements.
- Disinfected and ventilated stores, canteens and equipment rooms to avoid cluster and group infections.

Mounting New Defense against the Epidemic by Leveraging Strengths

Early detection, early quarantine and early treatment are crucial to the prevention and control of the epidemic. We worked together with partners and applied 5G+ smart medical solutions to the "battlefront" of the fight against the epidemic.

5G remote medical services system

We built a 5G remote medical services system for designated hospitals for treating COVID-19 including the Beijing 301 Hospital and Taikang Tongji Wuhan Hospital to realize "face-to-face" communication between medical personnel in Beijing and Hubei and enable greater expertise in patient treatment. In addition, the application of technologies such as "5G remote medical services cart" and "5G+VR remote observation" has also made diagnosis more convenient and efficient.

5G intelligent medical robots

With the support of 5G networks, a number of service robots and disinfection and cleaning robots went on duty in hospitals in Hubei, Zhejiang, Shanghai and other places, where they provided assistance to medical personnel, disseminated knowledge on epidemic prevention, and carried out tasks such as disinfection and cleaning as well as medicine distribution and delivery. The use of those robots greatly reduced the possibility of cross-infection among medical staff in the wards and improved the quality of quarantine management.

5G Thermal Imaging Temperature Measurement System

In response to the risk of the epidemic further spreading due to the peak travel period following the Spring Festival, we launched the 5G Thermal Imaging Temperature Measurement System in Zhejiang, Shanghai, Guangdong, Jiangsu, Sichuan, Guangxi and other places. The technology provided high-precision, safe and continuous temperature screening in places with dense crowds, effectively reducing the risk of cross-infection caused by contact temperature measurement.

5G online outpatient consultation

The Sun Yat-sen Memorial Hospital of Sun Yat-Sen University in Guangdong province provided online doctor consultation based on the 5G online outpatient solution to reduce the risk of cross-infection.

Facilitating Normal Functioning of Society by Sharing Resources

To help maintain normal day-to-day functioning of society, the Company launched a variety of solutions for working, studying and living at home, thereby supporting people's efforts to return to work and contributing to epidemic control.

Telecommuting

The Company provided free services for enterprises including remote conference, multi-party call, Fetion (instant messaging), voice notifications, etc. It also offered users telecommuting services available across all networks to meet the need to work anytime and anywhere, thereby enabling employees to work during the quarantine period.

Smart education

The Company launched the "National Primary and Secondary School Network Cloud Platform" in cooperation with the Ministry of Education to meet the need of 190 million primary and secondary school students nationwide to study at home and ensure that schooling continued while schools stayed closed. Utilizing its strengths in information and content distribution, the Company facilitated differentiated online education in different places by providing three modes including multi-screen interaction, big-class live broadcast and small-class interaction as well as various forms such as on-demand videos and live broadcast. As of March 5, 2020, the Company has started 690,000 online classes, covering a total participation of 387 million person-times.Meanwhile, the Company actively responded to the needs of students in remote areas for internet connection to study online by setting up base stations and broadband equipment.

Online entertainment

The Company offered users services such as MIGU video, Mobile Box and MIGU Reading to allow them to embark on high-quality spiritual journeys without leaving home.

Smart epidemic prevention and control

The Company launched a smart epidemic prevention and control platform in provinces including Zhejiang, Henan, Shanxi, Fujian and Guangdong, providing enterprises with functions such as epidemic prevention inspection, visitor registration, employee health tracking and employee daily health check; and offered products like "And-Easy Report" and "Easy Epidemic Statistics", satisfying epidemic prevention and control needs such as data collection, counting and analysis.

Sale of agricultural products

The Company used the China Mobile 12582 Agricultural Information Network to support the sale of agricultural products and help rural population secure employment by collecting and distributing information on unsold agricultural products and employment opportunities through channels such as free text messaging service, video ringback tones and the 12582 service hotline.

Apart from that, we also launched the "Warm Spring" initiative to help our 500,000 channel partners resume work and reduce loss by offering special assistance, ensuring channel availability and empowering innovation, etc.

Building Digital Infrastructure

Bolstering Connectivity Foundation

Acting on the strategy of building a world-class enterprise, China Mobile is committed to developing high-speed, safe, ubiquitous and smart infrastructure of the highest standard and continuing to improve network quality so as to bolster the connectivity foundation of a smart society.

The Company fully implemented the "Double GB Plan" by intensifying the construction of cloud computing infrastructure, accelerating the development of network capacity and the construction of novel information infrastructure, converging different infrastructure into next-generation information and communications technologies, and driving the effective transmission and integration of all kinds of information in the digital world.

GB 5G Mobile Network

Built over 50,000 5G base stations and offer 5G commercial services in 50 cities; to deliver 5G network coverage in all urban areas at the prefecture/city level or above by 2020.

GB Fiber Broadband Network

Commenced building the GB broadband network, equipping around 80% of the facilities in urban areas with the capabilities for the rapid expansion of GB broadband business.

We continued to narrow the digital divide in 2019, providing broadband access to 43,000 administrative villages through the Telecommunications Universal Service Project that had cumulatively finished installing wireline broadband in 38,000 administrative villages and 4G network in 4,564 administrative villages; and launched special projects on the daily maintenance of rural networks and the guarantee of normal network functioning for users to enjoy the same networks and same speed in rural and urban areas.

Taking Roots in Southern Tip of China to Make Sansha More Digitally Advanced

Sansha City is the southernmost prefecture-level city in China. It administers Xisha, Zhongsha, Nansha Islands and their territorial waters. Despite its strategically important location, Sansha experiences harsh natural conditions, leading to difficulty in network construction and scarcity of telecommunications supplies. Overcoming the challenges in transportation, construction and other aspects, China Mobile has managed to provide residents on the islands with the same high-quality telecommunications network enjoyed by mainland residents by switching on 2G and 4G services over the years. Those efforts have helped put the Nansha territorial waters on the "information fast lane".

2019 saw us actively push forward 5G construction in Sansha City as the Company built 5G base stations in Xisha and Nansha. We then introduced information-based applications that took advantage of the high speed and low latency of 5G networks such as remote medical services and HD videos. By doing so, we provided local island residents with customized services, laying a solid foundation for the development of a smart Sansha.

Launching 5G network along the Guangzhou-Shenzhen-Hong Kong Express Rail Link on November 20, 2019

Putting up fiber optic cables across the Dulongjiang River in Nujiang, Yunnan

To deliver the "TV in Every Village" project to relocated families in Chaya County of Changdu City, Xizang, China Mobile set up the "Thousand Households Action" team and formulated the Home Broadband Program Plan and the Network Design, Survey and Pre-coverage Plan for Poverty-alleviation Relocation Sites in Chaya. We deployed construction supplies in advance and appointed staff to take care of user-side setting-out, all in an effort to guarantee the quality of the project.

As of the end of 2019, the "Thousand Households Action" initiative had finished pre-coverage of home broadband in 1,761 relocated households, providing them with access to convenient and stable broadband services.

Supporting Emergency Communication

2019 has been a highly challenging year loaded with heavy support tasks. China Mobile further expanded the scope of our emergency communication management and developed an agile and highly efficient emergency communication support system, attaining the goal of "zero major network failure, zero major network security incident, and zero major complaint from customers".

Emergency Plan

Devised a comprehensive emergency plan fully covering the customer, home, business and new markets.

Innovative Approach

Conducted management and maintenance of emergency plans, drills, resources, personnel and events through emergency management platforms.

Equipment Upgrade

Deployed high-altitude drone base stations to enable fast low-altitude communication coverage and to meet the capacity needs and public communication coverage needs in times of extreme disasters.

Personnel Deployment

Held emergency contest for five consecutive years and organized rehearsals and drills in greater administrative area, thus continuously enhancing quick response and reporting abilities.

Communication Support for a Series of Events for China's 70th Anniversary

October 1, 2019 marked the 70th anniversary of the People's Republic of China. To provide communication support for the celebration events, China Mobile had kicked off relevant network planning and construction at the beginning of the year.

We increased the capacity of nearly 600 base stations, 100 transmission nodes as well as content and Internet TV systems, and built 43 new base stations. We developed the "One Emergency Plan at One Place" and "One Emergency Plan at One Site" measures in key support areas to ensure the smooth running of networks in the Tian'anmen area. We deployed five emergency vehicles and temporary base stations such as light-stand base stations and small emergency stations in the core viewing areas in Tian'anmen. We increased our network capacity to 3.5 times and, for the first time in the world, realized 2G/4G/5G full-spectrum, fully compatible network capacity support in open areas with the highest unit density. Based on all those pioneering and original technologies, we maximized the network capacity and provided reliable network services for China Mobile users who spectated at Tian'anmen Square on the National Day.

During the support time, we dispatched a support team of almost 2,000 members who worked around the clock to complete all support tasks with high quality.

Communication support service commando for China's 70th anniversary celebration events

Developing New Disaster Relief Models Using New Technologies

China Mobile actively applies new technologies to innovate emergency communication support measures in light of the actual conditions of different regions. The tectonically complex Sichuan Province located in southwestern China has one of the country's highest frequencies of geological disasters. The Company developed a new disaster relief management model accordingly, prioritizing the protection of homes and people's safety in its emergency support efforts.

Strong Support Team

- Formed a disaster relief command center comprising provincial, city-level and county-level leaders, taking charge remotely or on-site in disaster relief efforts
- Employees stepped forward to be volunteers, amplifying the relief efforts

Complete Emergency Plan

- **Before disaster:** Intensify drills and related education
- **During disaster:** Activate communication "lifelines" and deliver the swiftest relief efforts
- **After disaster:** Provide affected people with life supplies and help them rebuild homes

Advanced Technologies

- Developed the first earthquake early warning system together with Sichuan Earthquake Administration
- Used drones for disaster relief
- Provided emergency medical support for patients through China's first 5G emergency medical system, with the 5G ambulance that was jointly developed by our Sichuan subsidiary, Chengdu Industry Research Institute and Sichuan Provincial People's Hospital

Under this management model, the Company dispatched personnel and supplies quickly in response to the fire in Muli County of Liangshan in 2019, becoming the first telecom operator to repair networks and reactivate services in the affected area. We dispatched nine drones including a high-altitude drone base station, unmanned aerial vehicles (UAVs) and firefighting drones. With a coverage of around 30 square kilometers, the high-altitude drone base station provided nearly 1,000 on-site rescuers with all-round communication services; the UAVs and firefighting drones offered data support for delivering accurate rescue directions and effective rescue efforts. Our well-developed management model continued to allow us to provide affected people in ensuing natural disasters with timely communication support, such as the storm and mudslide in Wenchuan and earthquake in Changning, Yibin.

High-altitude drone base station put to use during Muli forest fire

Rescue personnel generating electricity for communication equipment after Changning earthquake

Communication support at the 14th Guizhou Tourism Development Conference

Communication support during Typhoon Lekima

Leading
Innovative Digital Ecosystem

Deepening Open Cooperation

Thanks to the help of industry partners, China Mobile has developed into the world's largest telecom operator in terms of network scale and customer base in the past 20 years. In response to the vast opportunities made possible by 5G, we have continuously optimized our strategic cooperation plans and enriched the fruits of our partnerships, thereby laying a solid foundation for the use of 5G technology to propel economic and social development.

Government Agencies	Large Enterprises	International Telecom Operators	Universities and Colleges
We have signed strategic partnership agreements with many provincial local governments, national departments, key cities and national-level new areas. We have implemented nearly 100 key cooperation projects in areas such as regional development, new types of infrastructure, smart society, digital services and 5G innovation, effectively catalyzing the transformation and upgrade of local economies.	Focusing on the two directions of "empowerment platform" and "vertical applications", we have entered into strategic partnerships with many enterprises in the six key areas of 5G, IoT, big data, customer market, smart home and vertical industries. The partnerships have produced sound cooperation value in various aspects such as leveraging advantageous resources, making up for lack of key capabilities, and leading industry ecosystems.	Since we entered into a strategic cooperation framework agreement with NTT DOCOMO of Japan and KT of South Korea in 2011, a cooperation organization mechanism involving top management of all three parties has been established. Over 190 cooperative projects have been conducted in key areas such as 5G and international roaming, boosting the development of the industry globally.	Through strategic partnerships with renowned universities such as Tsinghua University, Sichuan University and Nanjing University, we have been actively and deeply engaged in the R&D of next-generation information technologies, commercialization of scientific research findings, construction of scientific research platforms, joint talent cultivation and other areas, facilitating the coordinated innovation efforts among companies, universities, research institutes and the market.

We stay open and embrace cooperation. We strive to work closely with industry chain partners from around the world to carry out in-depth implementation of ecological cooperation plans.

Every Cooperation is Possible
- Product cooperation – open up the largest 5G product market
- Brand cooperation – create the largest customer privilege cooperation platform

Everything can be Shared
- Share 600,000 physical channels and create the largest ecological product direct-sales system
- Share more than 1 billion customers and develop platform economy

Everything can be Customized
- Optimize cooperation mechanism and develop specialized subsidiaries into the driver and builder of ecological cooperation
- Embrace greater openness and deliver better services to partners through the all-network concentrated matching mechanism and procedure
- Provide partners with business models of billing by the number of connections, rate or usage to accommodate their different needs for monetization

Everything is Done for the Benefit of Customers
- Implement the 5G Leadership Plan, accelerating the scale-up of 5G customers, services and devices
- Implement the Double 10-billion Plan, including investing RMB10 billion to introduce ecological customer privileges, household smart devices, and content for large screens, and sharing RMB10 billion of new values with partners in the fields of mobile cloud, DICT integration and application, and industry intelligent hardware

Promoting Technological Innovation

Deeply implementing the innovation-driven development strategy, China Mobile convened the second Technology Innovation Conference-cum-China Mobile Science and Technology Association Inauguration Ceremony in 2019, further expanding innovation plans, enriching innovation models and boosting innovation capabilities, thereby constantly fueling the Company's digital transformation. The Company has won a multitude of national awards for technological advancement, and our standardized work places us among the world's top rank. In terms of patent capabilities, we are becoming stronger and have cultivated a number of influential technology industry leaders.

- **Putting together the list of breakthroughs in core technologies in key fields:** We have clarified key technologies and paths based on the R&D capabilities map, and worked with upstream and downstream industry chain partners to step up resolving "bottleneck" problems.

- **Establishing an application-oriented basic research system:** Focusing on seven directions, namely new mobile communication, new basic network, next-generation information technology, next-generation AI, new types of information processing, future safety intelligence and new energy materials, and with the localization of core chips, devices and basic software (operating system), we intensify pioneering technological innovations with collaboration among companies, universities, research institutes and the market.

- **Giving out technological awards:** We give out on-the-job innovation awards to stimulate the innovative vitality of frontline staff, and commercialization awards to boost innovation effectiveness.

- **Founding Science and Technology Association:** The association has over 70,000 registered members and has held a series of brand events such as science and technology publicity campaigns, academic forums and thesis collection to spur a stronger cultural atmosphere of cultivation.

- **Refining talent support mechanism for core technological breakthroughs in key fields:** We hold company-level "Chief Scientists" and "Chief Experts" elections based on the Company's technical expert system to build a high-caliber team of talents.

- **Building up a pool of core talents:** We match application-oriented basic research with R&D resources, and build stronger connections with and continue to introduce high-caliber talents and experts from around the world, in order to build the core capabilities required by key areas in the future.

Achievements of China Mobile Scientific and Technological Innovations

Capacity Building

11,000 full-time R&D employees

6 national labs

45,000 person-times of technological awards covered

Standardization Leadership

30+ leadership positions in key international standard organizations

No.1 among all telecom operators in terms of the number of proposals regarding 5G network

No.1 among all telecom operators in terms of the number of 3GPP standardization project initiations

Patent Application

19,000+ patent applications cumulatively, with **2,000+** being 5G related

Provided patent licensing for **60+** overseas companies, including companies from Japan, the US and European countries

Ranked among **the top** telecom operators in terms of patent applications numbers

International Influence

Headed the establishment of the world-leading open source networking project **ONAP** and contributed **470,000+** lines of codes, ranking second in the world

Initiated the **GTI (Global TD-LTE Initiative)**; being the **1st** China-led international cooperation platform in the telecom sector

Cultivating Innovation Ecosystem and Distinctive Entrepreneurship and Innovation

In keeping with the national strategic planning of "mass innovation and entrepreneurship", China Mobile continued building the national-level Entrepreneurship and Innovation Demonstration Bases as we worked towards the goal of constructing an "And-Innovation Ecosystem". We strive to fully unleash the internal potential in innovation of all our employees and actively explore the Entrepreneurship and Innovation model where large enterprises can engage small- and medium-sized enterprises (SMEs), resources are shared, and integrated development is enabled, in order to gradually foster an industry ecosystem that thrives on cooperation and all-win.

Diversified platforms for innovation and entrepreneurship

- Online: On the basis of the "R&D Cloud" platform, we have introduced development tools and resources suitable for innovation teams to meet the incubation management and resource needs for Entrepreneurship and Innovation.
- Offline: We have set up nine "And-Creation" Spaces in such professional fields as digital home, smart city, IoT and digital content to provide a full suite of integrated incubation and cooperation services. Over 40 projects have been incubated in our "And-Creation" Spaces. We have built 25 5G open labs providing 5G-oriented innovation R&D and test services. Through cooperation with universities and leading enterprises, we are dedicated to setting up a hundred joint labs with universities, a hundred industry demonstration bases and a hundred joint labs with enterprises as carriers of innovation.

Well-established procedures and mechanisms

- We have established the "crowd innovation, crowd sourcing, crowd funding and crowd evaluation" innovation model, constructed the "entry, incubation, exit and commercialization" end-to-end channel.

- We have established crowd sourcing models like "major propositions", "minor propositions" and "promotional propositions", and put in place a reward system to mobilize the collective wisdom of different units to solve practical challenges in operations.

- We have established the off-the-job incubation and shared benefits and risks models and mechanisms such as fault-tolerant incubation, personnel flow and intellectual property rights management to integrate various aspects of the incubation process and safeguard the rights and interests of the Entrepreneurship and Innovation members.

- We have established a "unit, cross-unit and multi-unit" multi-channel commercialization mechanism that is convenient and highly efficient and a quantitative evaluation system that assesses the comprehensive value of research findings, guaranteeing maximum commercialization effectiveness with just and objective evaluation of incubation results.

Rich competitions and events

- Internally: We have held the Self-development Contest for five consecutive years that covers all our lines of business, with a total of 15,000 employees participating, embedding all-involved innovation throughout our corporate culture.
- Externally: We have held the China Mobile Hackathon for four consecutive years. Our contests covered eight major themes in 2019, and we compiled the 2,817 innovation projects submitted into the *Outstanding Hackathon Projects List* and had them pilot-run across all network.

In 2019, China Mobile Entrepreneurship and Innovation demonstration bases were included in the *100 National Best Cases of Entrepreneurship and Innovation Demonstration Bases* and won the first prize for corporate management modernization of the telecom industry.

With the advent of 5G, we have launched an ecology cooperation plan for deepening Entrepreneurship and Innovation – the Star Plan. We will bring together multiple stakeholders along the industry chain, including upstream and downstream companies, innovation capital, incubators, universities and scientific research institutes, and empower our internal innovation teams, SMEs and innovators in society to boost the rapid growth of the innovation teams and the Company. Progressively, we will build up a star cooperation ecosystem that accommodates full-range service scenarios with booming and varied industry applications and integrated industry innovations.

> "Regardless of which company it is or which geographical region it belongs to, innovation can only bear fruits and create value when applied to address real problems. That's also what makes our work meaningful."
>
> —— Gold Medal Project "I-link – Smart-link Sensing" Team at the 2019 Self-development Contest

2019 Self-development Contest

2019 China Mobile Hackathon

Serving the General Public

In step with users' changing information consumption needs, China Mobile has been promoting its distinctive 5G applications with a view to engaging users in a "novel, immersive entertainment experience" and facilitating an upgraded information consumption experience.

New Ways to Watch	Delivered the initial application of 4K ultra HD live broadcasting at a scale of hundreds of million users, with over 30 pioneering applications in the world.
New Ways to Listen	Pioneered full-screen video CRBT (Coloring Ring Back Tones) integrating watching, listening and touching and provided novel audio/visual services for the four ecosystems of "short videos, media communication, industry and commercial advertising" by enabling functions such as all HD, all size, all interactive, and CRBT plus vibration.
New Ways to Play	Initiated the China Cloud Gaming Association and launched the East Wind Developers Plan, thus delivering a more engaging and convenient gaming experience based on such features of carrier-grade cloud gaming platforms as "ultra HD, no latency, running on cloud, and click and play".
New Ways to Shoot	Launched a series of innovative application scenarios such as VR same-screen interaction and photos with celebrities using 5G and AR technologies, thus providing a novel short video experience in the 5G era.
New Ways to Use	Implemented full-scale upgrade of basic telecom services such as phone number, SMS and cloud service.

In terms of products, the Company has introduced our proprietary innovative 5G commercial products – the 5G Smart Hub "Pioneer No.1" and the 5G cellphone "Pioneer X1". Both are examples of our exploration in the new application of 5G on devices. The 5G Smart Hub "Pioneer No.1" won the "2019 Red Dot Design Award" of Germany, the "5G Device Innovation Leadership Award" presented by the *People's Posts and Telecommunications News (PPTN)*, and the "Best 5G Commercial Solution Award 2019" presented by the *Communications World*. The 5G smart parking solution developed on the basis of our 5G smart devices won the "Best 5G Commercial Solution Award 2019" presented by the *Communications World All-media*.

In terms of product benefits, the Company provides 5G users with a rich selection of benefits including Internet, brands, business and memberships that cover videos, reading, travel, and discounts on 5G devices and on international roaming.

5G HD Video CRBT (Coloring Ring Back Tones)

We have launched 5G HD video CRBT products to provide users with a new window to showcase their personalities. Users of this product can select featured content from the China Mobile short video library or custom-make a video CRBT with their own videos. When a call comes in, the caller can watch this personalized short video and like or share it in real time, making the wait more engaging and fun. As of the end of 2019, 5G HD video CRBT had been officially put to commercial use in 29 provinces, played over 1.2 billion times per month.

5G Live Broadcasting

In 2019, MIGU performed multiple 5G+4K ultra HD live broadcasts and 41 "industry/global-first" 5G+4K+VR+AR live broadcasts. MIGU also launched the first cafe with 5G coverage in the world.

Organizing the "Sing for the New Era, My Ode to Motherland with 5G" Weibo 5G video live stream event in Hubei

Integrating into Various Sectors and Industries

China Mobile works with outstanding partners of the various industries to tap personalized long-tail needs and develop 5G applications in key sectors to facilitate their digitization.

5G smart healthcare

5G smart finance

5G smart media

5G smart transportation

5G smart campus

5G smart energy

5G drones

5G HD industry video

5G high-altitude Internet of Flying Things

5G smart park

5G industrial Internet

5G smart city

5G cloud gaming

5G smart agriculture

Scan the QR code to watch
VR demonstration of 5G applications

China Mobile's Mobile Authentication, the Facilitator for Industry Digitization

China Mobile's Mobile Authentication supports one-click registration and login and is an optimization and upgrade from traditional identity authentication methods such as "account + password" and "mobile phone number + SMS verification code". Based on our unique data network authentication and data capabilities as a telecom operator, we provide companies with a comprehensive one-stop solution for user account use and data management, thus turning mobile phone numbers from a communication industry-specific account system into a multiple-industry account system serving communication, Internet, IoT, banking and other industries and boosting the rapid development of video, e-commerce, online office and other fields.

Additionally, using the Super SIM security encryption chip as a digital credential carrier, we have launched a series of innovative products such as SIM authentication, SIM card messaging, SIMeID, SIM signature, SIM all-in-one card and SIM car key, which enable authentication on a number of security levels and Near Field Communication (NFC) services in the 5G era. As of the end of December 2019, more than 670,000 users had activated the Super SIM feature.

Providing Accessible High-quality Networks to Help Build Orderly Urban Villages

As a phenomenon of rapid urbanization, urban villages are densely populated with high mobility but are weak in network infrastructure construction. To help improve the network quality in Wanxiu Village in Nanning City of Guangxi, China Mobile summarized scenarios reflecting the local conditions and characteristics, and set up a "matrix + module" joint project team accordingly. We effectively improved the user experience with methods such as education and publicity on network, inspection and removal of unqualified signal amplifiers, optimization of signal layout, and construction of new base stations. After taking down 212 unqualified signal amplifiers and building over 700 new communication spots, we raised the 4G coverage in pilot urban villages to 98%, benefiting over 600,000 users and providing a foundation for guaranteeing the safety and stability of the urban villages.

Assisting in Automated Mine Management

In 2019, our Neimenggu subsidiary worked with business partners and launched the "5G Smart Mining" project in Baotou. We transformed vehicles into unmanned vehicles and formed an autonomous driving work cluster for transportation in the open-air iron, mineral, ore and rough stone mine, realizing functions like remote vehicle control, integrated vehicle positioning, precise parking and autonomous obstacle avoidance. This has effectively improved the efficiency of mining vehicles in special environments and minimized the number of workers at the project sites, thus ensuring personnel safety. A remote intelligent dispatch and monitoring platform and a vehicle-vehicle, vehicle-network and vehicle-ground communication system have also been built, enabling automated management of mine production and operations. As of the end of 2019, we had completed transforming 4 vehicles into unmanned vehicles. We estimate over RMB9 million to be saved in fuel consumption annually and the production efficiency to increase by 10% when we finish the transformation of all 17 vehicles.

Supporting the World's First 5G Remote Surgery at Beijing 301 Hospital

In March 2019, we assisted the Beijing 301 Hospital to perform the world's first 5G-based remote surgery - the "brain pacemaker" implantation surgery for a Parkinson's patient. The features of 5G networks can effectively guarantee the stability, reliability and safety of surgeries and always allow experts to monitor the surgical process and patients' status. In 2019, the project won the Asia Mobile Awards (AMO) "Award for Best Support for the United Nations Sustainable Development Goals Mobile Innovation" presented by the Global System for Mobile Communications (GSMA).

As the application of 5G networks continuously expands in the medical field, the Company also supported the nation's first 5G remote fundus laser surgery, 5G remote orthopedic surgery, 5G teleconsultation, 5G remote ultrasound and other projects, effectively improving the quality of medical services and management.

"I work in rotation between Beijing and Hainan. This surgery took place during my rotation in Hainan. A Parkinson's patient in Beijing needed surgery, but his condition did not allow him to fly to Hainan. With the support of China Mobile's 5G network, a remote surgery between Hainan and Beijing was performed for the first time. Free from 4G problems such as video lagging and significant remote-control delays, the surgery was performed in near real time and I hardly felt that the patient was actually 3,000 kilometers away. Through remote surgeries, high-quality and high-level experts in higher-level hospitals will be able to perform surgeries directly on patients in remote and backward areas, making possible surgeries that were once too challenging to deliver at the grassroots level."

—— Ling Zhipei, Director of Neurosurgery, First Medical Center and Hainan Hospital of Beijing 301 Hospital

Empowering the Whole Agricultural Industry Chain

China Mobile has built the smart "And-Agriculture" product suite that helps reduce agricultural production costs and improve production efficiency, product quality and the ecological environment, thus contributing to the implementation of the Rural Vitalization strategy.

Precision Planting
The 5G precision greenhouse tomato planting solution is based on the key capabilities of agricultural AI and 5G advantages. Drawing on analysis by the AI brain, it performs intelligent control over the planting conditions, water and fertilizer to improve the quality and efficiency of tomato production.

Precision Farming
Drawing on the advantages of 5G, the intelligent pig farming platform overcomes the problems of deploying GPU (Graphics Processing Unit) servers in farms, such as high cost and poor maintainability, and enables functions like pig weight measurement, backfat measurement, body temperature measurement and sow lactation monitoring based on 5G capabilities and AI platforms.

Smart Aquaculture
The circular aquaculture system under the control of 5G networks detects and analyzes the dissolved oxygen, temperature, pH value and other parameters of the water and performs remote intelligent control over water injection, aeration, sewage and pump bacteria. A smart, convenient, efficient and safe management model has been created through the establishment of a scientific and technological aquaculture log.

Smart Agricultural Machinery
The automated agricultural machinery control system is based on 5G and can work around the clock. It accurately plans the work route to ensure high-precision operations of the agricultural machinery at all times, thus improving the efficiency and increasing the income generated by the machinery.

Making Education Smarter and More Scenario-based and Accessible

China Mobile has developed comprehensive 5G-based smart campus solutions that focus on three core issues, namely better teaching, quality resources sharing and smart campus management.

5G smart classes with dual teachers

We have helped Shenzhen Longgang Science and Technology City Foreign Languages School launch 5G remote synchronous classes, where real-time class footage is transmitted between Shenzhen and Guizhou to allow classes to be shared between two locations.

5G cloud AR immersive and interactive learning

Utilizing the Cloud XR (Extended Reality) educational platform, we have helped the China Science and Technology Museum build a virtual science and technology pavilion that breaks the constraints of time and space, providing more visitors and schools with richer and more convenient educational resources and services.

5G remote holographic teaching

We set up a holographic teaching facility at Beijing Normal University. It allows teachers to give lectures in a green screen studio and transmits life-size footage of the teachers to other places through 5G networks.

5G safe campus

We have built the "And-Recognition" smart reception system that enables college freshmen to complete all registration procedures based on face recognition using only their ID cards. Besides, the 5G Safe Campus solution offers a variety of customization functions tailored for real-life campus scenarios, such as family video calls, face recognition in exams, see-through kitchens, and face-recognition authentication for parents when picking up their children from school, greatly improving safety.

5G Classroom for Future

Immersive interactive learning with 5G Cloud and AR

Providing Technological Solutions to Livelihood Supervision

Our Hunan subsidiary was actively involved in assisting Hunan Province to build "Internet + Supervision" platform, empowering livelihood supervision with technology.

External public portals

Breaking information barriers and advancing connectivity, the platform supports visits on computers, WeChat subscription accounts, mobile applications (apps) and query machines. With one click, people can access a variety of information, such as information on the remittance of their subsidies, targeted poverty alleviation policies and special grants as well as spending status of village-level organizations, and can file complaints or whistleblowing reports.

Internal supervision portals

We have set up a web portal that consolidates a variety of functions, such as data input, complaint handling, data collision analysis, performance evaluation and platform management, allowing the platform to operates smoothly, efficiently and safely.

As of the end of 2019, the "Internet + Supervision" in Hunan had enabled the identification of over 1.7 million problematic data entries, and displayed the account information of 208 livelihood subsidies and over 6 million pieces of transaction information of villages. The total views of the provincial, city-level and county-level web portals and the WeChat subscription account exceeded 1.2 billion person-times, and the WeChat subscription account attracted 3.37 million followers. The platform had become an important channel for people to carry out livelihood supervision. We upgraded the platform in 2019, intensifying efforts in areas like big data, cloud computing, standard system, and safety operations and maintenance. The major related project "Hunan Province Unified Financial Software for Village Finance" is the first in China to enable unified accounting and centralized supervision of village-level finance across the province.

Providing Enjoyable Services

China Mobile firmly adopts the "Customer-centered and Service-oriented" approach and has built a comprehensive, full-process and all-hands service system. We have set up the China Mobile Service Leadership Project Steering Group headed by main company leaders to improve our customer service on all fronts, enhance the building of a service-oriented culture, and strengthen the formulation, application and management of regulations[1] in areas like customer rights protection, thereby delivering enjoyable customer services.

Improving Customer Perception	• Carried out the "Leading Projects" for customer satisfaction, comprehensively improving customer perception. • Ran the 10080 service quality supervision hotline to upgrade the centralized handling, supervision and management of complaints. • Utilized new tools such as voice robot, text robot, intelligent quality inspection and intelligent strategy center to improve service efficiency. • Implemented a series of service measures, including an upgraded version of the 0000 value-added service subscription inquiry and unsubscription and a more transparent complaint handling process. • Built a comprehensive customer perception evaluation system to acquire customer perception in real time; the system has reached over 620 million person-times of customers in total. Our 4G customer satisfaction rate was 78.37% in 2019, maintaining a leading position.
Building a Service-Oriented Culture	• Held a series of "Enjoyable Services 365" customer opinion collection activities, of which the "Enjoyable Services 365 – Network" activity attracted the participation of 1,163,000 customers. • Held General Manager Customer Reception Day activities which were attended by over 140,000 customers, and handled nearly 130,000 inquiries and complaints over the year. • Established a two-tier User (Supervision) Committee, cumulatively recruited more than 2,000 users as committee members, and established diversified customer communication channels. • Conducted activities like service star and star team selection and service management best practice selection to encourage quality service demonstration and promotion. • Promoted the "Voice of Customers" project, and delivered more effective problem-solving and better service management by having managers at all levels listen to customer complaint recordings.
Giving Back to Customers	• Introduced measures such as "free data on checking user seniority" and "quick installation and quick repair with free data for overtime". • Upgraded the three brands of GoTone, M-Zone and Easyown and launched a series of services and benefits around users' lives.
Protecting Customer Rights and Interests	• Optimized customer bills and regulated key contact services such as data inquiry display, customer service numbers and 5G business service reminders. • Comprehensively strengthened regulations on public notifications of tariffs of available services, simplified the tariff structure, and promoted transparent consumption. • Carried out the "Sunshine Action" for the protection of customer rights and interests, continued to standardize operations like outbound marketing and deduction reminders, and formulated management measures on billing security and transparent consumption to fully protect customers' right of choice.

1: The Company has formulated the following documents in 2019 for the protection of customer rights and interests: the *China Mobile Penalty Measures for Violation of Customer Rights and Interests (Trial)*, the *Notice on Further Strengthening the Service Guarantee of Customers' Independent Right of Choice*, the *China Mobile Data Inquiry and Display Service Specifications*, the *China Mobile Individual Customer Billing Service Specifications V3.0*, the *5G Business Service Reminder Standards*, the *China Mobile Customer Service Numbers Management Measures*, the *Notice on Delimiting "Three Red Lines" for the Scope of Market Operations and Management, etc.*

Facilitating Worry-free Sails and Bringing Seafarers Closer to Families

China has the most seafarers of all countries and is the world's largest exporter of seafarer services. The seafarers spend more than half of the year on the sea, where there is no signal, making it difficult for them to communicate with their families.

To help seafarers meet their particular communication needs, our Beijing subsidiary and China Mobile International jointly launched the Seafarer Card, providing seafarers with the exclusive 1720711 number range and exclusive tariff benefits which, together with the Family Network, allow seafarers to enjoy free domestic calls with friends and relatives. Seafarers can also enjoy the benefits such as half-price data plans, free phone services and number hosting by logging in to the JegoTrip App using a Seafarer Card number. In the meantime, a communication group for Seafarer Card users has been set up with customer service available 24/7.

The Seafarer Card brings seafarers closer to their families, realizing true worry-free sails with a card number. The card has been well received among our seafarer users. China COSCO Shipping Corporation currently provides the Seafarer Card for its seafarer employees as a basic communication welfare.

- "The Voice of Customers" platform won the "Quality Service Project" award in the third National Quality Service Competition.
- The "Construction of IoT Service Quality Standard System Based on Customer Perception" project was recognized as a Highest-level Technology Achievement in the 4th National Quality Innovation Contest.

"5G Pioneer Cup" service skills competition in Shandong

Building a business environment with ethnic characteristics in Jilin

Promoting Speed Upgrade and Tariff Reduction

China Mobile actively promotes speed upgrade and tariff reduction to effectively improve people's sense of gain and well-being.

Individual Customers	**SME Customers**
Increased the value of data plans and basic plans, offered large-volume traffic plans, and continuously reduced tariffs charged when usage exceeding the plan.	Carried out the inclusive dedicated Internet connection campaign, 100M enterprise broadband promotion campaign, GB enterprise broadband promotion campaign, etc.
Handset data tariff decreased by 47% in 2019 from 2018.	The broadband and dedicated connection tariffs for SMEs decreased by 39% and 25% respectively compared with 2018.

Over the past five years since the Company began implementing speed upgrade and tariff reduction, we have implemented various tariff reductions measures, benefiting more than one billion users and four million enterprises, with data tariff dropping by more than 90% cumulatively.

Moreover, in November 2019, we officially launched the "Mobile Number Portability" policy, allowing users to switch to another telecom operator without changing their numbers. We issued the *Notice on Regulating Same-number Transfer between Operators*, ensuring orderly progress in strict compliance with requirements of the MIIT.

Maintaining Network and Information Security

China Mobile attaches great importance to network security. Under the united leadership of the Company's Network Security Leadership Group, we have set up network security leadership groups headed by the top leader of each of our 31 provincial subsidiaries and our specialized subsidiaries and directly affiliated units while prioritizing network security efforts. We actively respond to the risks brought about by the development of 5G and AICDE services and have produced security white papers on topics like AI, IoT and 5G to improve the overall level of security.

Campaigns	Talent Cultivation
"Shield Building" Key Information Infrastructure Protection Campaign	Network security expert team "Team Mountain Tai"
"Discerning Eye" Network Data Security Enhancement Campaign	Security training such as "Talent Honing Plan" and "5G – Shield Building"
5G Network Security Defense System construction and standards and norms formulation[1]	Certification of Certified Information Security Professional

1: The Company formulated the following 5G network security specifications during 2019: the *5G Telecom Network Security Technical Requirements,* the *5G Network Security Risk Assessment Specifications,* the *5G Network Equipment Security Configuration Specifications,* the *5G Security Risk Prevention and Control Work Guide,* the *5G Network and Service Security Benchmark Evaluation Specification,* the *5G New Technology and New Service Security Evaluation Reference Index,* etc.

For possible network security emergencies, the Company has formulated the *China Mobile Network Security Emergency Response Plan (V1.0).* It divides emergency responses to cyber security incidents into four levels, namely Critical (Level I), Significant (Level II), Moderate (Level III) and General (Level IV), with reference to "Information Security Technology – Guidelines for the Category and Classification of Information Security Incidents" (GB/Z20986-2007) to comprehensively improve the ability to respond to cyber security incidents. Our measures to deal with network security incidents include emergency bandwidth expansion, virus detection and the use of backup data.

The Company makes every effort to protect the security and reliability of customers' personal information according to laws and regulations. In the event of a major customer information breach, the Company would promptly inform the affected customers and propose measures to mitigate the damage. The Company had zero major customer information leakage incident recorded in 2019.

- Published 14 regulations including the China Mobile Customer Information Security Protection Management Regulations and established a normalized customer information protection system.
- Pioneered the "Vault Mode", including all high-risk operations on key system platforms that involve sensitive customer information into "Vault Management and Control".
- Fuzzified sensitive customer information on customer service system interfaces to prevent customer information leakage.
- Carried out data security compliance assessments to improve data compliance management and audited all maintenance operations.
- Strengthened real-time and follow-up inspection and supervision of customer information security incidents.

Managing Spam Messages

China Mobile makes dedicated efforts to manage all types of spam messages, effectively identifying and blocking spam SMS/MMS, nuisance/scam calls, etc. to help build a clear cyberspace.

Preventing Communication Information Fraud

- Released the *China Mobile Key Work Plan for Further Preventing and Controlling Telecom Network Fraud* to reinforce the security management of mobile phone cards, IoT cards, and new technologies and new services.
- Established the "Group, Key Regions, Provincial Subsidiaries" three-tier technical protection system to quickly monitor and tackle problematic numbers roaming to key regions.
- Built the "Customer Bad Credit Database" to prevent fraudsters from applying for new numbers to enter the network again.
- Blocked a total of 10.16 million international scam calls and 38.89 million scam messages and sent 2.4 billion free anti-fraud call reminders to 230 million users in 2019.

Tackling Nuisance Calls

- Launched a high-frequency nuisance call protection service ahead of industry peers, cumulatively blocked 1.2 billion nuisance calls for 7 million users.

AI Anti-fraud Application "OneAI Smart Detective"

Our Guangdong subsidiary and our online services specialized subsidiary jointly developed the AI anti-fraud application "OneAI Smart Detective" and the whole-process real-name authentication solution, carrying out black card and channel identification at the beginning of registration and in real time, thus effectively reducing the number of nuisance calls. The system also cooperates with law enforcement departments, providing suspected scam numbers and fraud locations for reference to improve the efficiency of crackdown on fraud. At present, the accuracy rate of "OneAI Smart Detective" identification and real-name authentication is 81% and 99.9%, respectively.

Emergency Protection System against "SMS Bomb"

If a mobile phone receives a large number of verification code messages within a short period of time for no reason, it is likely that the user has been attacked by a "SMS Bomb". In response, we launched the "SMS Bomb" Emergency Protection System to intercept "SMS Bombs" in real time. As of the end of 2019, the system had provided protection services for 1.32 million users and intercepted 270 million nuisance "SMS Bomb" messages.

- The Company's *Using AI Technology to Manage Cyberspace Spams and Protecting Users' Legal Rights and Interests* won the "WSIS Prizes 2019 Champion" award presented by the United Nations World Summit on Information Society (WSIS) 2019.

Offering "10086" dedicated customer service seats to elderly customers

Hosting "Convenience Services Brought into the Community" campaign to offer anti-fraud education in Anhui

Strengthening Product Responsibility

In 2019, China Mobile made comprehensive progress in the quality management of key products such as individual, home and intelligent hardware. We further improved the product quality evaluation standards and clarified the quantitative evaluation indicator system on product quality. We also optimized the closed-loop management mechanism for problem grading and classification, classifying problems as high, medium and low levels according to the scope of influence and probability of occurrence, thereby further refining the closed-loop management requirements. For non-conforming products, we implement measures such as upgrade and optimization, or repair, recall, rework and fines, according to the severity of the problems in accordance with our quality guidelines. The Company had zero product recall incident for quality issues throughout the year.

We act in strict compliance with the *Advertising Law of the People's Republic of China* and the *Trademark Law of the People's Republic of China*. We have formulated regulations including the *China Mobile Management Measures on Advertising and Publicity,* clearly requiring all types of information published for advertising purposes to be true and accurate, forbidding the use of unregulated pictures, terms or texts, and strictly prohibiting the unauthorized use of other people's portraits, registered trademarks, works, etc., to ensure that our product information and labeling are faithfully communicated and that we engage in transparent and effective communication with our customers.

Managing Electromagnetic Radiation (EMR)

The EMR monitoring of base stations is a key challenge for EMR management. China Mobile took the initiative to communicate with the community and customized an EMR publicity vehicle equipped with a vehicle-mounted dynamic EMR monitoring system and professional testing devices. Professional technicians fully participated in educational tours conducted in various residential communities, towns, rural areas and ethnic minority areas, effectively alleviating or dispelling negative public perceptions of EMR. In 2019, our EMR educational publicity vehicles carried out 120 educational activities in the three provinces of Hubei, Jiangsu and Henan, covering 42 cities and 88 districts and counties.

Summary of Our Key Performances

Our Achievements in 2019

- Officially launched 5G commercial services, implemented the "5G+" plan and the "Double GB Plan", thereby improving network quality, narrowing the digital divide, and accelerating the construction of a new type of information infrastructure in the 5G era.
- Built an agile and efficient emergency communication support system, and attained the goal of "zero major network failure, zero major network security incident, and zero major complaint from customers".
- Held the second Technology Innovation Conference-cum-China Mobile Science and Technology Association Inauguration Ceremony, deepened the "One System Four Rings + Three Verticals" scientific and technological innovation system, and continuously inspired internal innovative vitality.
- Carried out strategic cooperation, continuously opened up capabilities, supported the Entrepreneurship and Innovation, and pursued shared development with micro, small and medium enterprises.
- Undertook in-depth explorations in the customer market and verticals, thereby boosting higher-quality consumption and the transformation and upgrade of different sectors and industries.
- Adhered to the "Customer-centered and Service-oriented" approach, improved the service system, promoted speed upgrade and tariff reduction, safeguarded information security, practiced compliant marketing, and made every effort to protect customers' legitimate rights and interests.

Our Goals for 2020 and Beyond

- To expand 5G coverage to all cities at the prefecture level or above, achieve a net addition of 70 million 5G package customers, and strive to realize the commercial use of 5G SA networks at scale by 2020; to release over 100 5G smartphones and over 100 5G devices for industry use; to develop 100 industry-transforming and scalable 5G demonstration applications focusing on 14 key vertical industries.
- To optimize 5G integrated innovation capability system and continuously augment the eight major innovation capabilities of AI, IoT, cloud computing, big data, edge computing, security, blockchain and location.
- To deepen open cooperation, bring into play the "multiplier effect" of 5G, and build a 5G ecological community with worldwide industry partners.
- To promote satellite-aerial-terrestrial integrated emergency communication, cross-domain integration of emergency resources across all networks, and building of emergency management platforms capacity to comprehensively guarantee successful support efforts.
- To optimize the service system, build a leading service quality control mechanism, and provide customers with smart, convenient and efficient services.
- To continue to improve the three major capabilities of security situation awareness, security protection and emergency response and strengthen the ability of critical infrastructure in resisting cyber security attacks.

Key Performance Indicators

Economic Performance

Indicators	2017	2018	2019
Operation revenue (RMB100 million)	7,405	7,368	7,459
Taxation (RMB100 million)	337	359	353

Connection Scale

Indicators	2017	2018	2019
Number of total mobile customers (million)	887	925	950
Number of 4G customers (million)	650	713	758

Indicators	2017	2018	2019
Number of household broadband customers (million)	109	147	172
Number of corporate customers (million)	6.02	7.18	10.28
Number of IoT customers (million)	229	551	884
Number of countries and regions with 4G international roaming services	172	181	191
Number of countries and regions covered by our data roaming services	229	239	247

Network Capability

Indicators	2017	2018	2019
Number of 4G base stations (10,000)	187	241	309
Average 4G network downloading rate on urban roads (Mbps)	42.0	42.6	43.3
International transmission bandwidth (G)	23,750	39,000	70,885

Network Quality Guarantee

Indicators	2017	2018	2019
Number of emergency support	4,476	4,899	6,800
Significant political/economic event support	4,253	4,597	6,658
Significant natural disaster support	190	266	124
Significant accident or catastrophe support	23	16	16
Public health incident support	0	1	0
Social safety incident support	10	19	2
Number of emergency support vehicles deployed (vehicle-times)	7,362	8,986	7,931
Number of emergency support equipment installed (set-times)	30,642	36,596	27,755
Number of person-times involved in emergency support (person-times)	201,250	314,427	259,807

Open Cooperation

Indicators	2017	2018	2019
Number of enterprises served by communication capability open platform	>13	>15	>44
Average authentication processes carried out on the mobile authentication platform per day (100 million times)	>5	6.67	12.12
Number of developers on OneNET	56,728	99,963	148,642
Number of enterprises on OneNET	6,500	9,396	11,825
Number of connected devices on OneNET (10,000)	3,154.31	7,987.85	16,092.77
Number of developers of Andlink	13,500	76,300	115,900
Number of enterprises on Andlink	150	500	1,000

Indicators	2017	2018	2019
Number of GTI operator members	132	134	136
Number of GTI industry partners	163	176	237

R&D and Innovation

Indicators	2017	2018	2019
Investment in entrepreneurship and innovation support (RMB10,000)	7,955	8,359	8,830
Number of users of entrepreneurship and innovation platform	15.4	15.6	16.1
Number of projects created from entrepreneurship and innovation events	2,535	2,918	3,183
Number of teams participated in innovation and entrepreneurship events	1,819	1,855	2,817
Number of patent applications (pieces)	2,006	2,222	2,683
Number of newly granted patents (pieces)	753	1,040	1,384

Customer Rights and Interests Protection

Indicators	2017	2018	2019
Overall customer satisfaction in telecom service quality [1]	79.19	80.86	81.99
Number of spam messages report handled (10,000)	128	133	139
Number of scam phone numbers handled	50,700	19,600	10,500
Average number of spam messages handled per month (100 million)	> 2	> 3.9	> 4
Average number of accounts making illegitimate group voice calls handled per month [2]	2.1	5.5	59.4
Number of anti-fraud SMS alerts sent (100 million)	36.4	34.7	24.2
Annual number of targeted covert fraud incidents identified and successfully intervened [3] (10,000)	> 370	> 123	> 2,322

Notes:

1. The evaluation of overall customer satisfaction in telecom service quality was organized by the MIIT, who also announced the results. The total score is 100.
2. In 2019, the Company further strengthened the governance of nuisance calls, which resulted in the significantly increased average number of cases handled each month.
3. In 2019, the Company added four identification models for scenarios of covert communication information fraud, which resulted in the significant increase in the annual number of cases handled.

Jointly Creating

an Inclusive Good Life for All

"Blue Dream",
Innovating on Education for Poverty Alleviation

Sustainability Context

The pursuit of happiness is a common aspiration for all. Even though we have made significant progress in technological development, there are still many issues arising from unbalanced and inadequate development nowadays. China actively strives to build a community with a shared future for mankind, adheres to the concept of inclusive development, implements targeted poverty alleviation policies, coordinated regional development strategies and the Belt and Road Initiative, and works together with domestic and international partners to make positive contributions to the implementation of the relevant United Nations Sustainable Development Goals.

China Mobile actively explores the infinite possibilities of using 5G technology to serve society and improve the well-being of people. In the decisive period of building a well-off society in an all-round way, we are committed to sharing the enabling benefits of 5G and other ICT technologies with more people, and providing our ideas and solutions for promoting the all-round development of people and social progress.

Eradicating poverty starts from changing the minds of people. Poverty alleviation through education is a root solution to help the poor. To improve the education conditions of primary and secondary schools in central and western China, especially in poverty-stricken areas, and to eliminate the root cause of intergenerational poverty, China Mobile worked together with the Ministry of Education and launched the China Mobile Blue Dream Educational Aid Plan ("Blue Dream") in 2006, focusing on improving the comprehensive capabilities of rural teachers. We further developed on a sub-program of "Blue Dream", the Ministry of Education-China Mobile Central And Western China Rural Primary and Secondary School Principal Training Program ("Principal Training") and have established a unique principal training system, thereby creating a new platform for improving the education management skills of primary and secondary school principals from poverty-stricken areas in central and western China.

2006	Started the model of centralized training of small study groups.
2008	Started providing online support, setting up a dedicated section for Principal Training at the China Education Administration Training Network of the National Academy of Education Administration, posting program updates and allowing exchange of local progress of the program.
2009	Innovated the Training-in-Teaching model and the "Shadow Training + Remote Training" model, and set up the shadow training schools.
2016	Launched the first "Seed Principal Online Workshop + Teaching in the Countryside" program.
2018	Created the "In-School Training" diagnostic training program.

Innovative Training Models for Principals

From the "three-stage" training model of "centralized training + shadow training + back to school practice" that has been made part of government policy system by the Ministry of Education, to the "five-stage" training model of "centralized training + shadow training + online study + back to school training + sent to school practice", the program has been constantly evolving based on implementation and evaluation results, creating unique and innovative training models that contribute to the development of a high-quality national principal training system for the new era.

We initiated the "active training" concept and established a platform for team training at county level and provincial level, based on the individual development needs and career goals of the principals and the training needs of the region, to give the principals greater motivation to learn. We made effective use of the online training community platform centered on the "Seed Principal Online Workshop", and developed the combo training model of online learning and on-site practice. We also set up a menu-based, independent and open learning platform, where the principals could customize their class selections based on their individual needs. With over ten years of continuous efforts, we have fostered a training culture of "to learn and train to become excellent", motivating the all-around development of the principals.

Collaborative Governance as Foundation

The program went beyond the traditional task-based training concept. Instead, it has evolved into an effective "five-in-one" modern collaborative governance system, in which "the Ministry of Education and China Mobile lead, the program office coordinates, the provincial team designs, the training base implements, and the county-level team manages", all collaborating to train the principals. Meanwhile, we insisted on scientific management, studied best practices of similar programs and developed the *Principal Training Program Standards*, promoting program effectiveness with standardized implementation, supervision and support.

Public Participation with Greater Impact

Poverty alleviation needs the support and participation of society. We called on the public to join our efforts to support education poverty alleviation in the form of matched charitable donations. As of the end of 2019, 3.38 million people had participated in MIGU Reading's Read for Good campaign and raised RMB10 million for the "Blue Dream"; and 27 Read for Good events were organized at Joy Reading Cafes, which attracted 62.666 million person-times to participate and raised a total of RMB6 million.

"I am a veteran of principal training. But it's very rare to see programs like China Mobile's 'Principal Training' that last for over a decade to help rural principals. And it's not an easy thing to do! China Mobile's 'Principal Training' provides customized training for rural principals with unwavering love and dedication, benefitting rural principals in Guangxi, especially those from low-income counties. The program allowed the rural principals to feel the sincerity and warmth of charitable support, which is a great boost to their confidence!"

—— Li Fuzhuo, Director of "Principal Training" Guangxi Partner (Nanning Normal University)

"'Principal Training' allowed me to reexamine myself from a new perspective, and showed me the way to a dense forest of education, where my dreams can flourish. My dream is to work hard to support rural education."

—— Chen Yang, Principal of Dandian Primary School, Tuanfeng County, Huanggang City, Hubei Province

"'Principal Training' allowed me to better grasp and form my own understanding of education, and develop my own action plan to manage my school. It has lit a shining light for my professional growth and daily practice, so that I can become a better thought leader at my school and move in the right direction."

—— Li Liansheng, Principal of Shangganshan Central Primary School, Shanggao County, Yichun City, Jiangxi Province

Since the launch of the "Blue Dream" Education Aid Plan, the Company has invested nearly RMB180 million and provided training for over 127,000 rural primary and secondary school principals from central and western China, directly benefiting over 700 counties. To leverage our advantages and support education poverty alleviation, we have also built 2,310 China Mobile Libraries and 2,863 multimedia classrooms for schools in regions in extreme poverty in 23 provinces in central and western China and the Xinjiang Production and Construction Corps, and equipped the multimedia classrooms with remote learning equipment and "And Education" products.

In the future, China Mobile will continue to uphold the founding aspiration of supporting the development of rural education and serving the professional growth of rural primary and secondary school principals in central and western China, continuously inject new impetus into the development of education in the central and western rural areas, and lay a new foundation for the fundamental eradication of poverty.


"In-School Diagnostic Training" of the "Principal Training" program in Sichuan

Supporting Poverty Alleviation and Public Welfare

Contributing to Poverty Eradication

2019 is a crucial year for eradicating poverty in China. China Mobile developed a series of policies, including the *China Mobile Poverty Alleviation Priorities in 2019*, the *China Mobile Poverty Alleviation Assessment Methods in 2019*, and the *2019 Notification on Specifying Poverty Alleviation Tasks for China Mobile Units*, to specify the priorities, implementation requirements and assessment standards for its poverty alleviation work in 2019.

During the year, we summarized the experience, studied new trends and requirements in poverty alleviation, and developed the "network + poverty alleviation" model based on the "1 + 3 + X" system, focusing on the network-based poverty alleviation model and implemented poverty alleviation programs in education, health care, livelihood, industry, consumption, etc. with support in terms of organization, funding and talents. In 2019, our parent company was recognized as one of the best performers in the targeted poverty alleviation assessment by the central government, 13 provincial subsidiaries were recognized as provincial-level poverty alleviation models, and 8 provincial subsidiaries received the top-level rating in the provincial poverty alleviation annual assessment.

Network + Poverty Alleviation "1+3+X" System
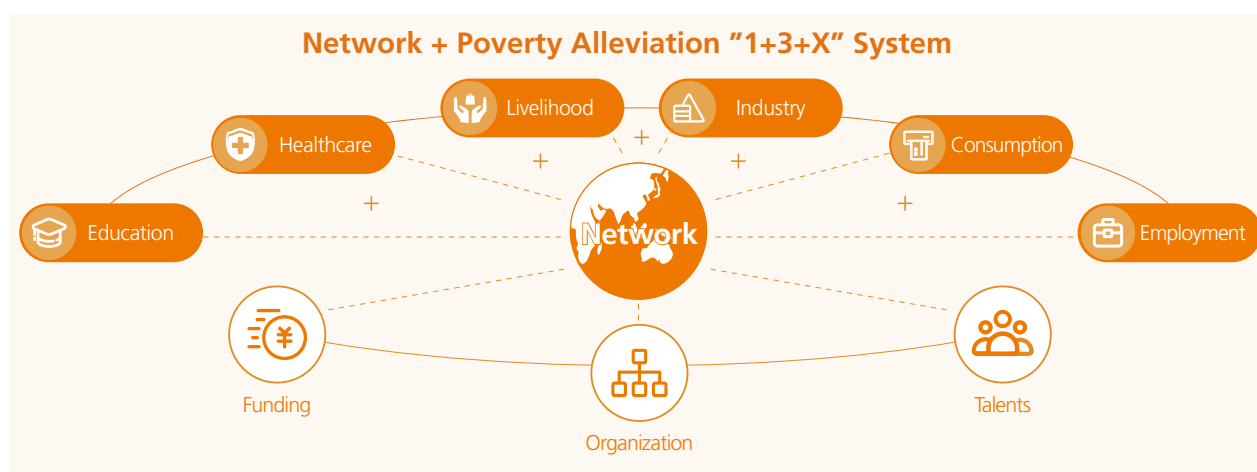
Strengthening Organizational Support

We established a three-tier mechanism, under which "the Group coordinates, provincial subsidiaries manage, and city/prefectural branches and poverty alleviation volunteers implement", and a collaboration mechanism consisting of "task allocation and implementation, supervision and notification, and assessment and accountability". Meanwhile, we cooperated with our parent company and arranged nine provincial subsidiaries in eastern China to support the six targeted counties, and mobilized all employees and 1 billion customers to participate in poverty alleviation.

Promoting Poverty Alleviation Officers

We have been cooperating with our parent company, undertaking the poverty alleviation work and providing pair support in the 8 poverty counties of 5 provinces, such as the "three regions and three prefectures", and covering the poverty alleviation work in 1,767 counties, townships and villages designated by local government since 2002; and dispatched 4,425 employees (2,200 employees on duty in 2019) working at the front line of poverty alleviation full time. One of the poverty alleviation volunteers, Duan Yuping, was recognized as the highest award in poverty alleviation in China, while other 24 received provincial-level poverty alleviation awards.

Prioritizing Poverty Alleviation Funds

Our parent company gave priority to funding poverty programs in areas with extreme poverty and areas lacking basic livelihood, education, health care and housing conditions, and donated a total of RMB290 million in 2019 with approximately RMB55 million of in-kind donations; and invested RMB1.1 billion, totaling RMB1.6 billion cumulatively, in the Central Enterprise Poverty Support Industry Investment Fund.

Promoting Poverty Alleviation in Different Fields

We integrated network poverty alleviation with efforts in other fields, such as education, language, culture, health, consumption, industry and employment, and have achieved positive poverty alleviation results.

Building the Information Highway

We cooperated with our parent company and provided continuous support to improve telecommunications infrastructure in less-developed areas, having connected 127,000 townships with voice service and 72,000 villages with wireline broadband connection and 96% of archived poverty villages now have broadband connection cumulatively; actively promoted 4G and wireline broadband development in less-developed areas, with 98% of administrative villages have 4G network coverage; implemented the Phase-4 Telecommunications Universal Service Project and covered 4,564 administrative villages with 4G network; launched the Poverty Alleviation Service Package for archived poverty households, benefiting 9.95 million users; donated house-brand mobile phones to low-income households in Shule and Baisha; and have been donating Tibetan-Mandarin bilingual mobile phones for two years in collaboration with China Internet Development Foundation, benefiting 35,000 low-income Tibetan customers.

Major Breakthrough in Targeted Poverty Alleviation Areas

There are six targeted poverty alleviation counties for China Mobile, including Huanan and Tangyuan in Heilongjiang province, Akto, Shule and Luofu in Xinjiang Autonomous Region, and Baisha in Hainan Province ("six targeted counties"), among which the four counties in Xinjiang and Hainan are in extreme poverty. In 2019, we continued to cooperate with our parent company to support the poverty alleviation work in the six targeted counties and overfulfilled all targets for the targeted poverty alleviation commitment, including directly funding a total of RMB180 million, facilitating funding of RMB13.73 million, training 6,712 poverty alleviation volunteers and local residents, and purchasing and helping sell over RMB100 million worth of agricultural products from these counties. Among the six targeted counties, Huanan and Tangyuan were officially taken off the list of targeted poverty alleviation counties in May 2019, and Shule and Baisha were in the process of being taken off the list. A total of 78,000 people in the six targeted counties had successfully been removed from the registered poverty population list during the year.

Providing Mandarin Training for Ethnic Minorities for a Better Life

The lack of Mandarin skills severely limits the capability of ethnic minorities to get rid of poverty and develop their regional economy. To address this challenge, our Yunnan subsidiary developed the "1 + 3" information solution for Mandarin education, consisting of one core app, the "Mandarin for Poverty Alleviation" app, and three support systems in data traffic, marketing promotion and big data, to help more people learn Mandarin and gain access to more employment opportunities.

- **Efficiency:** Participated in developing the "Mandarin for Poverty Alleviation" app, which included functions such as character learning, daily dialogues, self-learning and other modules covering 1,000 daily phrases and 500 high-frequency vocabulary items in the local region.
- **Affordability:** Provided customized mobile phones for poverty alleviation training with preinstalled "Mandarin for Poverty Alleviation" app, and sponsored data subsidy and mobile device subsidy.

- **Accessibility:** Carried out the all-round promotion of the "Mandarin for Poverty Alleviation" app with the support of Yunnan China Mobile stores, social channels and village service points, and publicized successful cases and set up Mandarin-speaking model villages to encourage more people to use the app.
- **Measurability:** Retrieved app usage data from the big data platform to support the implementation of the programs in different locations.

As of the end of 2019, we had donated 20,000 mobile phones customized with the "Mandarin for Poverty Alleviation" app, and provided free in-app data for 120,000 users. The "Mandarin for Poverty Alleviation" app was used by 148,300 users, contributing to a relatively fast growth of their annual income.

In April 2019, our parent company signed the *Strategic Cooperation Framework of Promoting Mandarin Education for Poverty Alleviation* with the Ministry of Education, the Poverty Alleviation Office of the State Council, the State Language Commission and iFLYTEK in Kunming to promote the Yunnan experience nationwide.

"Now, I can write my own name, read some simple characters, and speak Mandarin. I like the 'Mandarin for Poverty Alleviation' app. It is convenient and practical. I can learn Mandarin and Chinese characters anytime and anywhere because of it."

—— Youli, Villager, Guquan Village, Nujiang Lisu Ethnic Minority Autonomous Prefecture

Villagers learning how to use the "Mandarin for Poverty Alleviation" app

Customized "China Mobile Education for Poverty Alleviation" mobile phone

Targeted Poverty Alleviation System

China Mobile developed the Targeted Poverty Alleviation System, and deployed the system in 92 cities and counties in 14 provinces to construct an ecosystem of targeted poverty alleviation, serving 8,169,000 low-income households and 741,000 poverty alleviation volunteers with its "one system and one mobile phone". In 2019, the Targeted Poverty Alleviation System was included in the "Global Showcases of Poverty Alleviation" at China International Forum on Poverty Alleviation.

With the Targeted Poverty Alleviation System, poverty alleviation volunteers can use their phones to scan the QR code outside each low-income household to access the details of the applicable poverty alleviation policies.

Promoting Education Equality with the "Internet + Education for Poverty Alleviation" Model

China Mobile has created the "dual teacher classroom solution" to promote the sharing of high-quality teaching courses and resources among schools and student households, allowing the less developed areas to improve their teaching quality with not only accessibility but also quality resources. Lack of available courses is not a bottleneck anymore. This new teaching model has effectively improved the education equality for the less developed areas.

In Jiangxi, we have deployed video hardware to connect rural teaching sites with central schools in urban areas, creating a Cloud Classroom that fully synchronizes the teaching processes at both ends of the educational support partnership with its remote teaching function. Its Cloud Homework function can support the rural children's after-school learning needs. The service is available to the 8.64 million primary and middle school students in Jiangxi, and we have provided the Cloud Homework service for free, together with free broadband service, to 300,000 students from low-income households.

In Sichuan, we have developed the model of "live streaming of courses of famous teachers + management software + intelligent hardware". In Gulin County, we have set up 45 virtual lecture rooms for teachers and 255 virtual classrooms for students, providing local students with quality traditional Chinese studies, music, art and other courses from experienced teachers in Beijing, Jiangsu and Zhejiang.

To date, the Company has deployed several hundred classrooms in the poverty-stricken areas in central and western China, benefiting nearly 10,000 students. In addition, we worked together with the Ministry of Education to jointly launch the campus broadband "Double Plan" to give primary and secondary schools in poverty-stricken areas free broadband service upgrade. In 2019, we provided Internet access to 2,460 schools from the "three regions and three prefectures", achieving a 30% increase in the Internet access rate.

Our Hainan subsidiary actively participated in passion fruit planting in Rongbang Village, Baisha Prefecture to support local poverty alleviation

Our Xizang subsidiary helped build greenhouses in Bangren Village in Aili Prefecture and improved local livelihood

Supporting Public Welfare

Since its founding in 2009, the China Mobile Charity Foundation has been adhering to its public welfare philosophy of "sincerity, commitment, harmony and sharing" in the last decade. Aiming at helping build a beautiful and inclusive society, the Foundation has implemented various programs to support the disadvantaged groups, promote education equality, support environmental protection, and provide emergency assistance in major disasters, etc.

The Foundation continuously improves its governance. It holds board meetings to decide on major issues twice a year, has developed and revised 11 rules and regulations such as the *Charter of China Mobile Charity Foundation*, and makes three-year plans on a rolling basis. Efforts have also been made to improve its informatization and information disclosure. In 2019, the Foundation continued to carry out its hallmark charity programs such as the Heart Caring Program and Blue Dream .

- Heart Caring Program – support for children with congenital heart disease in poverty: Since 2011, we have been providing free screening and treatment for children from poverty-stricken families with congenital heart disease. In 2019, we donated RMB17.8 million to implement the program, and successfully completed the Ningxia phase III, Guangxi phase III and Yunnan phase I new projects. Over the past 8 years, we have implemented the program in 10 provinces (regions), and provided free congenital heart disease screening for 54,968 children and free surgical treatment for 5,973 diagnosed children, with a cumulative donation of RMB178.6 million.

- Blue Dream – China Mobile Education Aid Plan: In 2019, we provided training to 11,556 principals from poverty-stricken areas and built 561 multimedia classrooms. Please see pages 28-29 for detail information.

- We also studied the actual needs of society and engaged in a variety of efforts focusing on the fields of poverty alleviation, community development, and elderly care and child care, helping serve poverty population, children, outdoor workers, elderly, disabled and other disadvantaged groups with programs such as the "And You" donation to support education, the "And Seedlings" volunteer teaching program, and the "Learning from Lei Feng" voluntary service activities. We continued to explore new models to empower public welfare with technology. In 2019, we worked together with the online news portal Toutiao and jointly launched the "Find You" public welfare program, donating 1,000 "Find Him/Her" positioning bracelets to elderly people with Alzheimer's disease.

Exploring Innovative Public Welfare Programs with Fun

The First Charity Platform for Internet Fans in China

In 2019, MIGU innovated the "Music + Public Welfare + Fan Group" model and created the first fan-based public welfare music platform in China. With the influence of celebrities and the enthusiasm of music fans in charity activities, MIGU launched an online charity challenge relay and organized on-site visits, providing young music fans with charitable activities to spread positive energy.

MIGU Music Class

MIGU Music Class was launched in 2017. By the end of 2019, it has entered more than 10 schools. Together with star artists, music college students and volunteers from all walks of life, the program has brought music classes and donated musical instruments, books and other items to more than 10,000 children in remote areas, contributing to the improvement of rural quality education.

Bring History Alive with Digitization

In 2019, MIGU and the China Museum Association jointly launched the Mobile Museum event, bringing together 130 national top museums to create a museum aggregation platform. Our Shaanxi subsidiary and MIGU cooperated with Shaanxi Provincial Bureau of Cultural Relics to jointly develop an "Internet + Cultural Heritage Education" platform with digital museums, museum campus tours and cultural documentaries. The platform has made available the excellent digital cultural contents from 87 partner museums to thousands of households with the support of mobile optical broadband network and Internet TV. As of the end of 2019, we had organized 28 themed activities in Shaanxi, including the Campus Han Costume Show, Intelligent Poverty Alleviation, etc. The 5 digital museums we established have attracted over 5 million views and become a platform for the younger generation to have close interaction with our cultural heritage.

In 2019, MIGU continued its efforts to support education. It developed the "Tongyue Project" client-side app, carried out charity sales and donation of the MIGU version of Kindle, and participated in a number of education charity programs in cooperation with various stakeholders. In the New Era Rural Reading Season program, the MIGU Read app has opened a section of free e-books to encourage more farmers to experience the convenience of digital reading, and help solve the "last mile" challenge of rural library service.

Caring for Takeaway Riders

With the rapid development of the mobile Internet, takeaway riders shuttling through the streets have become an ordinary part of urban life. Our Jiangsu subsidiary fully studied the needs of delivery workers and launched a charity campaign of "Caring for Young Riders and Building a Star City" in Changzhou City with three components to support takeaway riders.

Caring Plan: Upgraded the existing "Caring Station" for sanitary workers in 100 plus stores for use by takeaway riders, providing them with a shelter to rest with drinking water, first aid supplies and convenience tools. During rainy or snowy days, they could also take shelter or borrow raincoats. In each month, there was a "Rider Day" special event organized at five showcase caring stations, offering services such as free mobile phone screen protectors, free books and magazines borrowing to the riders.

Rate Plan: We launched preferential rate plans based on the special usage of riders to help them reduce expenses.

Empower Plan: We organized regular awareness-raising programs on communication technology and network security to improve riders' awareness of information security.

China Mobile Youth Rider Caring Station

Riders getting drinking water at the caring station

As of the end of
2019

Total number of registered employee volunteers
122,900

Total amount of employee volunteer service time
615,100 hours

Our Jilin subsidiary established its employee volunteer team 10 years ago and carried out a total of 33,816 hours of volunteering services to help the disabled, the elderly and families in need. In 2019, the volunteer team was awarded the title of "Advanced Collective for Assistance to the Disabled in China".

06 Promoting Coordinated Regional Development

Serving Regional Construction

In recent years, the government further deepened its coordinated regional development strategy and implemented a number of regional development plans, such as the *Master Plan of the Hebei Xiong'an New Area (2018-2035)*, the *Outline of the Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area*, the *Master Plan of the China (Hainan) Pilot Free Trade Zone*, and the *Outline of the Yangtze River Delta Regional Integrated Development Plan*, injecting strong impetus into the high-quality economic development of China. China Mobile actively implements the requirements of the relevant strategies. We have made special regional network plans in our annual network planning and promoted the sharing of regional network resources to support coordinated regional development.

Xiong'an New Area

- Completed the Phase 1 5G construction, helping the New Area build benchmark 5G network.
- Hosted a series of forums on 5G and smart city, and arranged over 600 experts (person-times) to participate in the formulation of smart city standards and programs.
- Support the inclusion of the New Area into the national backbone network.
- Preliminarily achieved "GB to the households and ten GBs to the enterprises" in the New Area.

Guangdong-Hong Kong-Macao Greater Bay Area

- Optimized the tariff plans and introduced the Guangdong, Hong Kong and Macao universal voice/data monthly packages. The average roaming data tariff in Hong Kong and Macao decreased by 33% compared to 2018.
- Facilitated the development of a regional collaboration and communication mechanism and the integrated development of international optical cable network, data center, smart park, 4G/5G wireless and various industry application platforms in the area, creating an optimized balance of resources and demand.
- Constructed the Zhuhai-Hong Kong cross-border cable and upgraded the Shenzhen-Hong Kong cross-border cable to enhance regional network transmission capacity.

Hainan Free Trade Zone

- Established the Hainan International Submarine Cable and Information Hub Construction Leading Group with Hainan provincial government, and started the preparation for the construction of the Hainan-Hong Kong Submarine Cable Project and the submarine cable from Hainan to the Maritime Silk Road countries.

Yangtze River Delta Region

- Built a regional high-speed data center system by solving the hotspot resource over-demand challenge with the coordinative planning of data center.

Our Hong Kong subsidiary, our Guangdong subsidiary, Macao Telecom and Guangdong Communication Industry Association jointly initiated the establishment of the Greater Bay Area 5G Industry Alliance ("the Alliance") in August 2019. The Alliance takes advantage of the 5G + industry chain in the Greater Bay Area, coordinates research of products and services, technological innovation and industry standards based on 5G technology, laying a solid foundation for the high-quality development of the Greater Bay Area.

Supporting the Belt and Road Initiative

From Chinese President Xi Jinping proposing the initiative to jointly build the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road" in 2013, to the release of *The Belt and Road Initiative: Progress, Contributions and Prospects* report in 2019, the Belt and Road Initiative has made concrete progress over the years in the areas of policy coordination, connectivity of infrastructure, unimpeded trade, financial integration, and closer people-to-people ties. It has received positive responses from more and more countries and international organizations, attracted wider attention internationally, and seen its impact grow steadily.

China Mobile has been actively participating in the construction of the Belt and Road Initiative. We established the Department of International Business in 2019, which is responsible for formulating our international development plan as well as the Belt and Road Initiative implementation plan, striving to help build a smooth "Information Silk Road" with measures such as promoting communication infrastructure connectivity and providing high-quality information and communication services.

Regarding the construction of international communication infrastructure, we continue to optimize the "road, station and island" network layout and promote the infrastructure construction in Belt and Road countries. We also lowered the tariffs accordingly. Among the Belt and Road Countries, 105 directions enjoy the RMB30 daily package for data and 119 directions enjoy the Belt and Road RMB1 daily package for voice calls. Moreover, we have achieved roaming settlement cooperation with almost all Belt and Road countries in Africa.

Road Information Highway (connecting resources)	Information Station (POPs)	Information Island Hub (data centers)
Promoting the construction of the Asia-Oceania and Asia-America undersea cables along the Belt and Road countries, and upgrading the capacity of various undersea cables and cross-border terrestrial cables.	Operating over 170 POPs globally, including 137 self-built nodes, covering over 60 Belt and Road countries and regions.	Data centers in Singapore and the UK have been completed and put into use; IDC resale partners grew to 23 during the year, covering 179 cities around the world.
Road	**Station**	**Island**

We launched the CMLink mobile service brand in overseas markets, providing local communication services in UK, Japan, Thailand, Canada, Singapore and other countries and regions, and global data Internet access services for business travelers with the CMLink global data card product. We also developed the OneLink and One Card Two Numbers platforms to better serve the needs of Internet of Things import and export business and realize the global connectivity of the Internet of Things.

Regarding industry cooperation, we took the initiative and launched the Hand-in-hand Program, aiming at providing customers with a high-speed, seamless, worry-free and borderless digital experience with a global Internet of low cost, high quality, fast delivery and wide coverage through international business and technical cooperation along the industry chain. In 2019, we introduced the 5G Initiative into the Hand-in-hand Program and developed the cooperation focusing on 5G + ecosystem, 5G + roaming, and 5G + IoT, with a vision to achieve all-win in the 5G era. 16 partners joined the initiative. With regard to the expansion of members, with Vietnamese telecom operator Viettel becoming the 26th member of Hand-in-hand Program in 2019, the program now covers more than 2.9 billion mobile users worldwide.

- *China Mobile's Improving Overseas Service Capabilities to Support Belt and Road Construction* won "2019 Sustainable Development Goals Enterprise Best Practices (Global Partnership)" Award by the UN Global Compact China Network.

07 Growing Together with Employees

Protecting Employees' Rights and Interests

China Mobile strictly abides by the laws and regulations related to the protection of the rights and interests of employees in China and overseas[1]. The Company adheres to the principle of equal pay for equal work, and forbids any form of child labor or forced labor. We provide our employees with social insurance and housing fund, and protect the legitimate rights and interests of our employees in various ways. We are committed to building a fair, just, flexible, efficient, harmonious and stable workplace.

Equal Employment Opportunity and Non-discrimination

- The *China Mobile Recruitment Management Measures* upholds the principles of openness, transparency, equality and fairness in recruitment, specifies that except for certain specific positions, there should be no discriminatory job requirements such as height, appearance, ethnicity, gender, etc., and strictly prohibits the use of child labor and forced labor.
- Adhering to relevant laws and regulations, our *Labor and Employment Management Regulations* specify that the two types of employment (contracted employees and dispatched employees) should be managed equally. It also specifies the management requirements regarding employment type, recruitment, labor contract management, working hours, leave and vacation, employee exit, etc.

Protection of Democratic Rights and Interests

- We uphold the employees' freedom of association and the rights of collective bargaining, and maintain smooth communication with employees in a number of ways, such as the CEO mailbox, employee hotline, employee forum, and employee representative meeting. All of our provincial subsidiaries have signed collective equal bargaining contracts with 100% of employees.
- We fully protect the employees' rights to know, participate, express and supervise, organize topic-based trainings on rights protection, and conduct trainings for the managers working on rights protection.
- We implement the "Female Rights Protection" program to help female employees better safeguard their legitimate rights. We strictly comply with the collective contracts and the special contracts for female employees, and monitor the compliance with labor contracts and labor protection laws and regulations. We care for women's needs and 100% of our female employees at the headquarters have returned to work after maternity leave.

Workplace Safety Management

- We strictly implement the workplace safety accountability system, establish and continuously optimize safety management policies, thoroughly identify safety hazards, invest in safety precaution facilities, so as to create a safe and healthy workplace for employees.
- We ensure labor safety supplies and gears are properly prepared and managed. We also provide guidance and supervision to our employees in relation to personal safety protection during production to guarantee the safety and health of employees.
- We conduct full-coverage, multi-channel and high-quality safety training and education to raise the safety awareness and capabilities of employees, both at work and in their daily life, to prevent safety accidents.

1: The Company abides by the following laws and regulations regarding employee recruitment and employment: the *Labor Law of China*, the *Labor Contract Law of China*, the *Ban on Using Child Labor*, the *Special Provisions on Labor Protection of Female Employees*, the *Women's Rights Protection Law of China*, and the *Law on Occupational Disease Prevention of China*, etc.

- Recognized as one of the "2019 Top 10 Best Employers" at the 2019 Best Employer of China Award event jointly organized by Zhaopin.com and the Institute of Social Science Survey, Peking University.
- Received the "2019 Top 100 Model Employers in China" Award and the "2019 Employer Brand Management Model" Award at the China Model Employer Award event.
- Received the "Best Employer Brand Value Award" at the 4th China Talent Selection Award event.

Supporting Employee Career Development

China Mobile is committed to providing a broad development platform and space for its employees and cultivating outstanding talents it needs to become a world-class enterprise. In terms of salary and incentive, we have implemented the salary system reform focusing on "performance orientation and structural adjustment". We issued the *China Mobile Salary and Incentive Policy in 2019*, which specifies a variety of incentive policies for key talents, including incentive for internalized core capabilities for backbones, incentive for technological innovation, annuity incentive for outstanding employees, periodic incentive on total salary, equity and dividend incentive for technology enterprises, share option incentive scheme, etc. We have also organized a number of competitions to commend the employees who have made outstanding contributions at work or in public welfare activities.

China Mobile Craftsman

In 2019, to cultivate outstanding talents within the Company, we organized the China Mobile Craftsman competition to commend employees who have been working in ordinary positions but have made extraordinary contributions. 200 employees won the China Mobile Craftsman honorary title.

Employees who won the 2019 China Mobile Craftsman title

Please scan the QR code to read the stories of the China Mobile Craftsman

The Most Beautiful Mobilers

The Company continued to organize the annual Most Beautiful Mobilers election to encourage all employees to learn from the employees selected for their outstanding merits, including dedication, innovation spirit, perseverance, hard work, care for society and willingness to serve the people.

Representatives from The Most Beautiful Mobilers sharing their stories

Please scan the QR code to read the stories of this year's Most Beautiful Mobilers

China Mobile Philanthropy Stars of the Year

Ruan Zhengyu is an employee of Qianjiang Branch of our Chongqing subsidiary. In 2010, he started participating in the Company's poverty alleviation efforts. He organized the establishment of planting bases of traditional Chinese herbs, pumpkin, mustard tuber, etc., and proactively help the farmers sell their products. In addition, he studied the Company's poverty alleviation policy regarding communication services, and leveraged these services to guide the farmers to increase their income with entrepreneurship and help them solve the practical difficulties in production as well as in daily life.

Zhang You is an employee of Yicheng Branch of our Shandong subsidiary. In 2010, he joined the Yicheng Volunteer Association. Since then, he has participated in more than 100 public welfare activities, including multiple times of blood drives, at which he donated a total of 3,800 milliliters of blood. With 9 years of persistence, he has demonstrated the spirit for public welfare by practising what he preaches.

Liang Zhongping is an employee of Yuhang Branch of our Zhejiang subsidiary. As the team leader of the Liangzhu Museum Volunteer Service, he and his team members have provided over 80,000 hours of volunteer guide services to tourists in their own spare time. He also helped apply China Mobile's 5G technology in the Liangzhu National Heritage Park, creating an experience of going back in history for visitors with 5G technology.

Regarding employee training, we implemented the New Drivers Capacity Enhancement Master Plan to provide effective support to the "Powerhouse" strategy of the Company. Meanwhile, we developed curriculum resources in an efficient way, created plenty of opportunities for our internal trainers, and carried out various unique training activities for employees at different levels.

New Drivers Capacity Enhancement Master Plan

Empowering All Employees

Organized the "5G+ General Knowledge Learning for All" event for all technical employees, focusing on 5G + AICDE essential knowledge and know-how to systematically update the knowledge across the entire organization.

Reshaping the Skills of Core Talents

Developed a multi-field, multi-layer capability system for "Cloud Reform" and 5G core technology talents, used skills map, learning path map and skill certification as the starting point to accumulate training resources progressively, and used practical training as an effective and targeted way to deal with the lack of core capabilities needed in the transformation.

Improving the Capability of the Front-Line Employees

Developed a tiered curriculum system for business customer managers, grid managers and store managers with both online and offline courses, strengthening the systematic training for front line employees.

Senior Management

- Organized 5 senior management seminars and formulated themed research reports as reference for management decision-making.
- Carried out the leadership development program for new senior deputy management to help them improve management efficiency.
- Organized special training on finance, discipline inspection and other functions to improve the business capability of senior management.

Mid-level Management

- Implemented the Pair Support Action Plan to help solve practical problems in operations.
- Organized demonstration classes for key management staff of subsidiaries at prefecture level focusing on strategy implementation and day-to-day organization skills, and provided online courses to approximately 1,700 management staff members in companies at prefecture-level to improve their overall capabilities.

Employees

- Developed annual key training plans for technology, marketing and other functions, and carried out over 200 onsite training programs for core business personnel at the Group headquarters.
- Carried out the "3-3-3" Leapfrog Growth Program for channel managers, providing them with the innovative "systematic training + practical training" model, and a capability model and a curriculum system specially designed for channel managers.
- Provided online learning opportunities through online universities to help employees improve their professional skills and teamwork, with a total participation of more than 450,000 persons.

We continued to carry out the skill certification of financial, user experience and network maintenance personnel. In 2019, we organized more than 400 skill certification exams and 140,000 person-times had passed.

- The China Mobile Academy won the "Advanced Enterprise University" Award of China Enterprise Executive Training and Development Alliance.
- The China Mobile Academy won the "Best Corporate University of China 2019" Award in China's Best Corporate University ranking.
- The China Mobile Academy's Network Operation and Maintenance Technical Talent Training and Certification Program won the 2019 ATD Excellence Practice Award by the Association of Talent Development.

New retail training for channel personnel at "Burning Ice Action" in Jiangsu

Home broadband training in Shaanxi

Network and support personnel operation skills competition in Anhui

Capacity building training for core backbone employees in Hunan

Caring for Employees' Work-life Balance

China Mobile strives to create a working environment conducive to physical and mental health and well-being for its employees, pays attention to the work life balance of employees, and strives to continuously improve employee satisfaction.

"Happiness 1+1" Employee Care Program	The program was launched in 2015, encouraging employees to pick up "1" sport activity and cultivate "1" hobby. In 2019, we launched a variety of activities under the program, including walking, running, hiking, tree planting, mobile photography exhibition, calligraphy and painting exhibition, etc., covering 395,000 employees of the Company.
"Five Smalls" Employee Caring Project	We continuously improve the facilities at our workplace of our companies at county (municipal) and lower level, such as equipment at dining area, water dispenser area, washroom, changing room, lounge, learning area, etc., to provide a comfortable working environment for employees. In 2016, we launched the "Five Smalls" Employee Caring Project and started creating a homelike atmosphere for employees with small canteen, small bathroom, small lounge, small activity room and small reading room. In 2019, we spent RMB469 million to comprehensively improve the workplace conditions in grass-roots units, with priority given to locations in less developed areas with hard conditions and inadequate infrastructure.
Employee Assistance Program (EAP)	We have been offering EAP programs for 14 consecutive years. We have organized a variety of forums, work sharing sessions and training courses, and accumulated rich experience in crisis intervention and training of specialists. In 2019, 31 provincial subsidiaries and 20 professional units had established EAP programs, covering over 320,000 employees, and having cumulatively trained a total of 3,093 EAP specialists and set up 120 stress rooms, care rooms and other places.
Medical Care	We provide regular physical examinations with examination reports issued for all employees, and conduct health lectures and health consultation services. In 2019, 97% of our employees participated in the free medical examinations we offered. We also use relief fund, medical insurance and employee mutual aid to help employees with severe disease or personal difficulties.
Disaster Relief	We have increased the amount and the response speed for emergency support. In 2019, we gave out a total of RMB2.8 million to support employees of 10 units who were affected by disasters such as floods and typhoons, bringing them the timely care from the Company.

Caring for Mental Health of Employees in Hubei

In order to alleviate the psychological stress caused by the long lock-down due to the outbreak of COVID-19, our Hubei subsidiary promptly optimized the EAP work plan and actively provided psychological support for its employees.

- Strengthened mental health education, integrated various resources to provide online lectures for 19 times on prevention knowledge and psychological assistance on the online university platform, and launched an online EAP psychological mini-lecture series with over 8,000 views.

- Established a dedicated psychological counseling hotline for employees, which had handled over 40 consultations for a total duration of over 2,000 minutes.

- Strengthened the efforts of employee care, gave out RMB510,000 as special subsidies to infected employees, gave out RMB334,000 as relief money to quarantined employees and their families, organized front-line staff support activities for 4,552 person-times, and distributed materials valued at RMB1.63 million.

- Over 6,000 employees participated in the online epidemic time psychological self-assessment, where participants with certain conditions received timely follow-up calls and targeted consultation.

Summer program for children of employees in Shanghai

The Fourth "Happiness 1+1" Employee Games in Xinjiang

Summary of Our Key Performances

Our Achievements in 2019

- Developed the "network + poverty alleviation" model based on "1+3+X" system, with our parent company investing RMB760 million in targeted poverty alleviation and dispatched 4,425 poverty alleviation volunteers to promote poverty alleviation support in the fields of education, health care and livelihood. Huanan and Tangyuan were officially taken off the list of targeted poverty alleviation counties in May 2019.

- Continued to carry out our brand public welfare programs such as the Blue Dream Education Aid Plan and the Heart Caring Program, innovated on project commencement modes based on social needs and development trends, and encouraged employees to participate in volunteering activities. As of the end of 2019, the China Mobile Charity Foundation had donated RMB356 million cumulatively.

- Actively participated in the implementation of regional coordination and development strategies, promoted the development of the Belt and Road Initiative and strove to build a smooth "Information Silk Road".

- Upheld the principle of equal opportunity and no discrimination in employment, strictly safeguarded the legitimate rights of employees, provided employees with unimpeded career development channels and a comprehensive training system, protected employees, health and safety, and made efforts to help employees maintain work-life balance. In 2019, the Company provided training to its employees for 1.825 million person-times.

Our Goals for 2020 and Beyond

- To promote the "network + poverty alleviation" model based on the "1+3+X" system in an all-around way, give priority to support areas in extreme poverty, and provide continuous support to ensure the counties newly taken off the list of targeted poverty alleviation counties do not slip back to poverty; to adhere to the requirements of the Rural Revitalization Strategy, vigorously promote poverty alleviation through developing local industries and information solutions, and improve the quality of poverty alleviation.

- To further increase our support to less developed areas in western China, integrate our brand public welfare programs with battling poverty alleviation efforts, and give priority to address the needs for aid and education of areas in extreme poverty.

- To deepen our implementation of coordinated regional development strategies and the Belt and Road Initiative, continue to improve regional network infrastructure, strengthen communication business cooperation, and build a high-quality information highway.

- To optimize the career development path closely related to capability development and performance evaluation, strive to establish an employee career development system that provide smooth vertical and flexible horizontal mobilities and clear career path, and provide employees of different categories with a multi-dimensional career development space; to implement the "New Drivers Capacity Enhancement Master Plan", and carry out the company-wide "CHBN Knowledge Empowerment Action" to encourage all employees to deepen their understanding of general knowledge related to 5G+.

Key Performance Indicators

Public Welfare

Indicators	2017	2018	2019
Cumulative donation made by China Mobile Charity Foundation (RMB10,000)	27,225	31,055	35,590
Total number of registered employee volunteers (10,000)	11.10	13.59	12.29
Total amount of employee volunteer service time (10,000 hours)	56.80	56.76	61.51
Cumulative number of impoverished children to receive free congenital heart disease screenings	39,488	45,648	54,968
Cumulative number of assisted children in poverty who suffered from congenital heart disease	4,498	5,358	5,973
Cumulative number of multimedia classrooms built	2,030	2,302	2,863
Cumulative number of principals of rural primary and secondary schools trained	103,828	115,782	127,338

Employment and Diversity

Indicators	2017	2018	2019
Total number of employees [1]	464,656	459,152	456,239
Number of jobs created (10,000)	260	288	268
Human Resource Composition			
Percentage of technical personnel (%)	23.34	25.18	27.13
Percentage of marketing personnel (%)	56.56	55.17	53.27
Percentage of management personnel (%)	7.25	7.29	7.51
Percentage of general affairs personnel (%)	10.09	10.50	10.64
Percentage of other personnel (%)	2.76	1.86	1.45
Diversity [2]			
Number of employees in Mainland China			454,298
Number of employees in Hong Kong, Macau, Taiwan and overseas markets			1,941

Indicators	2017	2018	2019
Percentage of employees under 30 years of age (%)	29.62	24.35	19.76
Percentage of employees between 30 and 50 years of age (%)	65.95	71.13	75.33
Percentage of employees over 50 years of age (%)	4.43	4.52	4.91
Percentage of female employees (%)	55.11	53.17	53.94
Percentage of female employees at senior management level (%)	13.18	16.45	16.40
Ethnic minorities as a percentage of total employees (%)	6.83	7.03	7.07
Percentage of local employees in our Hong Kong subsidiary (%)	89.4	89.5	88.5
Percentage of local employees at management level in our Hong Kong subsidiary (%)	75.0	71.2	66.7
Employee Turnover [2]			
Total number of newly hired employees	27,011	20,259	23,727
Number of female employees newly hired	14,194	8,397	10,122
Number of male employees newly hired	12,817	11,862	13,605
Total number of resigned employees	14,831	18,217	13,161
Number of resigned female employees	8,242	9,411	7,375
Number of resigned male employees	6,589	8,806	5,786
Total number of dismissed employees	925	1,317	1,401
Number of female employees dismissed	589	888	949
Number of male employees dismissed	336	429	452
Turnover rate of employees under 30 years of age (%)	2.24	1.55	1.42
Turnover rate of employees between 30 and 50 years of age (%)	1.59	2.56	1.55
Employee turnover of employees over 50 years of age (%)	0.21	0.15	0.05
Female employee turnover rate (%)	—	2.05	1.63
Male employee turnover rate (%)	—	1.92	1.40
Employee Rights			
Percentage of contracted employees who are labor union members (%)	100	100	100

Indicators	2017	2018	2019
Percentage of dispatched employees who are labor union members (%)	98	98	98

Notes:
1. All employees of the Company during the year are full-time, and no part-time employees are hired.
2. The indicators under Diversity and Employee Turnover are based on the number of on-post employees at the end of 2019. The employee turnover refers to resigned employees.

Employee Training

Indicators	2017	2018	2019
Training expense per employee (RMB)	1,717	1,892	2,004
Number of person-times trained (10,000 person-times)	183.9	182.1	182.5
Number of senior management trained (person-times)	986	1,047	1,237
Number of middle-level management trained (person-times)	28,669	18,744	22,357
Number of general employees trained (10,000 person-times)	181.0	180.1	180.2
Average training time per employee (hours)	88.5	100.8	105.7
Average training time per senior management (hours)	106.9	106.0	107.4
Average training time per middle-level manager (hours)	88.1	109.5	114.2
Average training time per general employee (hours)	88.6	100.7	105.6
Training participation rate of senior management (%)			98.7
Training participation rate of middle-level management (%)			95.8
Training participation rate of general employees (%)			98.6
Average Online University study time per employee (hours)	50.0	53.6	65.3
Number of mobile Online University users via mobile phone (10,000)	29.1	34.5	36.8

Employee Health and Workplace Safety

Indicators	2017	2018	2019
Total investment in workplace safety (RMB100 million)	21.09	23.24	24.07
Number of safety emergency drills	1,250	1,225	1,230
Participation rate in safety emergency drills (%)	86.0	86.0	86.3
Accident fatality rate per 1,000 employees (%)	0.004	0.004	0
Number of fatalities caused by workplace safety incidents	2	2	0

Jointly Shaping

a Harmonious Ecology

Sustainability Context

Safeguarding Lucid Waters and Lush Mountains with Smart Applications

Climate change has become a challenge facing all countries. The Chinese government earnestly fulfils its obligations under the *United Nations Framework Convention on Climate Change* and the *Paris Agreement*, incorporates the construction of an ecological civilization into the overall national development planning, and thoroughly implements three major action plans for the prevention and control of atmospheric, water and soil pollution. Based on a sustainable consumption and production model, China has contributed significantly to the realization of the relevant United Nations Sustainable Development Goals. One of the contributions lies in the ICT sector, which plays a key role in monitoring climate change, mitigating and adapting to its impact, and promoting society's transformation to a green circular economy. At the same time, with the continuous evolution and development of 5G technology, how the ICT industry seeks a balance between the surge in energy demand and low-carbon development has also been placed under the spotlight.

Adhering to the ecological civilization philosophy of "Lucid waters and lush mountains are invaluable assets", China Mobile is committed to pursuing green and environmentally friendly development. While leveraging our industry advantages and actively managing our own environmental footprint, we continue to innovate the methods and means of applying ICT to environmental protection as we join hands with all sectors of society to contribute to minimizing environmental pollution.

In the Yunzhongshan Nature Reserve of Anxi, Fujian province, there is a magical pair of "eyes": they can detect forest pests and instantly prompt the conservation department to take treatment measures; when the rangers handle withered trees, they can then connect them with experts for "zero distance" guidance; and they can also swiftly detect forest fires and send the fastest warnings to the forest department.

This pair of "eyes" is called the Yunzhongshan Nature Reserve Information System, which has been tailor-made for the provincial-level Yunzhongshan Nature Reserve by our Fujian subsidiary. Relying on 4G, cloud computing, Global Positioning System (GPS) and other information technologies, the system supports a range of management functions such as personnel positioning and dispatching, real-time monitoring of key locations, processing of captured images, and SMS alert and publicity, and diligently performs its duties to protect the local environment.

A Smart "Housekeeper" for Forest Monitoring

Located in the mountainous area of Anxi County, the expansive Yunzhongshan Nature Reserve is home to many precious animals and plants and requires intensive efforts to patrol and protect the forest. The Yunzhongshan Nature Reserve Information System enables a full range of functions such as ranger management, video surveillance and mobile resource monitoring. Different from traditional forest protection that relies on manual labor, the system has digitalized the alerting and monitoring of forest fires and disasters with the monitoring command center as the core and digital communication as the means.

The system divides up the entire scenic area and sets up electronic fences. GPS positioning and historical movement tracing enable assessment and management of the rangers at any time; forest fires are monitored in real time through remote monitoring of key areas and intersections using the video surveillance system.

At the same time, the system uploads pictures taken by the thermal imaging monitors to the monitoring center through the mobile resource monitoring system. Those pictures enable the Reserve to collect and analyze information of passing rare animals and provide clues about poaching and smuggling of wild animals and plants, leading to markedly enhanced efficiency and precision in solving cases and effectively deterring illegal activities.

This system has been of enormous help to Yunzhongshan rangers. Not long ago, tea farmers in the Reserve set the tea trees on fire as they attempted to plant fruit trees in the tea garden. The system detected the smoke when the fire began to develop and sent out an immediate early warning, which prompted the forest protection department to quickly rush to the scene and stop a forest fire from happening. This spring, the system detected some hunters hunting in the mountain at night. The rangers immediately joined forces with the forest police to take protection actions and conducted timely investigations in surrounding villages, which served as an effective deterrent.
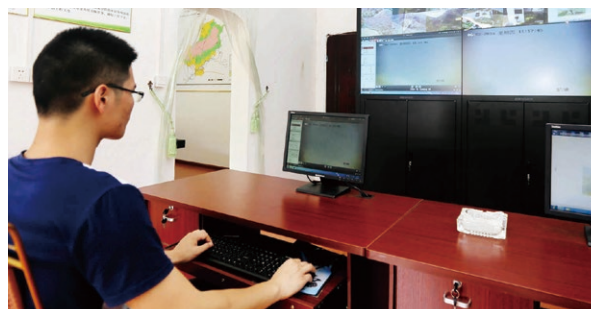
With the help of the System, the ranger is dedicated to safeguarding the Yunzhongshan Nature Reserve

Real-time HD video surveillance at each important location of the Yunzhongshan Nature Reserve area

A Smart "Helper" to Daily Forest Patrols

The Yunzhongshan Nature Reserve Information System is mainly composed of the monitoring command center, long-distance video surveillance, resource monitoring wireless image-capturing, and ranger movement tracing. In addition to smart monitoring in the forest areas, there is also a smart patrol "good helper" for frontline rangers.

This "good helper", called the "Smart Ranger Patrol System", was specially developed for Yunzhongshan forest preservation inspections. During the inspections, the rangers can take photos or videos with the built-in camera of specially-made mobile phones, which are uploaded to the cloud in real time. By analyzing the uploaded data, the monitoring center can accurately detect cases of illegal forest logging and provide scientific guidance on pest control and forest preservation. In the event of an emergency, the rangers can also use a one-click SOS alarm to quickly locate the incident, which safeguards their safety and guarantees highly effective firefighting efforts.

Ranger using the Smart Ranger Patrol System
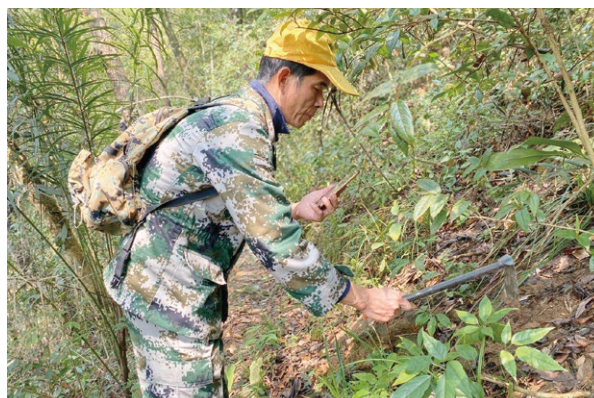
Real-time video communication with ranger

"This system can help us report situations discovered during the patrol to the back-office staff in time. For example, when we discover abnormal conditions such as fallen trees, suspicious animal access, insect disasters, fires, etc., we can use the platform to report information automatically with precise geographic location to facilitate work while ensuring our personal safety."

—— Lin Fuxiang, Ranger

"A few days ago, we communicated in real time over the treatment of a few withered trees, which were found by some rangers during a patrol. We immediately set up a dedicated line to have the rangers communicate with forestry experts in real time via a video link, and provided proper treatment of the trees."

—— Shen Jinquan, Director of the Management Committee of the Yunzhongshan Nature Reserve Area

As of the end of 2019, we had equipped all the rangers with the patrol system, enabling protection of over 3,000 hectares of forests.
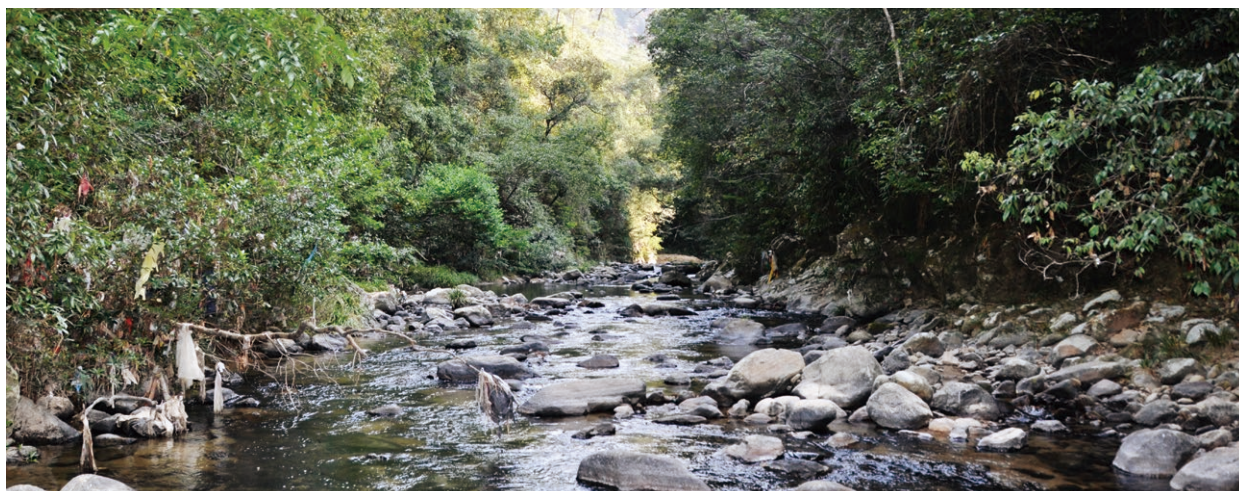
Innovating Environmental Applications

In the past years, China Mobile has put into practice the green development concepts and strives to make the sky bluer, water greener, and mountain lusher by promoting ecological construction with information-based means. The Company has launched exploration of IoT application in many fields across China, such as smart logistics, smart transportation, smart lighting and smart factories, using IoT technology to help all sectors effectively reduce greenhouse gas (GHG) emissions.

Window of Ecology, Contributing to Clearer Water

With a view to better protecting the lakes, wetlands and meadow ecosystem in Sanjiangyuan region, our Qinghai subsidiary and the Qinghai Provincial Environmental Protection Department jointly launched the Qinghai "Window of Ecology" project, and established a provincial observation and control platform, an on-site video observation system at observation points for key ecological function areas and typical locations, an audio and video connection system, and dedicated long-distance transmission networks. The project enables remote and real-time HD video observation, monitoring, and research and assessment of the ecological types, natural landscapes, wildlife and biodiversity in the five major ecological regions of Qinghai based on 35 observation points deployed throughout the province. A unified, complete, authoritative and efficient ecological environment monitoring network has thus been constructed, guaranteeing better refined management of environmental protection efforts.

Technology Empowering Garbage Sorting for a Green Life

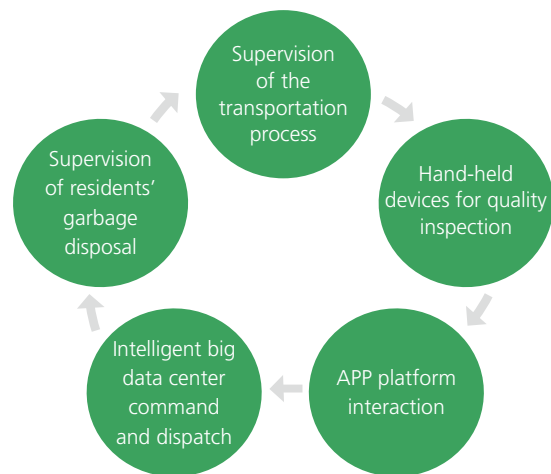Closely following governmental requirements for environmental protection, our Beijing subsidiary introduced a full-process garbage sorting supervision program based on its independent R&D and local integration capabilities.

- **Supervision of the transportation process:** It tracks garbage trucks in real time and plans the collection and transportation routes and personnel workload in a rational and effective manner to improve work efficiency.

- **Supervision of residents' garbage disposal:** The AI smart garbage bins placed in the community allow registered residents to throw in garbage based on face recognition; the residents can also scan a QR code to acquire knowledge on garbage sorting and earn points by throwing in garbage, which can be exchanged for rewards. The residents can also see their rankings on the data analysis platform and learn about the impact of garbage sorting on the environment.

- **Intelligent big data center command and dispatch:** It enables timely collection of data about the whole process of garbage disposal, collection, transportation and processing and the flow of garbage to prevent the sorted garbage from being mixed again on the back end.

- **APP platform interaction:** It promptly publishes monitoring data via the public service app and interactive coordination platform, and has channels in place to offer consultation and receive complaints, suggestions and feedback from residents.

- **Hand-held devices for quality inspection:** These devices allow sanitation workers to enter information such as the type of garbage, and offer intelligent means to reduce their workload such as the smart sorting system and smart inspection app.

Supervision of the transportation process → Hand-held devices for quality inspection → APP platform interaction → Intelligent big data center command and dispatch → Supervision of residents' garbage disposal

At present, the full-process garbage sorting supervision services have been piloted in Miyun District and Dongcheng District of Beijing, increasing the decontamination, reuse and recycling rate of garbage in those two districts from 65% to 100%. In the future, we will further improve the functions and promote nationwide adoption of the services to contribute to garbage reuse and recycling.

Smart garbage bins

Garbage sorting mobile app

Spreading Green Ideas

Our Energy Conservation Awareness Week continued in 2019. We fully played to our strengths and disseminated low-carbon and green concepts among our stakeholders such as employees, customers and the general public through activities like carbon emissions calculation, "And Machine Swap Service" (the trade-in of old mobile phones for new ones and recycling and refurbishing of optical modems and set top boxes), "Green Box by Your Side" (recycling of used phones, batteries and accessories), Green Life Photography Exhibition, and the publication of the *Special Issue on Energy Conservation Awareness*.

Scan the QR code to watch China Mobile 2019 Energy Conservation Awareness Week proposal

Scan the QR code to learn more about China Mobile Green Action Plan

Various Green and Environmental Protection Awareness Activities

In Liaoning, our employees made office supplies and daily necessities with waste paper and made vases and unique pen holders and storage boxes with waste newspapers, cultivating a sound atmosphere of energy consumption and low carbon.

In Sichuan, we carried out a number of activities such as garbage sorting and recycling, green running and urban "scanning", calling on our employees customers and partners to cultivate an environmental awareness in their daily work and life.

In Shanxi, we initiated the hand-drawn energy consumption awareness posters event themed "Energy Conservation by My Side" at our business stores in Taiyuan and Yuncheng, promoting green ideas to our customers through delicately drawn posters.

Helping Build Green Urban Homes

"Green Shanghai with You" is a strategic public welfare brand of our Shanghai subsidiary. It works with government agencies and runs diversified programs with a view to intensifying residents' awareness and actions for loving, protecting and appreciating the environment. Our Shanghai subsidiary hosted a number of environmental protection volunteering campaigns in 2019, which were very well received by the public.

- Charity Run in Celebration of China's 70th Birthday: We supported activities such as "Scent of Books Exchange for Scent of Flowers" and "One Child and One Tree" at the Charity Run event to allow residents to experience the environmental protection and public welfare concept of "Green Life Starts With Me".

- Close-to-nature Family Activity: The event allowed parents and children to experience the wonderful and magical relationship between plants and insects in nature together by watching the "One Flower One World" painting exhibition. The "Garbage Sorting" family game further strengthened children's awareness of garbage sorting.

- Care Activities on Campus: Gifts like ecology photographs and flowers were given to mentally challenged students in the supplementary reading class of Xinzhuang elementary school; educational classes on environmental protection and guided outdoor appreciation courses were given to the private Yumiao Elementary School where the majority of the students were children of migrant workers, and our volunteers also conducted interactive prize quizzes and gave away free plant seeds.

Since the project was launched, our Shanghai subsidiary has won honors such as "Excellent Public Welfare Partner" and "Excellent Partner in Shanghai for Volunteer Tree Planting". In the future, our Shanghai subsidiary will continue to carry out environmental volunteering activities regularly and advocate environmental protection together with the public.


Charity run in celebration of China's 70th birthday

Green class at the private Yumiao Elementary School

09 Promoting Low Carbon, Circular Development

Coping with Climate Change

China Mobile actively responds to the challenges brought by climate change. We have established a circular management system covering all aspects of our operation, and made continuous efforts to improve our environmental performance and reduce our GHG emissions.
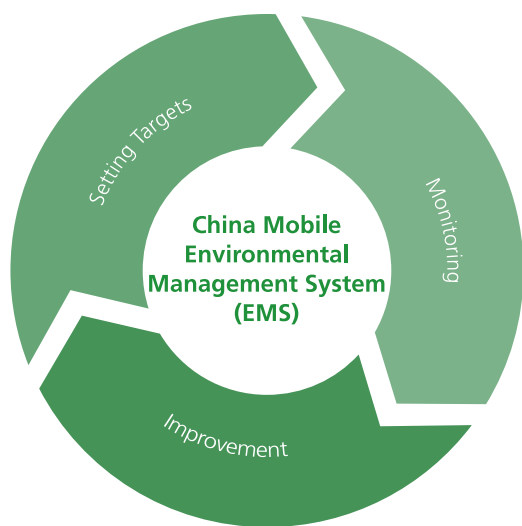
EMS Coverage: All aspects of our operations, including product operation and commercial facilities, selection of suppliers and service providers, research and development of new products and services, packaging and shipping, waste management, engineering design, new project construction, due diligence, daily office operations, etc.

Since the launch of the Green Action Plan in 2007, we compile the *China Mobile Green Action Plan Annual Priorities* every year, and allocate special funds for energy conservation and emission reduction to be used in energy saving renovations of communication base station, data center, office building, business stores, etc., thereby safeguarding the implementation of climate change related investment projects. We also vigorously promote energy conservation measures in technology and management and actively use renewable energy.

In 2019, we established the China Mobile Leading Group for Pollution Prevention and Energy Conservation as the main responsible body for ecological environmental protection and energy conservation, to ensure that solid progress is being made in pollution prevention and control as well as in energy conservation. We have formulated the *China Mobile's Management Measures for Prevention and Control of Environmental Pollution Risks* and the *China Mobile Management Measures for Energy Conservation*, laying out detailed regulations on the identification, prevention and remediation of the risk points of air, water, soil and other emissions in our operation activities, as well as detailed requirements regarding energy conservation and pollution prevention, including allocation of responsibilities, scope of work, prevention and control measures, functional management requirements and comprehensive evaluation system.

Climate Risks Faced by China Mobile and Our Responses

Risk Type	Risk Description	Response
Current or emerging laws and regulations	The requirements of laws and regulations regarding energy conservation and emission reduction, and carbon trading market become stricter	We closely follow changes in policies, laws and regulations, and promptly adjust our strategy and measures accordingly and arrange for the publicizing and implementation across the Group; quarterly calculate carbon emissions data and evaluate the cost of fulfilment and legal risk regarding non-fulfilment; and annually assess and ensure the consistency of our current internal management rules of carbon trading with the ETS regulations released by Beijing Municipal Commission of Development and Reform. In 2019, we successfully completed the tasks of submission of carbon emission report, third-party verification, carbon trading and compliance.
Legal	Risk of the counterparty default due to increase in carbon price	We regularly monitor carbon price fluctuation, and monthly evaluate the cost of fulfilment and the financial impact if the counterparty defaults.
Market	Risk of sudden expansion of network scale due to rapid user growth	We analyze the impact of network scale on energy consumption and greenhouse gas emissions and on our cost based on our annual internal planning.

Risk Type	Risk Description	Response
Reputation	Risk of government criticism or fine for unfulfilled carbon trading obligations	We conduct regular assessments on fulfilment risk, plan to include a contingency mechanism regarding non-fulfilment in our carbon trading management system, and assess the impact of reputation damage on the Company.
Acute physical	Damages to infrastructure and fixed assets due to extreme weather conditions	We built 46 super base stations in 2019 that can function under disaster conditions of earthquake, flood, typhoon or snow storm.
Chronic physical	Greater power consumption of equipment room due to global warming	We regularly evaluate and monitor the operation hours of A/C units in equipment room, and the impact on energy cost. We have also adopted energy-saving technology for main equipment in wireless network, transmission, IT/IP and core networks. We have implemented energy-saving upgrade of existing equipment rooms by using air-conditioning, power supply, lighting and other energy efficient technologies and products.
Upstream	Equipment with high energy consumption will use more energy	We issue equipment energy conservation grading standards to suppliers annually as part of the supplier assessment process, requiring equipment manufacturers to meet the requirement for product energy consumption and efficiency. During the procurement process, we strictly inspect the energy consumption and efficiency parameters of the equipment. Each year, we calculate and evaluate the energy consumption and financial impact of each supplier, and update the energy conservation grading standard to achieve greater emission reduction along our supply chain.
Downstream	Data center (IDC) leasing business increases energy consumption	We regularly make forecasts about the growth rate of the IDC business, and evaluate the related financial impacts such as operating cost and energy cost.
Technology	Existing low-carbon technologies cannot meet market and policy requirements	We regularly research the growth trend of our energy consumption every year based on policies or other management requirements. We also conduct cost analysis on the portion that exceeds the control targets, set energy saving and emission reduction targets for the current year, formulate the plan of technologies to be added or replaced as well as old or high energy consumption equipment to be replaced, and ensure the implementation by formulating relevant work and evaluation requirements. Meanwhile, we actively explore and apply the latest and most practical low-carbon technologies, closely follow industry trends related to energy-saving technologies and products, cooperate with research institutions to support long-term research on energy conservation, actively carry out pilot applications of new energy-saving technologies and products, regularly collect best practices in energy conservation and emission reduction from front-line units, and organize training and experience sharing on energy conservation and emission reduction.

In 2019, we modified more than 1,000 existing equipment rooms and data centers to make them more energy-saving and green, including optimization of air conditioning system and airflows, application of natural cooling sources, sleep function for power switches, and upgrade to high-efficiency power switches.

Building Green Data Centers

Huainan Data Center, located in Anhui Province, is the single largest data center in East China and a major energy user. We actively researched and innovated on green data center. In 2019, we filed 4 patent applications, laying a solid foundation for the transformation to become a clean and low-carbon data center.

- Fine management of equipment room cooling: We replace compressors with natural atmospheric cooling in autumn and winter, and use storage cooling in off-peak time in the middle of the day, realizing an annual power saving of over 12 million kWhs.

- Central air conditioning water treatment and pollution reduction system: The system monitors the water quality of water-cooled air conditioning units, and softens and treats the water automatically to increase the efficiency of heat exchange. The system can help reduce power consumption by 1.9 million kWhs and avoid the discharge of 20,000 cubic meters of sewage each year.

- Zero-power green testing system: The system can be used to run the full-capacity testing of new data center equipment rooms, to avoid the overheating problem associated with full-capacity operation.

- Smart and paperless equipment room maintenance system: Maintenance personnel swipe their NFC enabled mobile handsets over patrolling checkpoints, allowing accurate, automatic and closed-loop management and maintenance of data center infrastructure.

- AI precision refrigeration configuration assistant: We use AI technology to automatically adjust the configuration of refrigeration hardware based on the real-time operating conditions to improve refrigeration efficiency with precision and to lower A/C energy consumption.

- Equipment room airflow optimization: We modify the air duct and air baffle to ensure the isolation of hot and cold air in the equipment room to achieve accurate cooling.

Regarding the use of renewable energy, we actively promote the use of alternative new energy sources, such as solar energy, wind energy, water energy, hydrogen energy, etc. in areas with rich natural resources but insufficient supply of traditional energy. Xinyu Branch of our Jiangxi subsidiary utilized its unused rooftop space and built a 105kWp distributed solar power generation system, which generated 82,000 kWhs of power in 2019.

Regarding the construction of 5G base stations, we studied the energy consumption of 5G network in advance, and upgraded our enterprise equipment energy conservation grading standards accordingly during the early stage of network construction. In Jiangsu, we innovatively applied the liquid cooling technology, which could significantly reduce the PUE of base station to around 1.1, saving as much as 35% of energy compared with traditional base stations. At the 2019 Information and Communication Industry Conference on Energy Conservation and Emission Reduction, the 5G liquid cooling node technology was the only application technology of the Company selected for sharing, showcasing our leadership in the green application of 5G network.

In 2019, the Company had zero violation of environmental laws and regulations.

Driving Value Chain Green Transformation

While continuously developing and applying advanced energy-saving technologies, we are also committed to driving the green transformation of our value chain.

Green Procurement

In 2019, our paperless bidding process ran smoothly, achieving an annual paperless rate of 99.9% of all biddings. We continue to apply energy conservation grading standards, energy-saving technical requirements and green packaging grading standards for communication products in our equipment bidding and procurement. We also gave greater priority to energy conservation at the source, and significantly increased the weight of energy conservation performance in the technological assessment of the centralized procurement of 5G wireless equipment.

At the annual supplier reception day event, we focused on the theme of "Building a Green Supply Chain", publicized the green development concept to our suppliers, and shared with them our excellent cases to encourage them to work together with us to build a green planet for all.

Green Packaging

We cooperated with Apple Inc. to implement the mixed pallet upgrade project. During the initial sales of iPhone 11 series products, we upgraded the single-layer, single-model and mixed pallet model to the single-layer, multi-model, multi-category and mixed pallet model, using 15% less wood pallets. Meanwhile, our green packaging rate of newly procured main equipment reached 69%, saving 164,000 cubic meters of timber resources.

Reusing Optical Modems to Promote the Circular Economy

Optical modem is a low value optical fiber transmission equipment widely used in the installation of fiber optical broadband equipment. Retired optical modems are usually disposed of as waste. Our Hubei subsidiary launched the Optical Modem Recycle, Refurbish and Reuse project, established a dedicated team overseeing the process and a standard operation procedure manual that covers the entire process including code-scanning recycle registration, sorting and testing, cleaning, repairing, refurbishing, labeling and packaging. We also formulated quality inspection standards to ensure that the refurbished optical modems could function properly.

As of the end of 2019, we had delivered 387,600 refurbished optical modems and 180,000 set top boxes, saving RMB62.16 million from the purchase of optical modem and auxiliary supplies.

Managing Water Resources Consumption

The water used in our daily office and production operations mainly comes from centralized municipal water supplies. We do not have any risk of water resources.

We strictly abide by the relevant requirements of the *Water Law of China* and the *Water Pollution Control Law of China*, advocate water conservation, strictly control sewage discharge, and strive to reduce water consumption. In 2019, we continued to strengthen water management of equipment rooms, management facilities and stores. Our Ningxia subsidiary adopted wastewater recycling and reuse technology to treat and recycle the wastewater generated in the production center, and used it as supplementary water sources for vegetation irrigation and toilet flushing, reusing nearly 10,000 tonnes of wastewater on average each year.

Summary of Our Key Performances

Our Achievements in 2019

- Leveraged our expertise to innovate on ecological and environmental information applications.
- Established the China Mobile Leading Group for Pollution Prevention and Energy Conservation, continued to implement the Green Action Plan, and further optimized our environmental management system.
- Reduced our annual overall energy consumption per unit of information flow by 43% through measures such as energy saving renovations, innovative environmental applications and improvement in green operation.
- Implemented green procurement and promoted the green development of the supply chain, and increased our green packaging rate of newly procured main equipment to 69%.
- Reduced annual power consumption by 2.21 billion kWhs, equivalent to the reduction of 1.415 million tonnes of GHG emissions.
- Awarded the CDP (Carbon Disclosure Project) Global Leadership Level Company on climate change, and was one of the top-rated companies in Mainland China.

Our Goals for 2020 and Beyond

- To explore the means and ways to apply 5G technology for environmental protection, and continuously innovate on environmental applications.
- To reduce the overall energy consumption per unit of information flow by 15% and the overall energy consumption per unit of telecom business by 10% by 2020; to achieve a 60% or higher ratio of green packaging usage by 2020.
- To continue to promote green procurement and green logistics management, and establish a green supply chain system covering the whole procurement process, realizing fully paperless and electronic procurement in the next three years; to formulate scientific energy conservation and environmental protection targets, and encourage suppliers to enhance their social responsibility awareness; to promote the full-process application of green packaging, continue to strengthen reverse logistics, explore Radio Frequency Identification (RFID) embedded packaging, and realize the traceability of the whole process.
- To ensure that the year-on-year growth rate of our overall energy consumption and the year-on-year growth rate of our carbon emissions are lower than the growth rate of our network (connection) scale in the next five years.

Key Performance Indicators

Environmental Investment

Indicator	2017	2018	2019
Investment in Green Action Plan (RMB100 million)	1.4	1.9	1.6

Energy

Indicators	2017	2018	2019
Direct Energy Use			
Coal consumption (10,000 tonnes)	0.1	0.2	0.05
Gasoline consumption (million liters)	121.5	112.4	101.3
Diesel fuel consumption (million liters)	19.4	14.8	13.1
Natural gas consumption (million m³)	7.9	11.2	11.0

Indicators	2017	2018	2019
Coal gas consumption (million m³)	0.10	0.05	0.08
LPG consumption (100 tonnes)	3.1	2.7	2.3
Indirect Energy Use			
Total electricity consumption (100 GWhs)	223.3	244.7	264.0
Purchased heating costs (RMB million)	160.9	123.4	157.9
Energy Savings			
Total annual electricity savings (100 GWhs)	21.4	26.6	22.1
Equivalent annual cost savings (RMB100 million)	28.9	37.7	21.6

Indicators	2017	2018	2019
Equivalent annual GHG emission reduction (10,000 tonnes)	148.5	170.6	141.5
Overall energy consumption per unit of telecom business (kg standard coal/ RMB10,000)	21	10	6
Percentage decrease of overall energy consumption per unit of telecom business (%)	29	53	40
Reduction in overall energy consumption per unit of information flow (%)	40	57	43

Emissions

Indicators	2017	2018	2019
CO_2 emissions [1] (million tonnes)	15.98	16.17	17.32
Direct GHG emissions (Scope 1) (million tonnes)	0.33	0.31	0.28
Indirect GHG emissions (Scope 2) (million tonnes)	15.65	15.86	17.04
Carbon emission intensity (tCO_2e/ RMB10,000)	0.216	0.219	0.232
SO_2 emissions [2] (tonnes)	23.59	35.93	9.28
Carbon emission from commute (10,000 tonnes)	37.79	39.45	50.77
Carbon emission from business travel (10,000 tonnes)	29.44	7.10	8.19

Notes:

1. CO_2 is the only type of GHGs generated in our operations, and over 95% of our CO_2 emissions are from the use of electricity. CO_2 emissions are calculated mainly in accordance with the *Guidelines for National Greenhouse Gas Inventories* published by IPCC in 2006, and the baseline emission factors for the China regional grid published by the National Development and Reform Commission in 2017.
2. SO_2 is the only type of air emissions generated in our operations, mainly from coal burning in certain regions.

Water Use

Indicators	2017	2018	2019
Total amount of water consumption （million tonnes）	42.24	35.12	36.29
Water consumption per capita (tonnes)	91	76	80

Raw Materials Use

Indicator	2017	2018	2019
Total amount of resources used for producing devices (tonnes)	8,847	9,394	12,396

Waste Management [1,2,3]

Indicators	2019
Non-hazardous solid waste produced (10,000 tonnes)	7.14
Non-hazardous waste produced (10,000 tonnes)	4.52
Electronic waste produced (10,000 tonnes)	2.62
Non-hazardous General solid waste comprehensively utilized (10,000 tonnes)	7.21
Comprehensive utilization rate of non-hazardous solid waste [4] (%)	93.93
Non-hazardous solid waste intensity (kg/RMB10,000)	0.96
Hazardous waste produced (10,000 tonnes)	1.89
Hazardous waste disposed (10,000 tonnes)	2.17
Hazardous waste disposal rate [5] (%)	84.30
Hazardous waste intensity (kg/RMB10,000)	0.25

Notes:

1. In 2019, we updated and standardized the scope for the statistics of different types of solid waste in accordance with the requirements of the *Notification on Issuing the Statistical Report on Energy Conservation and Ecological Environmental Protection of Central Enterprises* of SASAC. We will disclose new indicators on a rolling basis every year.
2. Our operation generates three types of solid wastes: non-hazardous waste, electronic waste and hazardous waste.
3. Non-hazardous waste mainly includes domestic waste, food waste, office and marketing waste paper or packaging, construction waste, etc. Electronic waste mainly includes electronic components and equipment replaced from base stations and equipment rooms, and retired office equipment such as printers, copiers, fax machines and computers. Hazardous waste mainly includes bare circuit boards and batteries retired from base stations and equipment rooms, printer cartridges, ink cartridges and fluorescent tubes from offices, and damaged or retired smart terminals such as mobile phones, batteries and SIM cards. We sell most of our waste to qualified third parties recycling companies for
4. disposal.
   The comprehensive utilization rate of non-hazardous solid waste refers to the ratio of the amount of non-hazardous solid comprehensively utilized within the reporting period minus the storage capacity of comprehensive utilization in the past year, to the amount of non-hazardous solid waste generated. In 2019, our comprehensive utilization from the
5. previous year was approximately 5,100 tonnes.
   The disposal rate of hazardous waste refers to the ratio of the volume of hazardous waste disposed minus the storage volume of hazardous waste from the previous year, to the amount of hazardous waste generated in the reporting period. In 2019, our hazardous waste disposal storage volume from the past year was approximately 5,800 tonnes.

Green Operations

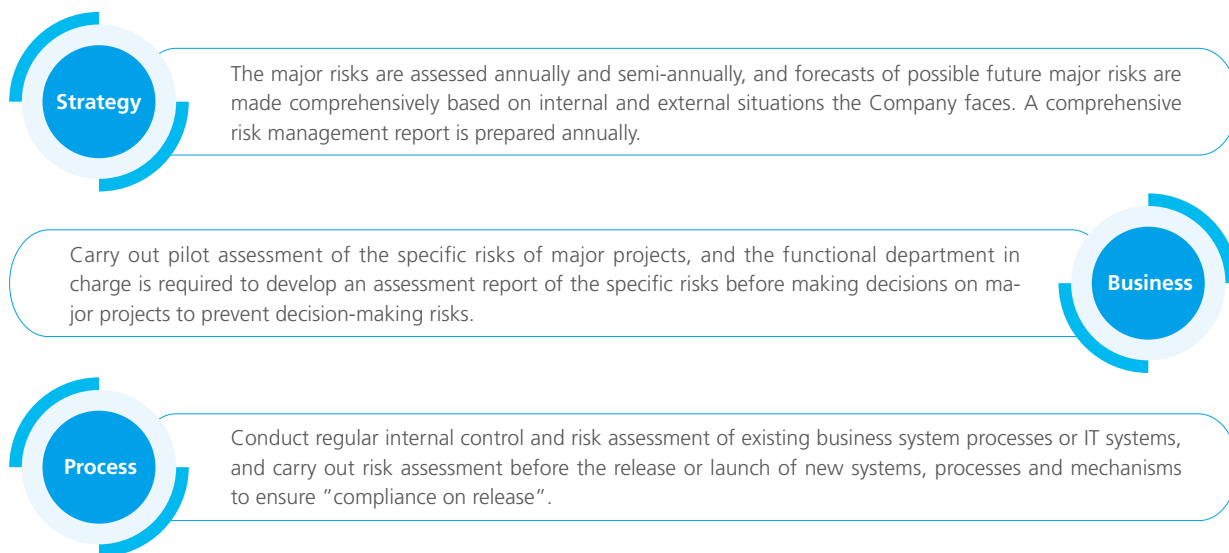| Indicators	2017	2018	2019
Number of video conferences usage at group level	882	970	1,184
Online sales volume (RMB100 million)	4,648	4,785	5,635
Number of online e-procurement projects in the year (10,000)	appr. 3.8	appr. 1.0	appr. 3.4
Reduction of paper-based documents with the wholly electronic procurement process (10,000 copies)	appr. 61.6	appr. 14.1	appr. 48.0

Feature: Responsible Operations

Risk Management

China Mobile has established a three-tiered risk management structure consisting of the Board of Directors, functional departments and functional positions to realize the specialized management of the whole process. For detailed information on the Company's risk management, please refer to the Risk Management and Internal Controls section in the Corporate Governance Report from China Mobile Limited's 2019 Annual Report.

Board of Directors

The Board of Directors has an Audit Committee, which is responsible for overseeing the Company's financial reporting system, risk management and internal control procedures, monitoring the integrity of financial statements, the annual reports and accounts, interim report and quarterly reports of the Company, and reviewing significant financial reporting judgments contained in them, etc.

Functional Departments

Risk management execution departments and supervision departments perform their respective duties: the Department of Finance takes the lead in organizing and carrying out various internal control and risk management work; business departments are responsible for the internal control and risk management work in specialized areas; and the Internal Audit Department is responsible for supervising and evaluating the effectiveness of internal control design and implementation.

Functional Positions

Each department has dedicated positions and personnel that are responsible for the implementation and regular supervision and inspection of specific internal control systems, while the Risk Management Expert Bank is responsible for the research and planning on general or specific internal control and risk management issues of the Company.

The Company continuously optimizes its risk assessment mechanism focusing on our development strategy and business objectives, and carries out risk assessment at three levels to improve the accuracy and timeliness of risk forecast.

Strategy

The major risks are assessed annually and semi-annually, and forecasts of possible future major risks are made comprehensively based on internal and external situations the Company faces. A comprehensive risk management report is prepared annually.

Business

Carry out pilot assessment of the specific risks of major projects, and the functional department in charge is required to develop an assessment report of the specific risks before making decisions on major projects to prevent decision-making risks.

Process

Conduct regular internal control and risk assessment of existing business system processes or IT systems, and carry out risk assessment before the release or launch of new systems, processes and mechanisms to ensure "compliance on release".

Regarding internal audit, the Internal Audit Departments of the Company and its operating subsidiaries are responsible for providing independent and objective confirmation of and consultation on the appropriateness, compliance and effectiveness of various business activities and the internal control and risk management of the Company, and assisting the Company in improving its corporate governance, risk management and control process. In 2019, we further intensified the audit and supervision on the areas related to the business and home markets, customer rights, key costs and expenses, system management and control, etc., to ensure the effectiveness of our cost reduction and efficiency improvement efforts and prevent business risks. We also further optimized our audit and rectification management mechanism with a new Smart Audit Cloud Hub and an improved "remote + onsite" holographic interactive smart audit model.

Meanwhile, we have established a hierarchical, multi-type training system for backbone internal control and risk management employees, prefecture-level financial managers and backbone financial employees, new financial employees, employees of all business lines and internal auditors, striving to create a risk management culture with the full participation of all employees.

Compliance Management

China Mobile has established a compliance management system with a top-down design and focusing on the following four aspects.

Organization

- Our parent company established the China Mobile Compliance Committee with the Chairman as the committee head. Its General Counsel serves as the head of the Office of the Compliance Committee, who is responsible for overseeing the building of compliance management system, handling major compliance incidents and risk prevention, and leading the office to provide expert opinions before making major business decisions in relation to antitrust, anti-unfair competition as well as tendering and bidding.
- Continuously deepened the Compliance Escort Plan to ensure the compliance of our business operations.

Culture

- Our parent company joined the China Enterprise Compliance Promotion Alliance as a vice-chairman member.
- Set up a Compliance Escort online learning section at the online university of the Company, with a total participation of over 3,400,000 person-times.
- Organized nearly a thousand training sessions on compliance issues in relation to key areas such as *Foreign Investment Law*, network security, market competition, and bidding and procurement.

Process

- Conducted compliance review prior to actions such as devising major marketing strategies and entering into major contracts, and conducted compliance review on major business activities such as transferring between operators with the same number, online privacy policies, and sharing of business partners' information.
- Conducted due diligence on issues in relation to network and information security in procurement projects to effectively prevent compliance risks.
- Launched the Hebao intelligent dialogue robot and big data visualization analysis and intelligent search functions in the contract management system.

System

- *Formulated the China Mobile Compliance Management Report*, summarizing our compliance management conditions and putting forward the requirements for compliance management.
- Developed a series of compliance policies to provide guidance for frontline employees, including the *Guide for Intellectual Property Rights Compliance* and the *Compliance Guide for Business Partners*.
- Improved intellectual property management with various efforts, including organizing the Intellectual Property Awareness Week activities for 10 consecutive years, organizing intellectual property training, issuing special analysis reports on intellectual property cases, trademarks and brands, and compiling the book, *Compliance and Data: Using Big Data for Compliance*.

Integrity and Anti-corruption

China Mobile actively upholds the healthy culture of hard work and integrity, adheres to the principles of openness and transparency in the operations, and continues to strengthen its anti-corruption efforts.

Organizational Support	• Started organizational preparation for establishing the Office of Anti-Corruption Leading Group and initiated a new round of signing procedures of *Business Integrity Pledge*. • Deepened the implementation of the embedded integrity corruption risk prevention and control mechanism and adjusted the 2019 performance evaluation indicators for embedded prevention work, urging the responsible departments to actively reflect on and examine themselves to identify any problems.
Working Style Construction	• Issued the *Notice on the Work Progress of the Centralized Rectification of Formalism and Bureaucracy* which formulated nearly 4,000 rectification measures focusing on 1,540 issues.
System Optimization	• Issued the *Provisions on Maintaining Record of China Mobile Senior Management Interfering with Major Matters (Trial)* to ensure that the senior management exercise their power in compliance with laws and regulations with fairness and integrity.
Anti-corruption Education	• Launched the Anti-corruption and Integrity Awareness Month, organized 4,960 education activities covering over 90% of the employees; encouraged employees to record their learning experiences with reference to their own position and to give integrity commitment, and organized field trips for employees to anti-corruption education centers, thereby improving the effectiveness of anti-corruption education. • Built a defense line against corruption by posting key learning content and best practice cases in various channels, including the web page of the Office of Discipline Inspection and Supervision, China Mobile Online University and MIGU reading. • Sent out pop-up anti-corruption alerts before festivals to remind employees to strictly abide by integrity requirements.
Whistleblowing	• Established multiple whistleblowing channels for corruption reporting, including mail, email, telephone hotline, onsite communication, the CEO Mailbox, etc. • Protected the legitimate rights of whistleblowers, with confidentiality given to the reported issues, the status of the investigation, and the relevant information of the whistleblowers. • Received a total of 1,730 whistleblowing cases, handled 393 corruption cases, and took disciplinary actions for 516 person-times in 2019.

Supply Chain Management

Supply chain management is a key component of our sustainability management. Insisting on responsible procurement, China Mobile has been continuously standardizing its procurement process and procurement audit, and achieved the overall management of the whole procurement process, fulfilling the social responsibilities jointly with its supply chain partners.

Procurement Transparency

Adhering to the principle of "procurement under sunshine", we require all business units to set up dedicated procurement facilities with audio and video recording equipment, allowing online supervision and inspection of all procurement processes. As of the end of 2019, we had set up 791 dedicated bidding facilities nationwide, and completed the closed bidding evaluation of 9,065 projects, preliminarily realizing the whole process supervision of key procurement processes.

To ensure the fairness and transparency of the procurement environment, we continued to carry out a series of information disclosures of the first-level suppliers, including supplier performance evaluation result, comprehensive inspection information, and rectification of negative findings. Suppliers can use the China Mobile Procurement and Tendering Portal to access their supplier evaluation results, the rectification result of negative findings, and the timely notification of their updated performance evaluation result.

In 2019, together with some of our partners, we jointly launched the Procurement Under Sunshine Together business integrity event. We revised the *Business Integrity Pledge* to specify the disciplinary actions for violations. We also launched the online signing function of the *Business Integrity Pledge* to make the procurement process more efficient and convenient.

Promoting Compliance of Suppliers

We published the *China Mobile Suppliers Cooperation Guidelines* on our own procurement website portal, explicitly requiring our suppliers to fulfil their responsibilities, including: actively fulfilling the obligations of paying social security and tax; abiding by laws and regulations on lawful hiring, labor protection, occupational health and safety, social responsibility and environmental protection; forbidding the use of child labor as defined by law, the use of forced labor, and the physical abuse of employees; prohibiting any form of unlawful discrimination; complying with national laws and regulations regarding salary, benefits, working hours, working overtime, health and safety conditions; and complying with all applicable environmental protection regulations.

We assess suppliers' overall capacities based on the criteria in the certificates of SA 8000 (Social Accountability), OHSAS 18001 (Occupational Health and Safety Assessment Series) and ISO 14000 (environmental management standards). In 2019, we required the verification of the SA8000, OHSAS18001 and ISO14000 certificates submitted by the suppliers as part of the preliminary certification inspection process for suppliers of key products. For suppliers of certain products, we also required onsite inspection to ensure that their environmental protection measures were properly implemented.

Supply Chain Management

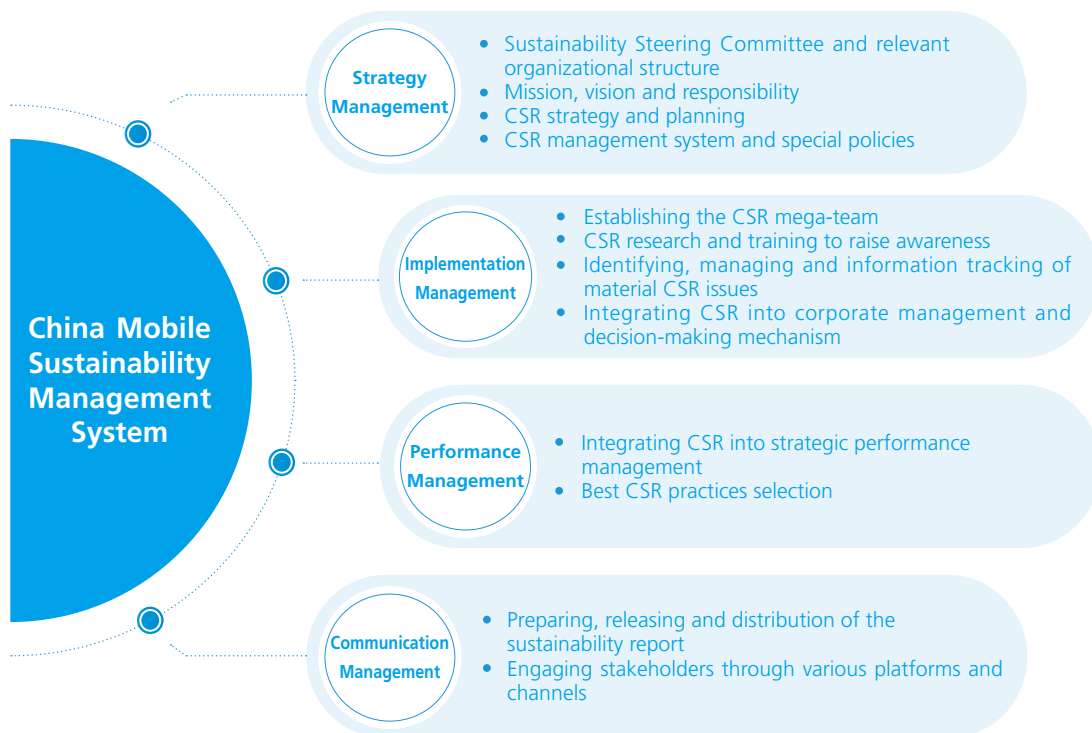| Indicators	2017	2018	2019
Number of centralized procurement suppliers	8,039	7,216	12,278
Number of first-level suppliers [1]	571	480	897
Percentage of first-level local suppliers [2]	100	100	100
Number of second-level suppliers	7,468	6,736	11,930
Percentage of second-level local suppliers [3]	55.69	80.35	55.20
Number of assessments on first-level suppliers [4]	2,417	2,194	2,268
Percentage of confirmed first-level suppliers assessed	100	100	100
Number of onsite supplier assessments conducted	—	674	1,330

Notes:

1. In 2019, the statistical scope of suppliers was changed from the number of centralized procurement suppliers to the number of suppliers with active procurement activities during the year.
2. Percentage of first-level local suppliers means the proportion of domestic suppliers (registered in Mainland China) among all suppliers for first-level procurement.
3. Percentage of second-level local suppliers means the proportion of local suppliers (registered in the province to which the China Mobile provincial subsidiary belongs) among all suppliers for second-level procurement.
4. The number of supplier assessments carried out by our Procurement Shared Service Center, covering both winning and non-winning suppliers, does not include second-level procurement.

Compliance and Anti-corruption

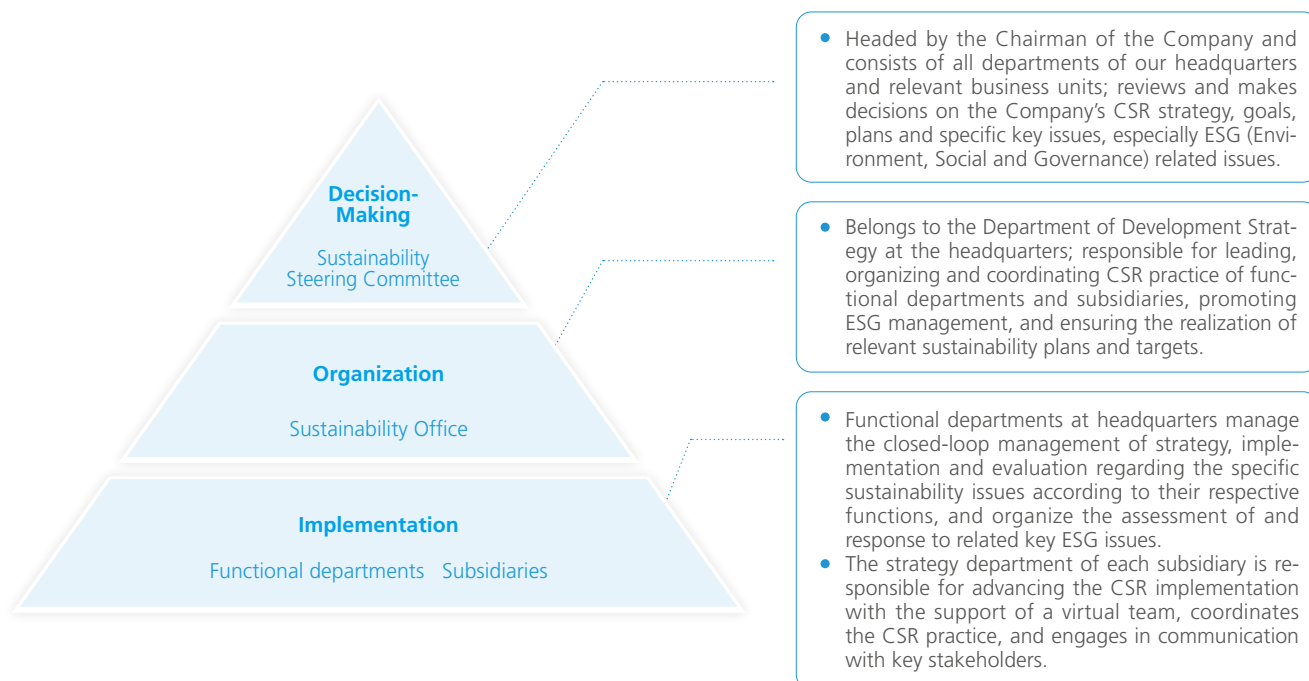| Indicators	2017	2018	2019
Number of Board Meetings in the year	4	4	5
Number of anti-corruption education activities in the year	3,580	3,717	4,960
Coverage rate of anti-corruption education activities	>90	>90	>90
Participation of anti-corruption education and trainings (person-times)	722,720	759,810	915,527
Number of corruption cases disciplined in the year	275	321	393
Number of employees dismissed and disciplined for corruption in the year (person-times)	414	433	516
Number of petitions received in the year	1,240	1,263	1,730

Sustainability Management

Since 2006, China Mobile has been managing its corporate social responsibility (CSR) practice in a strategic way in joint connection with its corporate strategy and operation. We have developed a 4-module strategic CSR management system covering strategy, implementation, performance and communication. In 2019, we further streamlined the scope of each CSR management module in accordance with the "3 steps and 10 methods" requirements for CSR management.

China Mobile Sustainability Management System

Strategy Management
- Sustainability Steering Committee and relevant organizational structure
- Mission, vision and responsibility
- CSR strategy and planning
- CSR management system and special policies

Implementation Management
- Establishing the CSR mega-team
- CSR research and training to raise awareness
- Identifying, managing and information tracking of material CSR issues
- Integrating CSR into corporate management and decision-making mechanism

Performance Management
- Integrating CSR into strategic performance management
- Best CSR practices selection

Communication Management
- Preparing, releasing and distribution of the sustainability report
- Engaging stakeholders through various platforms and channels

Strategy Management

Adhering to our CSR philosophy of "With perfect sincerity and integrity, we will strive to fulfil our triple-sided responsibilities: our economic responsibility, our social responsibility and our environmental responsibility", our parent company established the CSR Steering Committee in 2008 (name changed to Sustainability Steering Committee in 2016) and a three-layer CSR management system of decision-making, organization and implementation. Meanwhile, we formulated management policies such as the *China Mobile CSR Management Measures* and the *China Mobile Annual Best CSR Practices Selection and Reward Determination*, to enhance our CSR management improvement and further standardize the system and process requirements of CSR management.

Decision-Making
Sustainability Steering Committee

- Headed by the Chairman of the Company and consists of all departments of our headquarters and relevant business units; reviews and makes decisions on the Company's CSR strategy, goals, plans and specific key issues, especially ESG (Environment, Social and Governance) related issues.

Organization
Sustainability Office

- Belongs to the Department of Development Strategy at the headquarters; responsible for leading, organizing and coordinating CSR practice of functional departments and subsidiaries, promoting ESG management, and ensuring the realization of relevant sustainability plans and targets.

Implementation
Functional departments   Subsidiaries

- Functional departments at headquarters manage the closed-loop management of strategy, implementation and evaluation regarding the specific sustainability issues according to their respective functions, and organize the assessment of and response to related key ESG issues.
- The strategy department of each subsidiary is responsible for advancing the CSR implementation with the support of a virtual team, coordinates the CSR practice, and engages in communication with key stakeholders.

Implementation Management

The Company continued to deepen the capacity building for its CSR team with regular internal trainings to help functional departments and business units learn about the latest requirements and trends of sustainable development, and enhance the sustainability awareness of all employees. In 2019, the total participation of our CSR training activities reached 418,500 person-times.

We continued the management of sustainability related issues, conducted research and surveys on stakeholders, and studied the evolution of key sustainability standards at home and abroad, the best practice of our industry peers, and hot issues in relation to sustainability. Based on these, we identified our annual material sustainability issues, and took the opportunity of collecting information for our annual sustainability report to improve our management and disclosure of key sustainability issues as well as our

sustainability performance. Please see page 59 for the process of how we identified our material sustainability issues of 2019 and the results.

Regarding the implementation process, the Company continued to deepen the involvement of senior management in sustainability related matters. In addition to the establishment and operation of the Sustainability Steering Committee, our annual sustainability report is required to be formally reviewed and approved by senior management and the Board of Directors of the Company. Meanwhile, we have also strengthened the horizontal coordination across functional departments with clearly defined management responsibility over the relevant key CSR issues, fully incorporating CSR into their core operations.

Performance Management

The Company organized the annual Best CSR Practice Selection for the 12th consecutive year, inviting internal and external experts to sit on the annual review panel. Over the last 12 selections, we have received more than 820 CSR cases, 184 of which won an award. The selection has effectively encouraged our subsidiaries to innovate on CSR practices. In 2019, we also published

a book containing all the selected CSR best practice cases since 2013, *New Era, New Connectivity, New Responsibility: Selected Best CSR Practice of China Mobile (2013-2018)*. These cases present an overview of China Mobile's practice, explorations and accomplishments in fulfilling its corporate social responsibilities with a focus on connectivity.

Communication Management

In 2019, the Company prepared and released its 13th sustainability report. Not only did we fully comply with the requirements for ESG information disclosure, we also practiced our CSR in innovative forms such as promotional clips and short videos, which created a record-high online views of over 18 million.

The Company attaches great importance to the concerns of our stakeholders and has established a variety of communication channels in accordance with their expectations. In 2019, we organized the third "CSR Communication Day" event to listen to the opinions and suggestions of our wide range of stakeholders on our CSR activities. CSR communication activities were organized at 3,184 self-operated China Mobile stores, where 1,508

general managers of our prefecture-level branch companies and over 37,000 person-times of customers participated.

In addition, we also actively participated in the revision of sustainability standards, communicated and shared our experience with our industry peers, and strove to further improve the CSR management and performance jointly with our industry peers. We carried out over 40 major communication activities during the year.

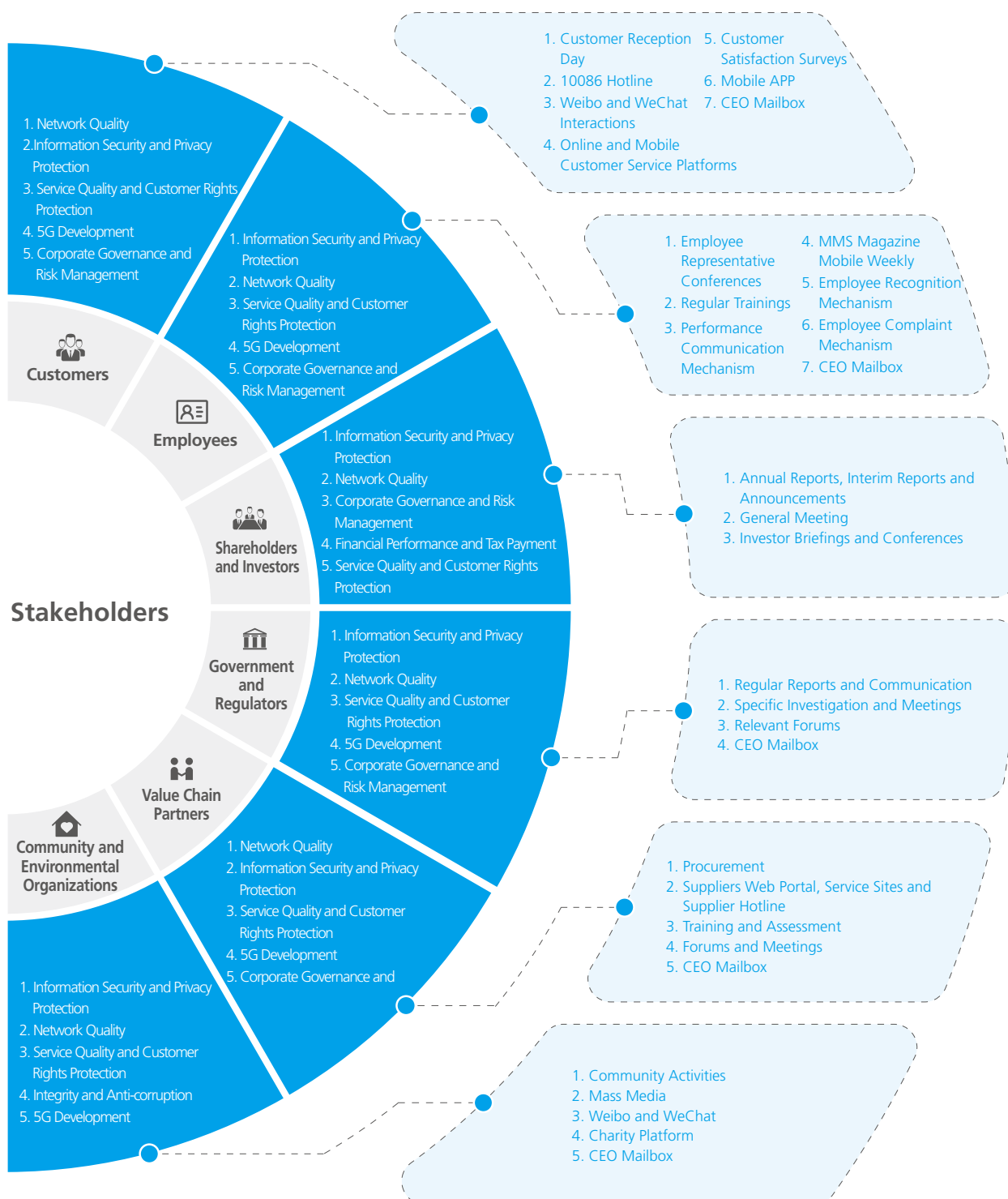Please see page 58 for the concerns and communication channels of our stakeholders.

Indicators	2017	2018	2019
CSR trainings participation (person-times)	471,669	447,006	418,507
Number of emails received in CEO Mailbox	1,279	1,315	903
Number of customer visits on Customer Day (person-times)	102,060	138,301	141,627
Number of complaint and inquiry cases handled on Customer Day	91,960	118,304	126,509

Stakeholder Engagements

We have established a variety of communication channels and maintained regular communication with 6 groups of stakeholders, including customers, employees, shareholders and investors, government and regulators, value chain partners, and community and environmental organizations. When preparing this report, we used questionnaires to identify sustainability issues that concerned different stakeholder groups, and then determined areas to be disclosed in the report based on a materiality analysis.

Key Issues of Concern (Top 5)*

Stakeholders

Customers
1. Network Quality
2. Information Security and Privacy Protection
3. Service Quality and Customer Rights Protection
4. 5G Development
5. Corporate Governance and Risk Management

Employees
1. Information Security and Privacy Protection
2. Network Quality
3. Service Quality and Customer Rights Protection
4. 5G Development
5. Corporate Governance and Risk Management

Shareholders and Investors
1. Information Security and Privacy Protection
2. Network Quality
3. Corporate Governance and Risk Management
4. Financial Performance and Tax Payment
5. Service Quality and Customer Rights Protection

Government and Regulators
1. Information Security and Privacy Protection
2. Network Quality
3. Service Quality and Customer Rights Protection
4. 5G Development
5. Corporate Governance and Risk Management

Value Chain Partners
1. Network Quality
2. Information Security and Privacy Protection
3. Service Quality and Customer Rights Protection
4. 5G Development
5. Corporate Governance and

Community and Environmental Organizations
1. Information Security and Privacy Protection
2. Network Quality
3. Service Quality and Customer Rights Protection
4. Integrity and Anti-corruption
5. 5G Development

Examples of Communication Channels

1. Customer Reception Day
2. 10086 Hotline
3. Weibo and WeChat Interactions
4. Online and Mobile Customer Service Platforms
5. Customer Satisfaction Surveys
6. Mobile APP
7. CEO Mailbox

1. Employee Representative Conferences
2. Regular Trainings
3. Performance Communication Mechanism
4. MMS Magazine Mobile Weekly
5. Employee Recognition Mechanism
6. Employee Complaint Mechanism
7. CEO Mailbox

1. Annual Reports, Interim Reports and Announcements
2. General Meeting
3. Investor Briefings and Conferences

1. Regular Reports and Communication
2. Specific Investigation and Meetings
3. Relevant Forums
4. CEO Mailbox

1. Procurement
2. Suppliers Web Portal, Service Sites and Supplier Hotline
3. Training and Assessment
4. Forums and Meetings
5. CEO Mailbox

1. Community Activities
2. Mass Media
3. Weibo and WeChat
4. Charity Platform
5. CEO Mailbox

*Note: The top 5 key issues of concern of each stakeholder group come from the results of the stakeholder survey in relation to the materiality analysis. Please refer to the materiality analysis on page 59.

Materiality Analysis

In 2019, based on the materiality analysis of various sustainability issues, we evaluated the degree of impact being brought on stakeholders by economic, environmental and social issues, and the importance of these issues to China Mobile, and identified issues of the high materiality to be highlighted in this report.

Based on the analysis and conclusion during the identification stage, this year we have added three issues: "5G development", "social ICT solutions", and "environmental ICT solutions". We have also made adjustment to three issues, replacing "anti-corruption and compliance" with "integrity and anti-corruption", "carbon emissions reduction" with "coping with climate change", and "employee health and safety" with "employee rights and interests protection". There is no significant change regarding the reporting scope of each issue.

Identification 01

International standard benchmarking

- HKEx ESG Reporting Guide
- GRI standards
- UN SDGs
- UNGC Ten Principles

Analysis of key sustainability issues and key industry issues

Corporate strategy analysis

Evaluation 02

Using online questionnaires, we carried out the key stakeholder survey with respect to the degree of impact of sustainability issues on stakeholders, collecting 3,901 valid questionnaires in total.

With reference to industry practices, we teamed up internal and external experts to evaluate the importance of different sustainability issues to China Mobile's operations.

Report Preparation 03

A materiality matrix was formed (see the chart right) to highlight issues to be prioritized in the report.
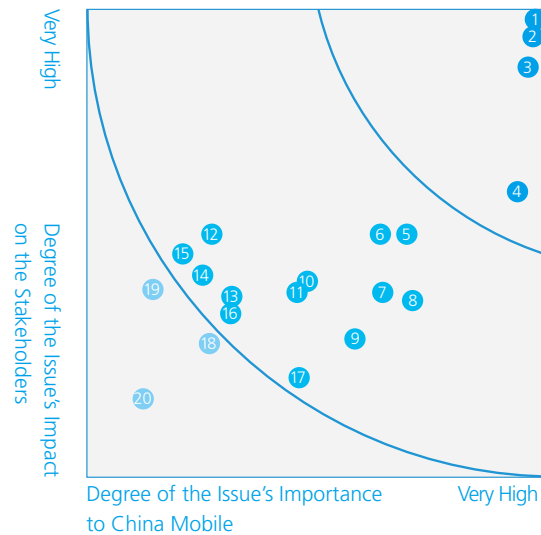
Materiality	No.	Issue	Page(s)	Boundary
Very High	1	Service Quality and Customer Rights Protection	10-11,22-27	Customers, government and regulators, community and environmental organizations
	2	Information Security and Privacy Protection	24,26-27	Customers, government and regulators, community and environmental organizations
	3	Network Quality	10-14,26-27	Customers, value chain partners, community and environmental organizations
	4	5G Development	6-7,18-21	Customers, government and regulators, value chain partners, community and environmental organizations
High	5	R&D and Innovations	16-17,26-27	Customers, government and regulators, value chain partners
	6	Integrity and Anti-corruption	54-55	Customers, government and regulators, value chain partners
	7	Social ICT Solutions	11,18-21	Customers, government and regulators, value chain partners, community and environmental organizations
	8	Corporate Governance and Risk Management	4,53-55	Customers, shareholders and investors, government and regulators
	9	Financial Performance and Tax Payment	4	Shareholders and investors, government and regulators
	10	Environmental ICT Solutions	44-47	Customers, government and regulators, value chain partners, community and environmental organizations
	11	Human Resource Development	38-40,43	Customers, shareholders and investors
	12	Employee Rights and Interests Protection	10,37,41-43	Customers, value chain partners
	13	Fair Employment and Non-discrimination	37,42-43	Customers, value chain partners
	14	Reducing Environmental Resource Use	48-52	Customers, employees, government and regulators, value chain partners
	15	Stakeholder Engagement	58	Customers, employees, shareholders and investors, government and regulators, value chain partners, community and environmental organizations
	16	Public Welfare	28-34,42-43	Customers, community and environmental organizations
	17	Coping with Climate Change	48-52	Customers, employees, government and regulators, value chain partners
Moderate	18	Supply Chain Management	50,55	Value chain partners, community and environmental organizations
	19	Waste Management	50,52	Customers, employees, value chain partners
	20	Offshore Compliance of Corporate Social Responsibilities	36	Customers, value chain partners

Independent Assurance Report

安永华明（2020）专字第 60688545_A01 号

To the Board of China Mobile Limited:

I. Scope of Our Engagement

The 2019 Sustainability Report (the "Sustainability Report") of China Mobile Limited (the "Company") has been prepared by the Company. Management of the company (the "Management") is responsible for the collection and presentation of information within the GRI Standards issued by the Global Sustainability Standards Board (GSSB), in accordance with the criteria selected by the Company. Management is also responsible for maintaining adequate records and internal controls that are designed to support the sustainability reporting process.

Our responsibility is to carry out limited assurance procedures over key social responsibility performance indicators for the year ended 31 December 2019 and to issue the assurance statement in accordance with the "International Standard on Assurance Engagements 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information" (ISAE3000), based on the Management's instructions and as agreed with Management in our terms of reference signed in August 2018.

Our work was limited to these stated above and our report is made solely to you, as a body, and for no other purpose. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance any such third party may place on the Sustainability Report is entirely as its own risk.

II. Work Performed

Our review has been planned and performed in accordance with ISAE3000. In order to form our conclusions, we carried out the following procedures:

According to the Managements instructions, we performed limited assurance procedures in:

The limited assurance procedures were performed over the following key performance indicators in the Sustainability Report for the year ended 31 December 2019:

Economic indicators

- Number of first-level suppliers
- Number of second-level suppliers
- Percentage of first-level local suppliers
- Percentage of second-level local suppliers
- Number of assessments on first-level suppliers
- Number of administrative villages with broadband service newly launched in the "Universal Telecommunications Service Project"

Environmental indicators

- Total electricity consumption
- Natural gas consumption
- LPG consumption
- Coal gas consumption
- Coal consumption
- Gasoline consumption
- Diesel fuel consumption
- CO_2 emissions
- Carbon emission from business travel
- Carbon emission from commute
- Number of video conferences usage at group level

Social indicators

- Number of spam messages report handled
- Number of emergency support
- Number of emergency support vehicles deployed
- Number of emergency support equipment installed
- Number of person-times involved in emergency support
- Number of principals of rural primary and secondary schools trained newly added
- Number of assisted children in poverty who suffered from congenital heart disease newly added
- Number of person-times trained
- Percentage of female employees
- Ethnic minorities as a percentage of total employees
- Total number of newly hired employees
- Total number of resigned employees
- Total number of dismissed employees

In preparing the above key performance indicators, China Mobile applied the criteria in GRI Standards issued by the Global Sustainability Standards Board (GSSB).

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the key performance indicators subject to assurance, and applying analytical and other limited assurance procedures.

The limited assurance procedures performed included, but were not limited to:

- Interviewing the company's management and staffs responsible for the selected key performance information;

- Performing analytical review procedures;

- Performing sample inspection on the selected key performance information;

- Performing recalculation procedures on the selected key performance information;

- Other procedures we considered necessary.

III. Limitations of Our Scope

Our scope of work did not include:

- Assessing the accuracy or fairness of information (including financial information) other than the selected key performance information.

- Reviewing the forward-looking statements made by the Management.

- Reviewing and consequently providing assurance on historical data.

IV. Level of Assurance

Our evidence gathering procedures have been designed to obtain a limited level of assurance (as set out in ISAE 3000) on which to base our conclusion. The procedures conducted do not provide all the evidence that would be required in a reasonable assurance engagement and,accordingly, we do not express a reasonable assurance opinion or an audit opinion. While we considered the effectiveness of the Management's internal controls when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls.

V. Our Conclusions

Subject to the limitations of scope and based on the procedures specified above for this limited assurance engagement, we provided the following conclusions:

Nothing has come to our attention that causes us to believe that the selected indicators were not presented fairly in all material respects in the 2019 Sustainability Report of China Mobile Limited, in accordance with the criteria defined above.

VI. Our Independence

We are in compliance with the Ernst & Young Global Independence Policy which was designed to comply with the requirements of the IFAC Codes of Ethics for Professional Accountants (the IFAC Code). We believe that there were no events or prohibited services provided which could impair our independence.

VII. Our Assurance Team

Our assurance team has been drawn from our sustainability assurance service network, which undertakes similar engagements to this with a number of domestic or international businesses. Our assurance team has met the requirements of competence and work experience of this engagement.

Ernst & Young Hua Ming LLP

Ernst & Young Hua Ming LLP

Beijing, PRC
March 25, 2020

About This Report

This report is the 14th Sustainability Report of China Mobile Limited. The report discloses relevant information about our economic, social, and environmental sustainability performance. We report annually on our sustainability performance. Unless otherwise stated, the time span of this report is from January 1, 2019 to December 31, 2019. Our last Sustainability Report was published in March 2019.

Report Form

- Report language: This report is published in both Chinese and English. Should there be any inconsistencies between the Chinese version and the English version, the Chinese version shall prevail.

- Report version: This report is presented in both printing and online versions (read and download the report at www.chinamobileltd.com).

Reporting Standards

The report has been prepared to comply with globally recognized benchmarks for disclosure of sustainability information while highlighting the industry background and China Mobile's unique characteristics. In 2019, we mainly referred to the following standards:

- Hong Kong Stock Exchange (HKEx) Environmental, Social and Governance Reporting Guide

- United Nations 2030 Agenda for Sustainable Development

- GRI Sustainability Reporting Standards by the Global Sustainability Standards Board (GSSB)

- Ten Principles of the United Nations Global Compact

- ISO Guideline on Social Responsibilities (ISO 26000)

- Chinese CSR Report Preparation Guide (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences

China Mobile has complied with the "comply or explain" provisions set forth in the HKEx Environmental, Social and Governance Reporting Guide, and this report has been prepared in accordance with the core option of the GRI Standards.

Report Content and Boundary

In accordance with the principle of "stakeholder engagement, sustainability context, materiality and completeness", China Mobile determined materiality issues and their boundary through materiality analysis (See page 59 for the process and result of the materiality analysis.)

Reporting Scope

Unless otherwise specified, all cases and data in this report are from China Mobile Limited and its subsidiaries.

Currency

Unless otherwise specified, all monetary figures shown in this report are expressed in RMB (yuan).

Data and Information Disclosure

The main channels for the collection of data and information in 2019 Report include:

- Relevant data collection systems and statistical statements of the Company

- CSR practice cases submitted by provincial subsidiaries every quarter

- Cases received during the 2019 Best CSR Practices competition

- Questionnaires developed to collect qualitative and quantitative information based on the report framework

Report Assurance

In 2019, China Mobile contracted Ernst & Young (special general partnership) to provides independent third-party assurance service for this report. Please see pages 60-61 for the Assurance Report. The Company's 2019 Annual Report contains details regarding audited financial statements and other financial performance and operating performance for the year ended on December 31, 2019, and can be downloaded from the Company's website at www.chinamobileltd.com.

Report Theme and Design

The theme of the report is "5G+ Infinite Future". It conveys our responsibility concept of China Mobile leverages its expertise and works together with its stakeholders to build a smart society and create a shared better future. It symbolizes our ambition to integrate 5G into every industry and every walk of life and create shared value for society. On the center of report cover is a "5G+" logo together with a design of the "infinite" symbol that connects a variety of scenarios, representing our founding aspiration to "Communicate a Boundless World and Construct an Information Society", indicating the broad space and infinite possibilities for the Company to innovate social values in the 5G era.

Feedback

Should you have any feedback or suggestions, please kindly send it to us through the channels listed below. We will take your comments seriously and promise not to disclose your information to any unauthorized third party.

- ✉ E-mail: CR@chinamobile.com
- 🖨 Fax: +86-10-52616167
- ⎁ Scan the QR code to fill the online feedback form

Report Disclosure Indexes

HKEx Environmental, Social and Governance Reporting Guide

Subject Areas and Aspects	General Disclosures and KPIs	Page(s)
A. Environmental		
Aspect A1: Emissions	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	48-52
	KPI A1.1: The types of emissions and respective emissions data.	52
	KPI A1.2: Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	52
	KPI A1.3: Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	52
	KPI A1.4: Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	52
	KPI A1.5: Description of measures to mitigate emissions and results achieved.	48-52
	KPI A1.6: Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	50,52
Aspect A2: Use of Resources	General Disclosure: Policies on the efficient use of resources, including energy, water and other raw materials.	48,50
	KPI A2.1: Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	51-52
	KPI A2.2: Water consumption in total and intensity (e.g. per unit of production volume, per facility).	52
	KPI A2.3: Description of energy use efficiency initiatives and results achieved.	48-52
	KPI A2.4: Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	50,52
	KPI A2.5: Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	52
Aspect A3: The Environment and Natural Resources	General Disclosure: Policies on minimizing the issuer's significant impact on the environment and natural resources.	48-50
	KPI A3.1: Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	48-51
B. Social		
Employment and Labor Practices		
Aspect B1: Employment	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	37
	KPI B1.1: Total workforce by gender, employment type, age group and geographical region.	42-43
	KPI B1.2: Employee turnover rate by gender, age group and geographical region.	43

Subject Areas and Aspects	General Disclosures and KPIs	Page(s)
Aspect B2: Health and Safety	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	37,41
	KPI B2.1: Number and rate of work-related fatalities.	43
	KPI B2.2: Lost days due to work injury.	43
	KPI B2.3: Description of occupational health and safety measures adopted, how they are implemented and monitored.	10,37,43
Aspect B3: Development and Training	General Disclosure: Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	38-40
	KPI B3.1: The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	43
	KPI B3.2: The average training hours completed per employee by gender and employee category.	43
Aspect B4: Labor Standards	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	37
	KPI B4.1: Description of measures to review employment practices to avoid child and forced labor.	37
	KPI B4.2: Description of steps taken to eliminate such practices when discovered.	37
Product Practices		
Aspect B5: Supply Chain Management	General Disclosure: Policies on managing environmental and social risks of the supply chain.	50,55
	KPI B5.1: Number of suppliers by geographical region.	55
	KPI B5.2: Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	50,55
Aspect B6: Product Responsibility	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	25
	KPI B6.1: Percentage of total products sold or shipped subject to recalls for safety and health reasons.	25
	KPI B6.2: Number of products and services related complaints received and how they are dealt with.	22-23,27
	KPI B6.3: Description of practices relating to observing and protecting intellectual property rights.	16,25,27,54
	KPI B6.4: Description of quality assurance process and recall procedures.	25,52
	KPI B6.5: Description of consumer data protection and privacy policies, how they are implemented and monitored.	24,26-27
Aspect B7: Anti-corruption	General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	54
	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.	54-55
	KPI B7.2: Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	54-55
Community		
Aspect B8: Community Investment	General Disclosure: Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	28-34
	KPI A8.1: Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	10,30-34
	KPI B8.2: Resources contributed (e.g. money or time) to the focus area.	10,42

United Nations Sustainable Development Goals (SDGs)

SDGs	Our Practices	Page(s)
1 NO POVERTY	Cooperating with our parent company to undertake the targeted poverty alleviation task and support areas in extreme poverty, establishing a sound poverty alleviation system framework, dispatching poverty alleviation volunteers, building communications infrastructure in poor areas, and comprehensively promoting poverty alleviation through related education, health, livelihood, industry and consumption programs.	28-34, 42-43
2 ZERO HUNGER	Building the smart "And + Agriculture" product suite that covers agricultural production, business, management and service, and using new technologies such as 5G and AI to increase agricultural production and income.	20,30,32
3 GOOD HEALTH AND WELL-BEING	Providing free screening and treatment of congenital heart disease for low-income children, promoting the deployment and upgrade of medical information systems in less developed areas and the interconnection of medical resources; organizing medical examinations for all employees, protecting physical and mental health of employees with employee assistance programs (EAP), "Happiness 1+1" activities, etc.	10-11,20, 33,37,41-43
4 QUALITY EDUCATION	Carrying out the "Blue Dream" Education Aid Plan to provide training for primary and secondary school principals in remote central and western regions, and donating teaching equipment and facilities to primary and secondary schools in less developed areas; promoting the "Internet + Education" platform, encouraging employee volunteers to teach in less developed areas, and supporting the improvement of teaching conditions.	11,21, 28-33
5 GENDER EQUALITY	Providing equal employment and training opportunities for employees, and ensuring a fair workplace; implementing the "Female Rights Protection" program, and ensuring the legitimate rights of female employees.	37-40, 41-42
6 CLEAN WATER AND SANITATION	Promoting water conservation, strictly managing sewage discharge, and reducing water consumption; strengthening water management in equipment rooms, office facilities and stores.	50,52
7 AFFORDABLE AND CLEAN ENERGY	Carrying out energy-saving and green renovation projects for equipment rooms and data centers, and promoting new energy sources such as solar energy, wind energy, hydropower and hydrogen in areas with abundant natural resources and insufficient supply of traditional power.	48-52
8 DECENT WORK AND ECONOMIC GROWTH	Adhering to stable operations and transformation development, providing shareholders with good economic performance; providing employees with competitive compensation, a smooth career development platform, and a sound training system, and working with value chain partners to create job opportunities.	4,38-40, 42-43
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Building first-class infrastructure that is high-speed, secure, ubiquitous, and intelligent, and continuously optimizing network quality; implementing the innovation-driven development strategy, and enhancing innovation capabilities in areas such as 5G, AI and cloud computing.	6-7,12-17, 26-27
10 REDUCED INEQUALITIES	Expanding the network coverage of administrative villages to reduce the digital divide between urban and rural areas; jointly building network infrastructure in Belt and Road countries to promote inclusive economic growth and create shared values.	12,28-36
11 SUSTAINABLE CITIES AND COMMUNITIES	Expanding 5G application in vertical industries to support the development of a smart society; leveraging our expertise to implement China regional development strategies and the Belt and Road Initiative.	19-21
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Continuously improving network and information security, strengthening the governance of malicious information, and protecting customers' right to choose and right to know; carrying out activities such as "Satisfaction Service 365" to improve customer satisfaction; and carrying out environmental volunteering activities, promoting sustainable consumption and green concept to the public.	22-25, 26-27, 47,51-52
13 CLIMATE ACTION	Focusing on the impact of 5G on climate change, established the China Mobile Leading Group for Pollution Prevention and Energy Conservation, implementing the Green Action Plan to establish an environmental management system covering the entire value chain, and conducting regular assessment of climate risks and contingency measures.	48-52
14 LIFE BELOW WATER	No relevant practice.	—
15 LIFE ON LAND	Developing smart applications for environmental protection and help protect the ecology; assessing local biodiversity before building a base station and taking measures to protect the local natural environment; no species was found significantly impacted by the Company's operations.	25,44-47
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Continuously improving our risk assessment mechanism, building a comprehensive compliance management system, actively fostering a healthy atmosphere of integrity and integrity, and further implementing responsible procurement, and jointly fulfilling social responsibilities with suppliers.	50-55
17 PARTNERSHIPS FOR THE GOALS	Continuing to improve the open cooperation layout, implement ecological cooperation plans, and cooperate with government agencies, large enterprise groups, global carriers and academic institutions to build a thriving 5G industry ecology; establishing an open cooperation platform for partners, and supporting small and medium enterprises with information solutions and quality services.	15-17, 26-27,36

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