CONNECTING THE FUTURE

2014 Sustainability Report

Huawei Investment & Holding Co., Ltd.

HUAWEI

Report Profile
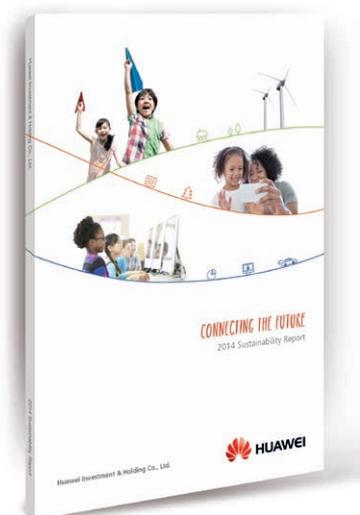
**2014
Sustainability Report**

Huawei Investment & Holding Co., Ltd.

Every year since 2008, Huawei Investment & Holding Co., Ltd. ("Huawei", "the company", or "we") has voluntarily released sustainability reports and disclosed sustainability initiatives so that the public can better understand and monitor the approaches and practices behind the company's sustainability efforts. Doing so is conducive to our sustainable development as we increase communication, awareness, and interaction between us, our stakeholders, and the general public.

This report covers all entities that Huawei either has control of or a significant influence over in terms of financial and operational policies. The scope of the entities in this report is consistent with the scope of organizations discussed in the *Huawei Annual Report 2014.* Unless otherwise specified, this report describes the economic, environmental, and social performance of Huawei and its subsidiaries worldwide during the January 1, 2014 to December 31, 2014 reporting period. All data herein is derived from Huawei's official documents and statistical reports.

This report is prepared in line with the "In Accordance – Core" Global Reporting Initiative (GRI) G4 *Sustainability Reporting Guidelines*. Huawei engaged TÜV, an external assurance provider, to verify the reliability, fairness, and transparency of this report and to issue an independent verification report (see Appendix III).

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Precisely Right.

As an independent record of sustainability, this report is published online and in print in both Chinese and English in June 2015. (The previous report was published in July 2014.) The *2014 Sustainability Report* can be viewed and obtained at www.huawei.com.

We would like to thank all stakeholders for sharing their feedback and recommendations as we strive to continuously improve the quality of this important report.

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Contents

1. Managing Sustainability

2. Bridging the Digital Divide

3. Supporting Stable and Secure Network Operations

4. Innovating for a Greener Environment

5. Seeking Win-Win Development

Connecting the Future)))

Like air and water, connectivity has become so pervasive that it is weaving its way into every aspect of life. A Better Connected World is taking shape – it is destined to profoundly influence every individual, organization, and industry. Connectivity is everywhere: between businesses, between people, between people and things, between things, and even between people's emotions. Enhanced connectivity will change the world for the better, allowing individuals to better sense and seize opportunities. However, our road ahead is beset with challenges. With a growing global population, deepening urbanization, and increasing resource consumption, a worrying dilemma lies ahead: how can we do more with less to be sustainable?

As a key player in the ICT industry, Huawei leverages connectivity-focused ICT technologies – such as cloud computing, 5G, and the Internet of Things (IoT) – to drive global sustainability and build a Better Connected World. Our innovative ICT technologies bring people closer together and reunite the separated, no matter where they are. Our ICT technologies also spawn considerable business opportunities, deliver efficiency gains, and move the industry forward.

*Huawei's vision for sustainability is to **Connect the Future**. In the future, we will bridge the digital divide with communications technologies; honor our responsibilities to support network stability and security; deliver innovative technologies to make our world greener; devote ourselves to employee care and improve well-being; build harmonious communities and make dreams come true; and partner with industry players to achieve mutual benefits.*

Huawei is ready to collaborate with all stakeholders to establish a sound business ecosystem and build a Better Connected World.

Message from the Chairwoman

We are moving toward a Better Connected World, where people, businesses, industries, and nations will link up and openly collaborate.

People can now enjoy high-quality educational, medical, and entertainment services at their fingertips. Businesses are more efficient than ever, and are facing myriad opportunities for innovation. Countries and regions are embracing the digital economy and breaking through the bottleneck of resource-based growth. As technologies such as cloud computing, Big Data, and mobility develop and become more popular, the IoT is starting to boom and becoming an important driver of innovation across economic sectors. In the future, a massive number of devices will be connected to networks and connectivity will become ubiquitous. Connectivity-focused ICT technologies are unleashing unprecedented potential and accelerating global digitization.

Bridging the Digital Divide

High-speed Long-term Evolution (LTE) networks are closely connecting different parts of the world – we have even built base stations in the Arctic Circle and on the Roof of the World. However, many places on this planet remain unconnected. Huawei is constantly exploring innovative solutions and models that will connect more people via networks so they can have access to more knowledge, education resources, and development opportunities. In partnership with a local carrier and UNESCO, for example, in 2014, Huawei helped over 3,000 students in South Sudan connect to the rich, networked world.

ICT technologies are becoming deeply integrated into every industry, driving digital restructuring in traditional industries and forcing them to upgrade and evolve. Huawei's ICT products and solutions boost efficiency and create value not just in the telecommunications sector, but also in the government, transportation, finance, energy, and medical sectors. For example, our telemedicine system in Karamay in Xinjiang, China, has addressed the imbalanced distribution of medical resources, eliminated the cost of travelling to distant hospitals, and provided easier access to medical services.

Supporting Stable and Secure Network Operations

Supporting stable and secure network operations is our most important responsibility – it is crucial to building a Better Connected World. However, as networks continue to develop, cyber security has become a global challenge with never-ending threats. We must be united as we address this challenge. Cyber security has always been a key part of our core strategy, and we have embedded security requirements into our business processes to make cyber security part of our corporate DNA.

We have developed a comprehensive security assurance system in our end-to-end process from product design and solution development to delivery. We have also developed effective emergency response systems so that we can rapidly restore our customers' networks when a crisis hits. Users can then access stable communications services, which can help protect life and property. In emergency scenarios, you will find Huawei employees at the center while others are fleeing; for example, the Fukushima nuclear disaster, the areas affected by Ebola, the epicenter of the Chilean earthquake, and war-torn countries and regions. This is because we have never shied away from our social responsibilities. In early 2014, when Ebola struck Sierra Leone, Liberia, and other West African countries, most companies evacuated their staff. Huawei employees, however, volunteered to stay behind to serve our customers. They made good on Huawei's commitment to supporting stable and secure network operations.

Developing Innovative Technologies to Build a Low-carbon Society

ICT is becoming the engine that powers the world's sustainable development. We are very lucky to be a part of the ICT industry – we are poised to leverage our ICT expertise to increase efficiency, reduce resource consumption, and build a green, low-carbon society. Sustained innovation and investment is key to fully utilizing ICT. We have established 16 R&D centers worldwide and set up 28 joint innovation centers with our global partners. We invest at least 10% of our annual sales revenue in R&D to ensure that we continue to innovate technologies and develop green products and solutions. Our world-leading energy-saving technologies enable our optical line terminals (OLTs) and optical network terminals (ONTs) to outperform rival products by over 20%, which is equivalent to an annual electricity reduction of nearly 200 million kWh. Our smart city solutions – now widely applied in many cities around the world – are becoming a benchmark for efficient and low-carbon urban management.

Jointly Building a Harmonious Industry Chain

Huawei strives to build a harmonious industry chain that benefits every player. We care about the health and safety of our employees, and provide them with an "umbrella" of benefits – last year we spent nearly CNY7.4 billion on employee benefits worldwide. Sustainability is now part of our end-to-end supply chain management processes as we aim to build a green, low-carbon supply chain and create value for our suppliers. We contribute to local communities by creating jobs, paying taxes, and initiating charity activities. We operate the Seeds for the Future program in over 30 countries, bringing outstanding college students to Huawei HQ for training on the latest technologies. As a responsible and respected corporate citizen, we comply with the ten principles of the United Nations Global Compact, conduct business with integrity, and comply with all applicable laws and regulations.

Merely maximizing our own interests is not a long-term strategy. Only sustainability can keep a company growing. Sustainability is not a quick fix – it is a long-term effort. We will continue to apply our innovative technologies, integrate our global resources, and openly collaborate with our customers and partners. Together, we will create a harmonious, sustainable industry chain that benefits everyone to build a Better Connected World.

Sun Yafang
Chairwoman of the Board

Message from the Chairman of the Corporate Sustainable Development (CSD) Committee

The value ICT brings to social sustainability has never been greater than it is now. As a leading global ICT company, Huawei is aware of its mission and responsibilities. We are integrating sustainability into our operations, delivering on our commitment to sustainability, and taking concrete action. Through these efforts, we have become a responsible corporate citizen and grown our business. We believe sustainability is the foundation of our survival and development and is crucial for us to remain competitive.

To reach our business goals and create business value, in 2014, we judiciously executed our sustainability strategy, efficiently applied our sustainability management system, and rolled out a series of sustainability projects and initiatives. Some examples of our recent activities are outlined below.

1. A professional, efficient management system is the building block of sustainability. In 2014, Huawei optimized its sustainability management system and integrated its sustainability management process more closely into operations to ensure effective execution. We developed a maturity assessment tool to comprehensively evaluate the maturity of our sustainability efforts. This tool allows us to identify areas for improvement and drive continuous improvement.

Professional competence and capability is a prerequisite for sustainability. That's why we launched the Sustainability Golden Seed Program to increase employee awareness and capabilities, and to create a leading culture of sustainability.

Stakeholder communication is a key channel for us to understand sustainability trends and requirements. In April 2014, we held the 1st Huawei Sustainability Conference in Shenzhen, China. This conference served as an important platform for Huawei to discuss and share experience with stakeholders, explore the direction of sustainability, and be prepared to cope with future challenges.

2. Huawei strives to provide everyone with equal access to the information society. With voice communications services becoming readily available, we now focus on enabling broadband for all and offering easier access to more content and services. By transferring ICT knowledge and skills, we aim to enhance digital literacy and close the information gap between people from all walks of life. In addition, we play an active part in energizing industries to realize ICT-enabled transformation and improve efficiency. Through our unceasing efforts, we aim to build a Better Connected World.

In 2014, Huawei implemented the Universal Access Project with the Zambia Information and Communication Technology Authority, deploying 169 base stations to connect over 500 remote villages in Zambia for the first time. In Kenya, Huawei worked with the Vodafone Foundation, Safaricom, and the UN High Commission on Refugees on a mobile education program. Thanks to this program, 18,000 students in a refugee camp can use the Internet to access high-quality education, just like children in other parts of the country. Alongside Spark New Zealand, Huawei deployed a 4G network that covered vast stretches of outlying and rural regions in New Zealand. This network allows nearly 200,000 rural customers (including businesses and individuals) to enjoy the same quality of Internet as the urban populace. In addition, Huawei runs 45 training centers globally and provides end-to-end talent development solutions to meet customers' and society's demand for ICT talent and to address challenges in a digital society. Our leading ICT technologies – now widely used in governments and industries such as finance, energy, and transportation – deliver great efficiency gains and reduce energy consumption.

3. Huawei provides network infrastructure and solutions on a global scale. We have stuck to our mission of supporting network stability and security in all circumstances – even in extreme conditions.

In 2014, Huawei ensured smooth communications for nearly 3 billion people worldwide, and supported stable operations for more than 1,500 networks in over 170 countries and regions. We guaranteed network availability in 150 major events (e.g., the Sochi Winter Olympics and the FIFA World Cup in Brazil) and natural disasters (e.g., the Ludian earthquake in China). For example, during the FIFA World Cup in Brazil, our team was onsite working 24/7 to ensure zero network incidents or interruptions for 120 key occasions in 12 cities. Our excellent network quality contributed to the success of this grand sports event.

Huawei has established an auditable, sustainable, and reliable cyber security assurance system by integrating security requirements into internal business processes. We have presented a stronger voice on a variety of platforms around the world to communicate Huawei's position and views on cyber security. In addition, we have made a solemn commitment to the public, governments, and customers to protect user privacy, just as we have done on cyber security. We have honored this commitment as a responsible corporate citizen, and continued to use every means possible to protect user privacy in compliance with applicable laws and regulations. Our best practices in establishing an end-

to-end global cyber security assurance system earned us the 2014 Cyber Security Organization of the Year award from CyberSecurity Malaysia.

4. Huawei has incorporated green ICT concepts into the entire lifecycle of products, and constantly looks for innovative ways to enhance products' energy efficiency and build green communications networks. In 2014, Huawei decreased the power consumption of its wireless access products to 7 J/Mbit, which is among the lowest in the industry and is 23% lower than in 2012. We also referred to industry standards to develop our capabilities at analyzing product water footprint, and assessed the water footprint of our mobile phones to better manage and protect water resources. The Huawei Honor 6 Plus became the world's first mobile phone to be issued with a Product Water Footprint Verification Statement. In addition, Huawei has obtained important references for its products' environmental designs.

To minimize the negative environmental impacts of our operations, we have expanded our use of clean and renewable energy. In 2014, Huawei constructed 15-megawatt photovoltaic power stations on its Hangzhou and Dongguan campuses. By the end of 2014, Huawei had built many 19-megawatt photovoltaic power stations to generate nearly 20 million kWh of electricity per year, equivalent to a CO_2 emissions reduction of over 18,000 tons.

Traditional economic development models create many problems, such as resource shortages, pollution, and damage to ecosystems. As a result, the circular economy business model is garnering more attention. In 2014, Huawei continued to adopt the "cradle to cradle" circular economy methodology on a larger scale to use resources sustainably and create maximum value from them. We also reused and recycled as many products as possible to decrease the landfill rate. As a result, only 2.37% of waste ended up in landfill in 2014. In addition, Huawei launched the Green Recycling Program by setting up over 190 recycling stations in 8 countries, including China, Saudi Arabia, and Thailand. By recycling and reusing old mobile phones, Huawei has boosted resource utilization and recovered considerable value from used products. Our efforts over the past year are contributing to building a circular economy.

5. As a global company, Huawei attaches great importance to workforce diversification, and has established varied channels that enable employees to realize their individual value. In 2014, Huawei rolled out the Time-based Unit Plan (TUP) globally. TUP is an incentive mechanism that allows outstanding employees to share in the benefits of Huawei's growth over the long term. Moreover, Huawei has established a comprehensive employee benefits system that includes mandatory insurance and commercial insurance (e.g., personal accident insurance, critical illness insurance, medical insurance, and business travel insurance). In Ebola-affected areas in West Africa, Huawei responded rapidly to the epidemic by taking preventive measures and providing treatment. Despite immense difficulties, such as canceled flights, Huawei managed to transport medical supplies to

affected areas, and engaged professional medical agencies to offer healthcare services for employees. Huawei's efforts have been well recognized all over the world. For example, Huawei is the only Chinese company to make LinkedIn's The World's 100 Most InDemand Employers 2014, coming in at number 95.

Integrity and operational compliance are prerequisites for Huawei to succeed and win respect in the global market. In 2014, Huawei focused considerable efforts on building compliance systems in its subsidiaries outside of China. As part of these efforts, Huawei established supervisory organizations and appointed compliance officers to supervise and manage subsidiaries' operational compliance.

A healthy supply chain is the foundation for a sustainable industry chain. With this in mind, Huawei has collaborated with governments and NGOs to build a greener supply chain. In 2014, we continued to expand our supplier energy conservation and emissions reduction project. Twenty suppliers took part in this project, reducing CO_2 emissions by over 53,000 tons.

Education is the key to creating opportunities. To contribute to the local communities where we operate, we have invested heavily in education. For example, in Egypt, Huawei trained over 5,000 technology professionals, recruited nearly 700 local staff, and indirectly created more than 2,000 jobs. In Sri Lanka, Huawei enabled Internet access in remote areas and donated e-education systems and e-labs to promote ICT education. By the end of 2014, Seeds for the Future – Huawei's flagship CSR program – had benefited over 10,000 students from more than 100 universities in 35 countries.

At Huawei, we understand that corporate sustainability is not the job of only a few staff or departments – it requires the joint efforts of all Huawei employees. In the future, we will further align sustainability requirements with the business activities of departments to create greater business value. We will engage every employee in sustainability initiatives so that they contribute greatly to our cause. We may face various daunting challenges on the road ahead, but that is no reason to stand still or give up. There are infinite opportunities ahead of us, and we are ready to connect the future with our strong sense of responsibility, passion, innovation, and devotion to employee care.

Last but not least, I'd like to thank each and every stakeholder for your attention to Huawei's sustainable development. It is your understanding and support that has enabled us to grow sustainably.

Deng Biao
Chairman of the CSD Committee

Overview of Huawei's Sustainability Initiatives in 2014

3 billion

Deployed products and solutions in over 170 countries and regions to serve nearly 3 billion people

45

Operated 45 global training centers to nurture local ICT professionals

10,000+

Delivered ICT training to benefit over 10,000 students

Provided ICT technologies for governments and the energy, transportation, and finance industries to boost efficiency

1,500

Supported the stability of over 1,500 customer networks

150

Supported network stability during over 150 major events and natural disasters worldwide

TOP100

Published the white paper *Cyber Security Perspectives—100 requirements when considering end-to-end cyber security with your technology vendors*

Won the Cyber Security Organization of the Year award

World's first mobile phone

with a **Product Water Footprint** Verification Statement

43 million kWh

Saved 43 million kWh of electricity via managerial and technological approaches

CO₂ 53,000⁺ tons

Cooperated with suppliers to reduce over 53,000 tons of CO_2 emissions

2.37%

Reduced the landfill rate to 2.37% via a circular economy model

CNY**7.3** billion

Invested over CNY7.3 billion in employee benefits

75%

Increased the employee localization ratio to 75% outside of China

100%

Audited 100% of medium and high-priority suppliers

Obtained 38,825 patents as of December 31, 2014

38,825
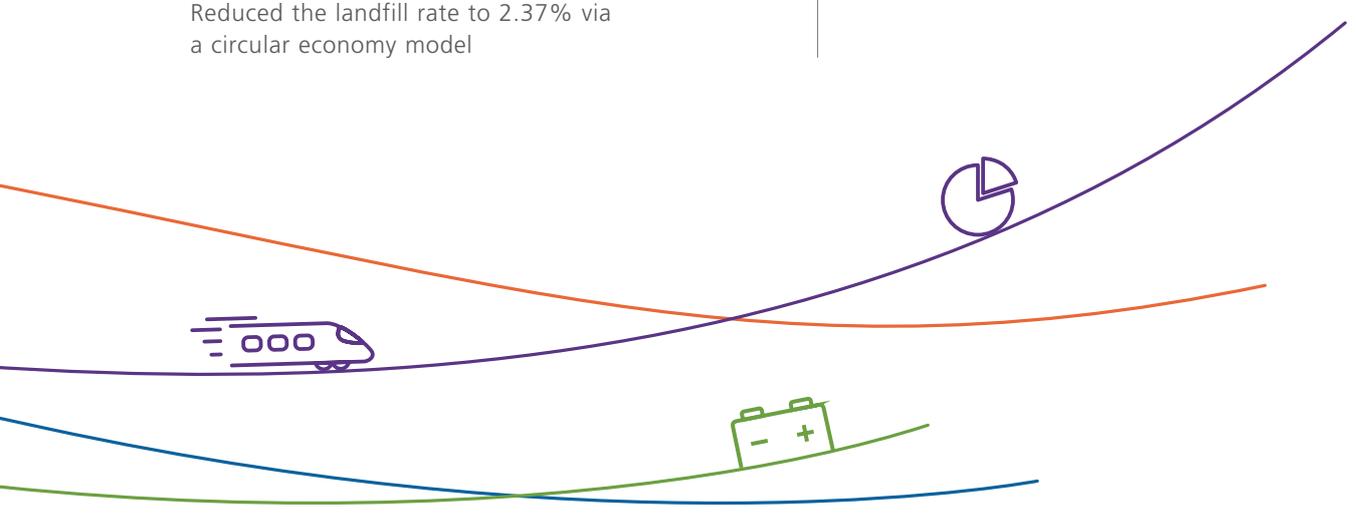
Sustainability Awards and Honors

Huawei's Sustainability Awards and Honors in 2014

Name of Award	Awarding Body
No. 1 in the CSR Index of Chinese Private Enterprises	Chinese Academy of Social Sciences
No. 95 (and the only Chinese company) on LinkedIn's The World's 100 Most InDemand Employers 2014	LinkedIn
Cyber Security Organization of the Year award	CyberSecurity Malaysia
Prize for the Best Energy Partner at the global energy summit jointly held by Telefonica and its global subsidiaries in Colombia	Telefonica
Best Practice award from the United Nations Global Compact Local Network China in recognition of Huawei's new public-private partnership model for building a green supply chain and protecting the environment	United Nations Global Compact Local Network China

Name of Award	Awarding Body
No. 6 in the global ICT industry and No. 1 of all Chinese enterprises on IPE's Green Supply Chain list	Institute of Public and Environmental Affairs (IPE)
Best Green ICT Innovation award for Huawei's MicroDC	Hong Kong ICT Awards 2014
Strategic Partner award (the most authoritative CSR award in the Arabic world)	Arabia CSR Awards
Best Social Cooperation and Contribution award/Best Enterprise for Supporting Talent Development award	Nigerian government
Excellent Education of Science and Technology award (Uganda's Deputy Minister of ICT recognized and thanked Huawei's efforts in boosting Uganda's socioeconomic growth, technological advancement, education, and environmental protection)	Ministry of Information and Communications Technology of Uganda
Technological Innovation award and Green award for Huawei's uninterruptible power supply (UPS)	Workshop on Technological Development and Prospects of UPS Systems and Technologies
2014 Outstanding Member of the Social Responsibility Committee under CESA	China Electronics Standardization Association (CESA)
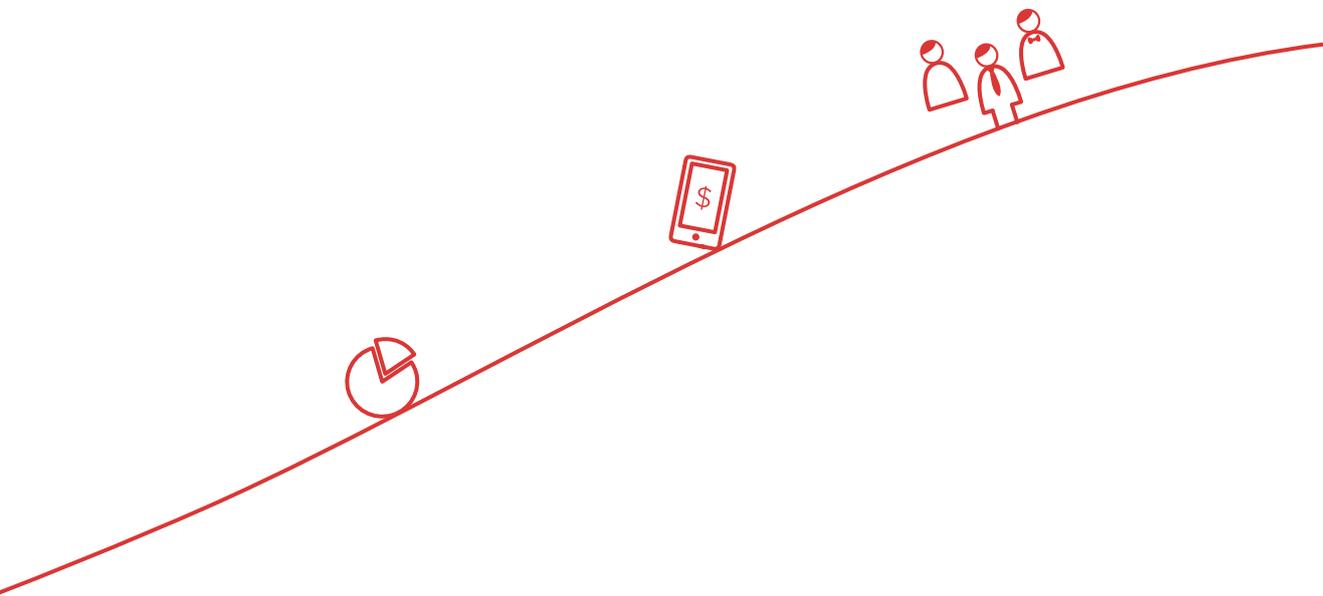
1.
Managing Sustainability

1.1 Corporate Profile

Huawei is a leading global information and communications technology (ICT) solutions provider headquartered in Shenzhen, Guangdong Province, China. Through its dedication to customer-centric innovation and open partnerships, Huawei has established an end-to-end ICT solutions portfolio that gives customers competitive advantages in telecom and enterprise networks, devices, and cloud computing. Huawei is committed to creating maximum value and a superior experience for telecom carriers, enterprises, and consumers. Our innovative ICT solutions, products, and services are used in more than 170 countries and regions and serve nearly 3 billion people around the world.

Huawei has remained focused on its goal: providing ubiquitous broadband connectivity, enabling agile innovations everywhere, and bringing a superior experience to everyone at an affordable price. With advanced ICT technologies and ideas, we will be able to promote social progress and build a world that connects all people and all things in cooperation with our partners in the industry.

Business Highlights in 2014

Enabling Broader Connectivity

With the accelerated rollout of 4G mobile ultra-broadband networks, Huawei commercially deployed 174 LTE networks and 132 Evolved Packet Core (EPC) networks worldwide. These networks reinforced Huawei's presence in Rio de Janeiro in Brazil, Bengaluru in India, and Stockholm in Sweden. In China, Huawei built up a business presence in every provincial capital. Huawei constructed 186 commercial networks worldwide powered by its 400G core routers to help customers across the globe take up the challenges presented by massive data traffic.

Advancing Commercial Use of NFV/SDN

Huawei continued to consolidate SoftCOM, its future-oriented telecom network architecture, by deeply integrating the concepts of cloud computing, Software-defined Networking (SDN), and Network Functions Virtualization (NFV). Huawei developed solutions that will reshape telecom networks in four areas: services, operations, network functions, and network architecture. It helped carriers fulfill their comprehensive business transformation and network evolution agendas. Huawei worked with more than 20 carriers in over 60 joint innovation projects on NFV/SDN.

Driving Service Innovation in the Cloud Era

Huawei launched SD-DC², the Service-driven Distributed Cloud Data Center solution; the OceanStor converged storage system, the first of its kind in the industry; the AR511, an IoT-oriented agile gateway; and the Cloud Fabric Data Center Network and Agile Branch solutions. Each of these offerings help customers build a technological foundation for business innovation in the cloud era.

Becoming One of the World Leaders in Smartphones

As part of its premium product strategy, Huawei introduced dual brands in the consumer business – Huawei and Honor. Huawei smartphones became market leaders in multiple countries. The market share of Huawei flagship smartphones increased significantly, with over 4 million Ascend P7 units shipped to well over 100 countries and regions. The Ascend Mate7 was the talk of the high-end market, and demand exceeded supply. More than 20 million smartphones under the Honor brand were sold through online channels worldwide in the first year alone.

Building Leading Advantages in Services

Huawei continued to build service competitiveness in the ICT domain, and helped achieve agile and efficient transformation in the area of ICT operations. The HUAWEI SmartCare® CEM solution, Quality Brand MBB service, and managed services continued to lead the industry. Huawei's ICT consulting and system integration services experienced rapid development, and the company enabled key breakthroughs in data center integration, NFV/SDN integration, Operations Support System (OSS) integration, and IT managed services. Huawei built NFV/SDN Open Labs and Service Provider Operations (SPO) Lab to promote open cooperation and jointly develop the industry ecosystem.

Defining 5G with Industry Players

Huawei continued to increase investment in 5G and worked with various industries – especially those likely to use public networks in the IoT era – to define 5G standards. These include raising spectrum efficiency, increasing peak rates, enabling massive numbers of connections, and achieving one-millisecond latency. In doing so, Huawei helped to push the sustainable development of the mobile industry. In late 2014, Huawei worked with industry partners to build the world's first 5G testbed in the UK to accelerate 5G research.

Building a Favorable Industry Environment

In the spirit of openness, cooperation, and mutual benefits, Huawei established strategic alliances and global partnerships with world-leading vendors such as SAP, Accenture, Intel, and Infosys. Through these partnerships, Huawei integrated high-grade resources and capabilities to help build a favorable industry environment.

Economic Performance

In 2014, Huawei's well-balanced, worldwide presence helped the company achieve stable and healthy growth in the carrier, enterprise, and consumer businesses. Annual sales revenues totaled CNY288,197 million, a 20.6% increase over the previous year.

CNY**288,197**million

Annual sales revenues totaled CNY288,197 million, a **20.6%** increase over the previous year

Five-Year Financial Highlights

Revenue

CAGR: 12%

CNY Million

Year	Revenue
2010	182,548
2011	203,929
2012	220,198
2013	239,025
2014	**288,197**

Operating profit

CAGR: 2%

CNY Million

Year	Operating profit
2010	31,806
2011	18,796
2012	20,658
2013	29,128
2014	**34,205**

Cash flow from operating activities

CAGR: 7%

CNY Million

Year	Cash flow
2010	31,555
2011	17,826
2012	24,969
2013	22,554
2014	**41,755**
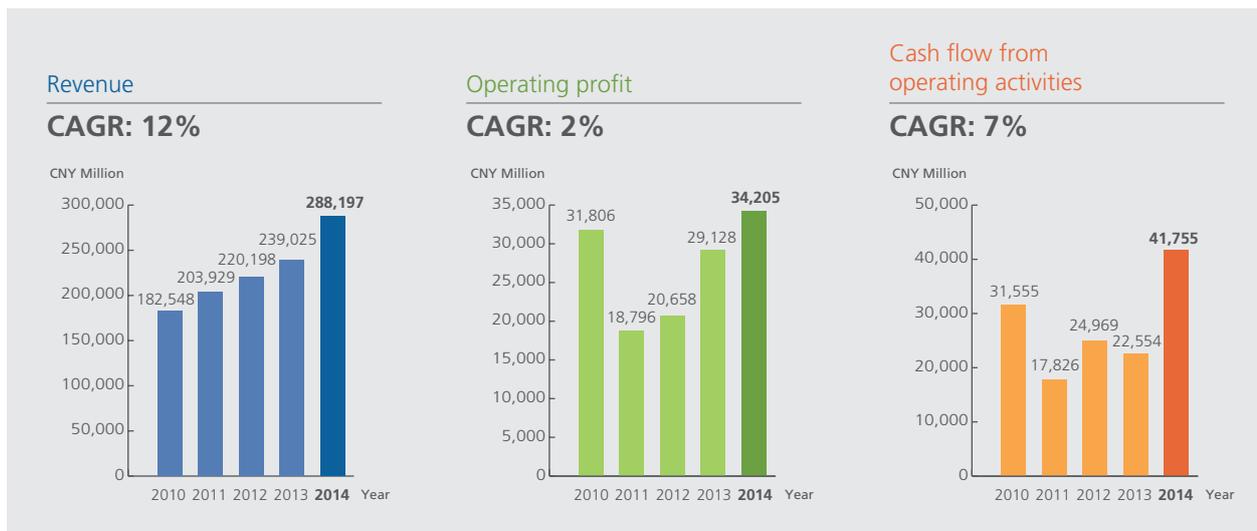
Revenue Performance by Region

35.0% — **EMEA** CNY**100,990** million

37.8% — **China** CNY**108,881** million

14.7% — **Asia Pacific** CNY**42,424** million

10.7% — **Americas** CNY**30,852** million
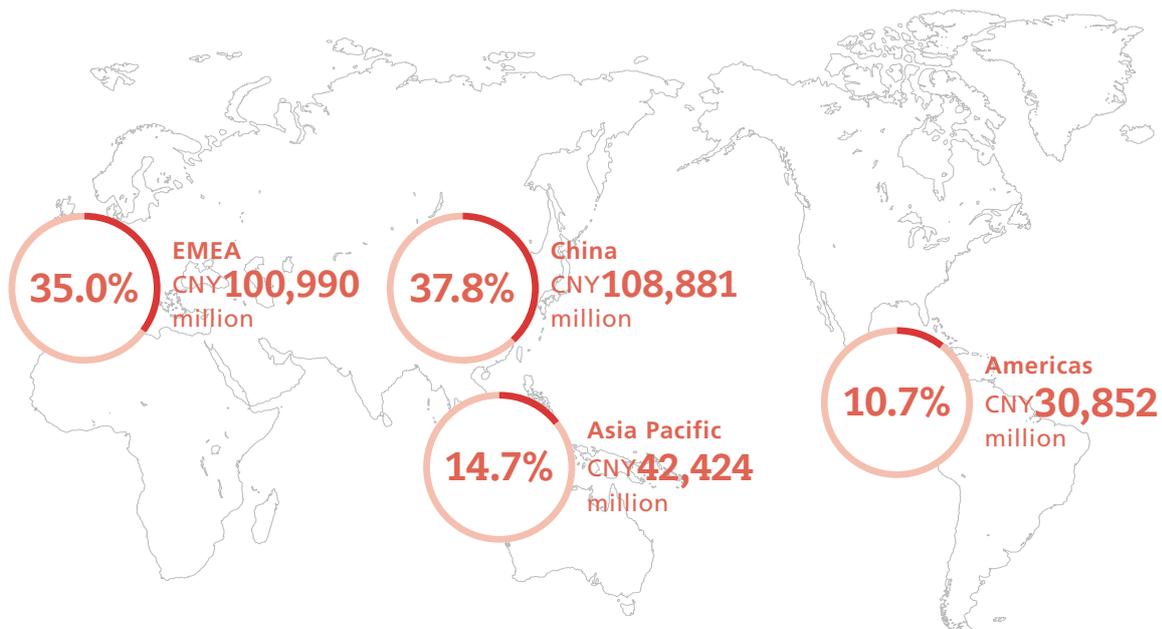
For more information about Huawei's financial performance, see the Five-Year Financial Highlights section on page 10 of the *Huawei Annual Report 2014*.

Corporate Governance

Driven by its core values of customer-centricity and dedication, Huawei has maintained long-term effective growth by continuously improving its corporate governance structure, organizations, processes, and appraisal systems.
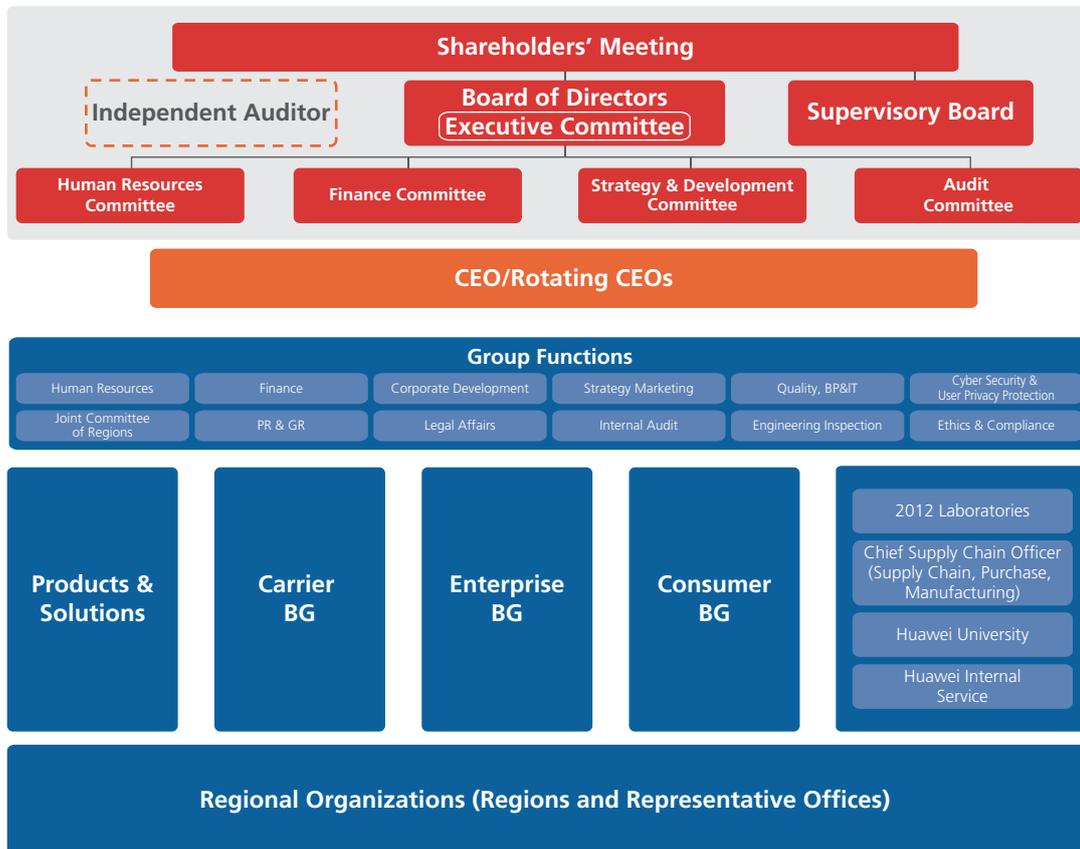
Huawei's Corporate Governance Structure

Shareholders

Huawei Investment & Holding Co., Ltd. (the "Company" or "Huawei") is a private company wholly owned by its employees. Huawei's shareholders are the Union of Huawei Investment & Holding Co., Ltd. (the "Union") and Mr. Ren Zhengfei.

Through the Union, the company implements an Employee Shareholding Scheme (the "Scheme"), which involved 82,471 employees as of December 31, 2014. The Scheme effectively aligns employee contributions with the company's long-term development, fostering Huawei's continued success.

Mr. Ren Zhengfei is the individual shareholder of the Company and also participates in the Scheme. As of December 31, 2014, Mr. Ren's investment accounts for nearly 1.4% of the Company's total share capital.

Board of Directors and Committees

The Board of Directors (BOD) is the decision-making body for corporate strategy and management. The BOD guides and oversees the overall business operations and makes decisions on significant strategic issues. The BOD has established the Human Resources Committee, the Finance Committee, the Strategy & Development Committee, and the Audit Committee to assist and support BOD operations.

Supervisory Board

Pursuant to the requirements of the *Company Law of the People's Republic of China*, Huawei has established a Supervisory Board. The key responsibilities of the Supervisory Board include examining the company's financial and operational status, monitoring the responsibility fulfillment of BOD members and senior management, as well as the standardization of BOD operations. Members of the Supervisory Board attend BOD meetings as non-voting participants.

1.2 Sustainability Strategy

Huawei's sustainability strategy is closely aligned with its corporate strategy. It demonstrates Huawei's commitment to promoting the harmonious and healthy development of the economy, the environment, and society over the long term.

Huawei's sustainability strategy is built on four pillars: Bridging the Digital Divide, Supporting Stable and Secure Network Operations, Promoting Environmental Protection, and Seeking Win-Win Development. Sustainability is one of the major considerations of Huawei's business strategy, and has been incorporated into the company's operating processes. Sustainability is vital for Huawei to become a responsible corporate citizen.

At the beginning of each year, Huawei holds a sustainability strategy workshop to review and revise its strategy in accordance with the developments of internal and external environments. Through this, we can ensure that our sustainability strategy is forward-looking, leads the industry, and sets a clear direction for future action.

Having a leading strategy is important, but effective execution is even more important. To translate the sustainability strategy into action, Huawei holds an annual strategy breakdown meeting to divide the strategy into actionable work priorities and goals, which will be assigned to various departments. Through this meeting, we can monitor and measure the execution of the strategy.

In 2014, we remained focused on our sustainability strategy. While enthusiastically fulfilling our own social responsibilities, we also encouraged other value chain players to do the same, and proactively addressed sustainability risks and opportunities. In doing so, we strive to contribute to a more harmonious and healthy value chain.

Sustainability Vision:
To bridge the digital divide and promote the harmonious and sustainable development of the economy, the environment, and society.

Sustainability Mission:
To establish a leading sustainability management system, operate with integrity and in compliance with applicable laws and regulations, continuously enhance communication with stakeholders, promote a harmonious business ecosystem, ensure sustainable development, and contribute to our customers and society.

Bridging the Digital Divide

- Huawei provides people across all geographic areas with easy access to voice communications services.
- Huawei ensures ubiquitous broadband for all and promotes future-oriented ICT technology to address global challenges.
- Huawei establishes training centers and launches joint teaching initiatives to develop local talent, transfer knowledge, and increase people's engagement in the digital society.
- Huawei provides customized ICT applications and solutions that suit individual, corporate, and regional requirements to improve economic performance, quality of life, productivity, and competitiveness.

Supporting Stable and Secure Network Operations

- Supporting network stability and security, especially at critical times (e.g., earthquakes, tsunamis, and other natural disasters and emergencies), is our highest priority and comes ahead of our own commercial interests.
- By fully considering service continuity and network resilience, Huawei continuously innovates to enhance the robustness and protection capabilities of our products. Huawei supports product testing, verification, and certification by independent parties to provide customers with internationally recognized security assurance approaches. Huawei maintains openness and transparency by proactively communicating and cooperating with stakeholders, and complies with applicable security standards, laws, and regulations.

Promoting Environmental Protection

- Huawei incorporates green concepts into product planning, design, R&D, manufacturing, delivery, and service processes. Through continuous technological innovation, Huawei boosts resource utilization efficiency to provide customers with world-leading green and energy-efficient products and solutions.
- Huawei is dedicated to improving resource utilization efficiency in offices, production facilities, logistics centers, and labs to minimize waste and greenhouse gas emissions and become a role model for environmentally-friendly operations.
- Huawei continuously ensures that our products meet environmental protection requirements, and requires our partners to operate in compliance with green regulations. By being closely involved in business activities, we promote energy conservation and emissions reduction in the supply chain to improve our overall competitiveness in the industry chain.
- Huawei rolls out a wide variety of green integrated ICT solutions to help industries conserve energy and reduce emissions. Huawei is an active player in promoting an energy-conserving, environmentally friendly, and low-carbon society.

Seeking Win-Win Development

- Huawei provides employees with varied career paths based on their special skills to help them realize their individual value.
- Huawei enthusiastically contributes to the communities and countries in which it operates.
- Huawei adheres to business ethics by opposing corruption, dumping, and monopolies. Huawei operates with integrity and in compliance with applicable laws and regulations.
- Huawei focuses on sustainability risk management during our operating activities and service processes and has gradually become a sustainability leader in the industry and the world.
- Huawei closely works with suppliers to develop standards and benchmarks. We have shifted the focus from risk management to efficiency management and taken a leading position in sustainability in the industry chain.

Huawei's Sustainability Strategy

Sustainability Risks and Opportunities

Huawei regularly analyzes sustainability risks and opportunities, and has developed a risk identification methodology to systematically uncover potential risks. Comprehensive discovery of sustainability risks and opportunities provides an important reference for strategy plans. It enables Huawei to set meaningful objectives for optimizing sustainability management and to create business value.

In 2014, we defined our priority sustainability risks (e.g., supply chain management and network stability and security) and opportunities (e.g., environmental protection and bridging the digital divide) in line with many factors. These include stakeholder requirements and expectations; research and analysis of sustainability trends; and industry benchmarking.

1.3 Stakeholder Engagement

Stakeholder engagement is at the core of Huawei's sustainability management efforts. Huawei has established the CSD Stakeholder Engagement Management Process to institutionalize stakeholder engagement and integrate it into operations to create greater value. By communicating with stakeholders, we can demonstrate our attitude towards sustainability as well as our efforts and resulting performance. More importantly, we can listen to all voices and apply suggestions in routine management to drive continuous improvement.

Smooth communication with stakeholders allows us to systematically identify and manage sustainability risks, which in turn will significantly increase our ability to grow sustainably and attain strategic objectives. The table below lists our main approaches to stakeholder engagement as well as examples of action taken in 2014.

Stakeholder	Engagement Approach	Example
Customers/Consumers	• Customer satisfaction surveys • Onsite dialogues with customers concerning sustainability • Industry exhibitions and forums • Consumer surveys • Huawei Club	• Attended BT's Better Future Supplier Forum (BFSF) to exchange ideas with the customer and study leading sustainability ideas. • Conducted a global customer satisfaction survey, which showed a steady improvement in customer satisfaction.
Employees	• Communication with employee representatives • Employee well-being activities • Organizational climate surveys • Communication with the management and suggestion mailbox	• Implemented the "3+1" program to create a relaxing and healthy working environment for employees. • Organized the Family Day activity to invite employees and their families to visit Huawei's campuses.
Suppliers	• Global Supplier Sustainability Conference • Supplier training and workshops • Supplier audits and appraisals	• Held the Sixth Global Supplier Sustainability Conference under the theme of Building a Connected World – a Greener Supply Chain and Greater Competitiveness.
Governments	• Cooperation on sustainability initiatives • Workshops • Policy communication meetings	• Collaborated with the Shenzhen government in the Shenzhen Green Supply Chain Pilot Project. Huawei demonstrated its commitment to being a socially responsible buyer and encouraged suppliers to save energy and reduce emissions.
Industry/Standards Associations	• Industry forums and association activities • Standards workshops • Publication of research achievements	• Attended the Going Green – Care Innovation 2014, an international environmental protection conference of the electronics industry. • Participated in developing the IPC-1401, a supply chain CSR best practice guiding standard launched by the Association Connecting Electronics Industries (IPC). • Joined the supply chain working group of the China Electronics Standardization Association (CESA).
NGO	• Sustainability conferences • Joint cooperation projects • Workshops	• Held the Huawei Sustainability Conference themed Build a Sustainable World Together. • Participated in activities organized by United Nations Global Compact Local Network China.
Media	• Sustainability conferences • Media interviews	• Convened an international media communication meeting in Hong Kong and launched the 2013 Sustainability Report.

Stakeholder	Engagement Approach	Example
Research Institutes/ Academia	• Workshops • Sustainability report • Cooperation on ICT training and development	• Attended the Conference on Legal Risks and Countermeasures of International Investment and Trade – From the Perspective of China-Africa Cooperation (hosted by the Ministry of Foreign Affairs of China and the China Law Society), and delivered a keynote speech entitled *Industry Norms and Social Responsibilities of Companies Operating in Africa*.
Community groups	• Regular meetings • Charitable donations • Training	• Worked with K to College (a non-profit organization) to make donations to students in the Rolando Park Elementary School in San Diego, California, to support education in the local community.

1st Huawei Sustainability Conference

On April 24, 2014, the Huawei Sustainability Conference was held in Shenzhen, China, with the theme of Build a Sustainable World Together. This event brought together over 60 attendees, including representatives from carriers (e.g., BT, Deutsche Telekom, and Vodafone) and organizations (e.g., United Nations Global Compact UNGC, CSR Europe, Global e-Sustainability Initiative GeSI, and CSR Asia).

Attendees discussed the trends in the ICT industry as well as hot topics relating to sustainability. Niall Dunne, Chief Sustainability Officer of BT, talked about the carrier's successful experience in becoming more sustainable. Alex Deng, Chairman of Huawei's CSD Committee, welcomed guests on behalf of Huawei. In his speech, he described Huawei's sustainability efforts in the areas of environmental protection and supply chain management. Alex also demonstrated Huawei's commitment to promoting the sustainable development of the company and the world at large. The conference was an excellent opportunity for Huawei to communicate with stakeholders and to share experience.

We believe in the power of communications to deliver sustainable social and economic growth. The Sustainability Conference has been an excellent opportunity to discuss with global industry leaders and stakeholders how ICT can play a very real part in building a better future."

—Niall Dunne, Chief Sustainability Officer of BT

Alex Deng, Chairman of Huawei's CSD Committee, giving an opening speech

Niall Dunne, Chief Sustainability Officer of BT, sharing the carrier's best management practices

Material Issues

By managing our material sustainability issues, Huawei can fully understand and prioritize stakeholders' concerns and respond to them in a more comprehensive and transparent way. In addition, Huawei can effectively identify areas for improvement and optimize sustainability management.

To identify the issues most important to stakeholders, Huawei surveyed over 230 stakeholders in 2014, including customers, employees, suppliers, consumers, governments, and NGOs. The survey was conducted through onsite interviews, phone calls, and questionnaires. It elicited an extremely active response from stakeholders, with a response rate of 98%.

Huawei defined the priority of issues from two dimensions: Level of Stakeholder Concern (vertical axis) and Impact on Huawei (horizontal axis). Based on the overall rankings shown in the stakeholder survey, Huawei determined the priority of issues on the vertical axis. In line with assessment results that encompass internal experts' analysis of sustainability risks, management systems, and strategic goals, Huawei determined the priority of issues on the horizontal axis.

High

🍃 Green products and services

💙 Supply chain sustainability management

🍃 Reducing energy consumption and carbon footprint

💙 Integrity and operational compliance

💙 Social contribution and charity

📶 Communications for all

🍃 Resource efficiency and circular economy

💙 Product safety

📶 ICT application

Level of Stakeholder Concern

⚙ Sustainability management system

☁ Actively responding to cyber security challenges

📶 Broadband inclusion for all

📶 Nurturing ICT professionals

💙 Employee health and safety

☁ Supporting network stability

💙 Employee training and development

💙 Workforce diversification

Low   Impact on Huawei   High

The 17 material issues shown in the above chart are discussed in the following sections of the report:

⚙ —P12-P27   Managing Sustainability   🍃 —P44-P61   Innovating for a Greener Environment

📶 —P28-P35   Bridging the Digital Divide   💙 —P62-P89   Seeking Win-Win Development

☁ —P36-P43   Supporting Stable and Secure Network Operations

Huawei's Participation in Sustainability Organizations

UN Global Compact

Global e-Sustainability Initiative

UN Broadband Commission for Digital Development

CSR Europe

QuEST Forum

Business for Social Responsibility

Huawei actively collaborates with our partners, customers, and other stakeholders to improve sustainability across the industry. We are a member of the UN Broadband Commission for Digital Development, UN Global Compact, GeSI, QuEST Forum, Business for Social Responsibility (BSR), CSR Europe, and other regional and global organizations. Our participation in these organizations allows us to share best practices, explore areas for collaboration, and improve standards.

The QuEST Forum launched the Sustainability Initiative in 2014 with the aim of creating a TL9000 measurement class that sets the industry standard for the effectiveness and maturity of a company's sustainability program. To date, over 20 telecom companies from Europe, Asia, and the Americas have joined the Sustainability Initiative.

The measurement class enables peer benchmarking and best practice sharing amongst participating companies. The QuEST Forum has developed a comprehensive framework that integrates sustainability into companies' practices and established an online data collection and benchmarking system based around this. As one of the pilot companies, Huawei contributed to the establishment of this framework, provided the required data, and led several subprojects under the Sustainability Initiative.

1.4 Sustainability Management

Continuously Consolidating the Sustainability Management System

Huawei established a sustainability management system based on ISO26000 in 2013. Since then, Huawei has developed and released a series of management methodologies and tools, such as policies, processes, and baselines. In 2014, Huawei continued to consolidate the sustainability management system to ensure its effective execution throughout the company.

We have made full use of our "Manage Corporate Sustainable Development Process" to systematically plan, execute, monitor, and improve sustainability efforts. In 2014, the process was adopted by all business departments. In 2015, we plan to optimize the process based on the actual results of operations to better align it with business activities and create more business value.

We have also developed a tool for assessing the maturity of the sustainability management system across 11 dimensions, such as strategy, risk management, indicator management, organization, and emergency management. This tool enables us to better understand the maturity of business modules, identify areas for improvement, and drive continuous improvement.

Corporate Sustainable Development (CSD) Committee

Huawei established the CSD Committee in 2010. As a specialized organization tasked with managing Huawei's sustainability efforts, the CSD Committee coordinates the operations of the sustainability management system, plans and develops the sustainability strategy, and monitors its execution during business operations. The CSD Committee is responsible for leading Huawei's sustainability efforts.

The CSD Committee is chaired by Alex Deng, President of Huawei's Quality, Business Process & IT Management Department and member of Huawei's Supervisory Board. This Committee comprises over 20 members from R&D, manufacturing, procurement, HR, administration, and other departments.

Sowing the "Golden Seeds" of Sustainability

The Sustainability Golden Seed Program provides sustainability-related training, certification, lectures by high-end experts, and forums. It aims to train sustainability experts for all departments, raise the sustainability awareness and capabilities of employees at all levels, and create a leading culture of sustainability.

In 2014, the program team invited internationally renowned experts to share their insights at our sustainability and circular economy forums, as well as special training on ISO 26000 – guidance on social responsibility. Over 500 participants from the R&D, supply chain, manufacturing, and HR departments attended these training sessions. These participants are now better able to improve Huawei's overall capability in sustainability.

Professional competence and capability is a prerequisite for sustainability. In 2015, the Sustainability Golden Seed Program will deliver courses tailored to the business type of each department to take Huawei's sustainability capabilities to a new level.

Sustainability forum

Circular economy forum

Mid- to Long-term Sustainability Objectives

Huawei has set mid- to long-term sustainability objectives to guide its future efforts. Huawei reviews the objectives every year in light of its development plan and stakeholder requirements to ensure that its objectives keep pace with the times.

Strategy execution

- Launch the Bridging the Digital Divide flagship program.
- Conduct GHG investigations and set the mid- to long-term emissions reduction goal.
- Develop a plan for auditing medium and high potential risk suppliers based on risk identification results, and drive improvements.

- Continuously implement the Bridging the Digital Divide flagship program and attain goals phase by phase.
- Continuously implement energy conservation and emissions reduction projects.
- Implement sustainability joint improvement projects together with suppliers, and coach key suppliers on establishing their own sustainability management systems.

- Strengthen and promote the Bridging the Digital Divide flagship program as planned.
- Continuously introduce new technologies and processes.
- Implement sustainability joint improvement projects together with suppliers, coach suppliers on establishing their own sustainability management systems, and focus on increasing suppliers' capabilities and efficiency.

- Continuously expand and optimize the Bridging the Digital Divide flagship program.
- Meet the goal of GHG emissions reduction.
- Drive collaboration on sustainability management in the industry chain, and continuously cooperate with customers with a focus on industry chain sustainability.

Management system

- Assess the maturity of the sustainability management system.
- Implement the corporate sustainable development process and consolidate the sustainability risk management mechanism.
- Provide sustainability training and improve sustainability capabilities.

- Deploy the sustainability management system worldwide based on customer needs.
- Optimize the sustainability management process.

- Apply and update the sustainability risk management tools.
- Optimize the sustainability management system.

- Promote the sustainability risk management tools globally and develop end-to-end process management mechanisms.
- Successfully deploy the sustainability management system in key regions outside of China.

| 2015 | 2016 | 2017 | 2018 | 2019 |

1.5 Integrity and Operational Compliance

Compliance Management

Compliance with applicable laws and regulations is crucial to the survival of any enterprise. As a global company, Huawei upholds high standards of business ethics, conforms to applicable international conventions and national laws, and operates with integrity. We play by internationally accepted rules and have integrated trade compliance into our day-to-day operations in order to create a harmonious business environment.

Integrating Operational Compliance into All Business Scenarios

Huawei's Legal Affairs Department provides legal guidance on compliance-related activities such as export control, cyber security, trade competition, HR management, and anti-bribery and anti-corruption. The department also conducts issue identification and evaluation, specifies compliance requirements, and releases warnings against internal and external legal risks. It also helps other departments ensure legal compliance in all operations.

Focusing on Building Compliance Systems and Organizations in Subsidiaries

In 2014, Huawei focused considerable efforts on building compliance systems in its subsidiaries outside of China. As part of these efforts, Huawei established supervisory organizations tasked with overseeing and managing operational compliance in overseas subsidiaries. Throughout the year, subsidiaries' supervisory organizations presented a total of 195 compliance reports to ensure the real-time supervision and management of subsidiaries' operational compliance.

To strengthen operational compliance all over the world, we have defined the responsibilities and operational mechanisms for compliance management and supervision, and appointed compliance officers in major countries outside of China. In 2014, we completed four training sessions that allowed compliance officers from all key countries and regions to better understand their roles.

Sharing Huawei's Trade Compliance Practices at the WCO Global AEO Conference

Huawei puts trade and customs compliance over its commercial interests. It complies with all rules stipulated by the WTO and free trade agreements to support smooth international trade operations.

On April 28, 2014, the World Customs Organization (WCO) Global Authorized Economic Operator (AEO) Conference was held in Madrid, Spain. Over 1,000 customs officials from 89 countries and regions attended the conference. Huawei's senior expert James Kenneth Lockett delivered a keynote speech entitled *Perspective: Huawei Experience* to share Huawei's best practices in trade compliance. He was the only representative from a manufacturer invited to give a speech.

Huawei's senior expert James Kenneth Lockett delivering a speech at the WCO Global AEO Conference

Anti-Corruption and Anti-Bribery

Huawei abides by business ethics, operates with integrity, and has zero tolerance for bribery and corruption. In 2014, Huawei continued to strengthen its control mechanism for preventing and eliminating bribery and corruption, and required all employees worldwide to adhere to the *Business Conduct Guidelines* (BCGs) and attend training every year. Furthermore, Huawei demanded that all its partners and suppliers sign the *Honesty and Integrity Agreement*.

Business Conduct Guidelines

The *Business Conduct Guidelines* (BCGs) includes regulations on the general business conduct that all Huawei employees must obey. It is one of the new hire packages that must be learnt and signed by new hires.

Public channels for lodging complaints:

✉ E-mail: BCGcomplain@huawei.com   ☎ TEL: +86-(0)755-28562338

In 2014,

99.42%

of employees had studied and signed the BCGs.

Export Control

Huawei conforms to the trade laws and regulations of the countries and regions in which it operates. Through policies, organizations, processes, systems, and tools, Huawei has embedded compliance requirements into the business activities of all functional departments. Huawei has also established an end-to-end Internal Compliance Program (ICP), which was highly praised by an authoritative third party during assessments and audits. Our ICP has gone a long way towards mitigating the import and export control risks faced by business units.

Huawei keeps a close watch on changes in the international situation, remains sensitive to compliance issues, and promptly and effectively identifies compliance risks in key countries and regions. We also maintain smooth communication with government authorities, industry organizations, and partners. As a result of these efforts, we have reinforced our positive image in terms of external compliance, and sustained our business development globally.

38,825 patents

As of December 31, 2014, Huawei had held 38,825 patents

48,719

applications

In total, Huawei has filed 48,719 patent applications in China and **23,917** outside of China

Intellectual Property Rights

Huawei respects the intellectual property rights (IPRs) of other holders, complies with international intellectual property laws, and resolves IPR issues through negotiation, cross-licensing, and product cooperation in an open, positive, and friendly manner. Huawei adopts legal means to protect itself against malicious infringements on our IPR.

As of December 31, 2014, Huawei had held 38,825 patents. In total, Huawei has filed 48,719 patent applications in China and 23,917 outside of China.

In 2014, Huawei held the most invention patents in China, the 7th most in Europe, and the 28th most in the US.

2.
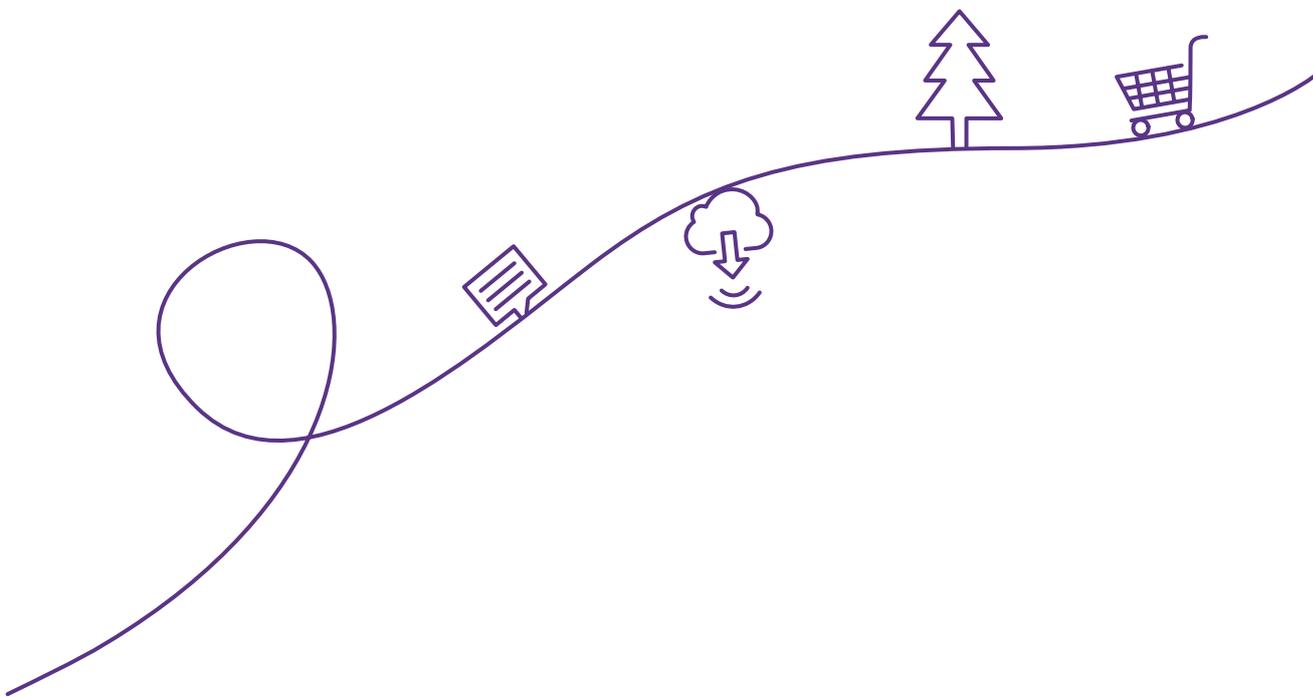
Bridging the Digital Divide

Overview

Technological advances – from broadcasting and TV to mobile phones and the Internet – have transformed the world. For many people, it's hard to imagine what life would be like without easy, efficient ICT services. While many of us enjoy the infinite opportunities and convenient services made possible by ICT, there are billions more who are left behind for one reason or another. ICT advances have created a huge digital divide for the unconnected.

As a key ICT player committed to building a Better Connected World, Huawei provides infrastructure, equipment, solutions, and expertise to enable Internet access and bridge the digital divide. We aim to connect the unconnected, develop the necessary ICT talent and skills to leverage the potential of new technologies, and deliver solutions that create value for users and enrich their lives. ICT has considerable potential to increase efficiency and productivity and improve health and education. Huawei will unlock the potential of ICT to contribute even more to the information society.

2.1 Communications for All

There has been great progress in extending voice communications across the world. Nevertheless, 450 million people across the world live out of reach of a telephone connection. Mobile penetration rates are still only around 45% in developing countries, and as low as 30% in the least developed countries. Therefore, ensuring communications for all is a key part of Huawei's strategy for bridging the digital divide.

Huawei strives to help more people reach out to the world. To that end, we have deployed products and services in more than 170 countries and regions, serving nearly 3 billion people around the globe. We are committed to providing people across all geographic regions with easy access to communications networks. As mobile communications services are readily available, we strive to provide basic voice communications to people in remote areas, helping them join the information society and improve their livelihoods. Through our own efforts and in collaboration with stakeholders, we are dedicated to meeting the ambition of enabling communications for all.

Connecting Rural Zambia

The mobile penetration rate is low in Zambia's remote areas. According to ITU, over 25% of Zambians are unable to access the Internet on their mobile phones. The Zambian people have a strong desire for mobile connectivity. They want to be able to promptly connect with their family and relatives, receive holiday greetings via calls or text messages, and reach distant buyers to sell their agricultural products via mobile phones.

Since 2013, Huawei has worked with the Zambia Information and Communication Technology Authority and local carriers to implement the Universal Access Project, an initiative designed to deliver network coverage to remote areas. As one of the most important welfare programs launched by the Zambian government, the Universal Access Project is aimed at deploying base stations in remote regions, which in turn can stimulate local economic growth, promote cultural development, and bridge the digital divide.

In 2014, Huawei successfully installed 169 base stations in remote areas of all 10 provinces in Zambia. These base stations connected over 500 villages for the first time and allowed tens of thousands of people to reach the outside world using their mobile phones. Huawei also donated 100 mobile phones to local villagers so that they could instantly enjoy convenient mobile services.

Zambian Vice President Dr. Guy Scott made the first call from the first tower delivered by the project at Matanda in Luapula Province. He urged women and young people in particular to seize the opportunities created by mobile communications to get involved in business.

In addition to deploying communications networks, Huawei employed local people to construct the base stations, creating job opportunities and increasing their income. Through this, Huawei has contributed to local economic growth.

"

Through our dedicated effort and commitment to the Zambian market, we endeavor to work with local partners towards improved network quality, affordable rates, and more value-added services for the benefit of the people of Zambia."

— Huawei Zambia managing director

Zambian Vice President making the first phone call

2.2 Connecting the 4.3 Billion Unconnected

According to ITU, fixed broadband penetration in most developed countries has already reached relatively mature levels. In contrast, it is only 6% in developing countries and growth rates have dropped from 18% in 2011 to 6% in 2014. Although the number of mobile broadband subscribers is increasing rapidly in developing economies with a growth rate of around 26%, overall penetration is still low, at 21% compared to 84% in developed countries. By 2014, there were 3 billion Internet users globally, accounting for 40.4% of the world's population. This means that 4.3 billion people are offline, of which 90% are from developing economies. While more than three out of four people in the developed countries have Internet access, only one out of three is online in the developing world.

Although continents are linked with submarine optical cables and LTE base stations have been built in the Arctic Circle and on the Roof of the World, there are still many places in the world that are unconnected. Ensuring broadband inclusion remains a major challenge for the ICT industry. At Huawei, we firmly believe that giving everyone equal opportunities for digital growth is crucial to creating a level playing field. Internet access will be the new starting point for the unconnected – it will change lives by opening the door to knowledge, education resources, and development opportunities. To make this happen, Huawei is committed to exploring innovative solutions to connectivity challenges.

Broadband networks that offer affordable and convenient connectivity have the potential to significantly drive economic growth, modernize education, and improve people's lives. With this in mind, Huawei has closely collaborated with its stakeholders and participated in broadband build-out projects in different regions. We strive to promote ubiquitous broadband for all and bridge the broadband divide on a global scale.

Improving Education Through the Internet

In cooperation with the local carrier Zain and UNESCO, Huawei helped schools in South Sudan connect to the Internet and access the information society.

In 2014, the first phase of the project enabled four schools to connect to the communications network, allowing over 3,000 students to access the Internet for the first time. These schools were entitled to 1 gigabyte of data per month per computer free of charge. This enabled students to enrich their knowledge by surfing the Internet freely. In addition, Huawei played several roles during the project, including providing computer training for school staff; furnishing computer labs; repairing computers; and offering computers, desks, and chairs. Thanks to Huawei's efforts, these students were able to use the Internet with ease.

Empowered by Huawei's technologies, students were able to participate in the UNESCO Associated Schools Project Network to learn from and interact with students in neighboring countries.

Students in South Sudan accessing the Internet

Huawei helped over

over **3,000**

students to access the Internet for the first time

Connecting Rural New Zealand with the Rest of the World

Vast stretches of forests and farmland have made agriculture and tourism the two legs on which New Zealand's economy stands. These two industries are crucial to the country's GDP and export earnings. However, complex terrain presented a huge challenge for Spark New Zealand, the country's leading carrier. How can the carrier deploy advanced mobile Internet technologies across vast expanses of outlying and rural areas? How can it ensure smooth communications comparable to that in cities and boost agricultural productivity to yield more benefits?

The agriculture and tourism industries require not just Internet coverage, but also a substantial level of service quality and new applications and services to really keep them running at a high level of efficiency. The agribusiness sector, which is highly productive in New Zealand, needs all sorts of modern technologies, especially connectivity technology, to keep improving. Spark New Zealand has begun trials on certain farms that need to be connected to increase productivity and measure and track food movement. The new network not only connects people, but also connects cows and farms. These connections, as part of the Internet of Things, will be crucial for the future.

Together with Spark New Zealand, Huawei deployed an LTE APT700 commercial network to connect rural New Zealand. Compared to other frequency resources, the 700 MHz frequency range can deliver wider coverage at a lower cost and ensure more flexible deployment, even in complex terrain. The 700 MHz low-frequency spectrum penetrates walls and travels long distances, making it very suitable for rural and urban coverage. This spectrum also significantly reduces the cost of network construction in the early stages and shortens deployment time. This helped Spark New Zealand quickly achieve its LTE coverage targets.

200,000

The LTE APT700 network now provides 4G services throughout the country, from the busiest parts of the nation to the most remote stretches of countryside, with nearly 200,000 rural customers (including businesses and individuals) now enjoying the same quality of Internet as the townies

The LTE APT700 network now provides 4G services throughout the country, from the busiest parts of the nation to the most remote stretches of countryside, with nearly 200,000 rural customers (including businesses and individuals) now enjoying the same quality of Internet as the townies. Not only does this bridge the digital divide, a social good in and of itself, it stimulates commerce. Consumers can check the origins and transportation records of the food on their table, instantly. Travelers can share their experiences as they happen, no matter how far they are from the noise and clutter of the modern world. And there will be more to come, with these emerging opportunities estimated to add US$1.85 billion to the GDP of New Zealand.

> *We are very pleased to have the 700 MHz band spectrum. We absolutely believe that having the spectrum is not only the right thing for our company, but the right thing for our customers and economy as well. And particularly in areas that wouldn't traditionally get coverage and speed without 700 MHz band spectrum being available."*
>
> *— David Havercroft, Chief Operating Officer, Spark New Zealand*

Tremendous gaps exist between developing and developed countries in terms of the efficiency and productivity of certain industries, particularly agriculture. By rolling out innovative broadband technologies, such as that adopted in New Zealand, developing countries can dramatically boost their productivity, rapidly modernize entire industries, significantly increase rural incomes, and enhance competitiveness in global markets.

But, just as we are continually developing new technologies to help drive socioeconomic progress, we need to ensure these technologies can benefit everyone: they must become a force for closing the digital divide, helping those who have fallen behind to catch up quicker and keep them from falling further behind.

2.3 Improving Digital Literacy

Cloud computing is now in full swing, and the Big Data era is already upon us. The ongoing convergence of IT and communications technology (CT) is reshaping the ICT industry, which in turn will raise the bar for ICT talent in terms of knowledge and skills. ICT professionals will be those who master a mix of knowledge and skills and keep pace with the times. ICT literacy is becoming a key factor that helps erase the digital divide. As part of its strategy to bridge the digital divide, Huawei enthusiastically promotes the transfer and sharing of ICT knowledge and skills, and nurtures ICT professionals. Through these efforts, Huawei strives to bridge the divide for people from all walks of life in terms of information accessibility and to make information technology available to all.

By the end of 2014, Huawei had established 45 training centers globally to nurture local professionals and transfer knowledge. In close collaboration with local higher education institutions and other organizations, we offered scholarships and internships to outstanding students to support ICT education and nurture talented individuals. Seeds for the Future – our flagship CSR program – had benefited over 10,000 students from more than 100 universities in 35 countries. (For more information about the program, see the "Supporting the Local Communities" chapter.)

Empowering ICT Talent to Flourish on the African Continent

At the closing ceremony of the 2014 World Economic Forum on Africa held in Abuja, Nigeria, Huawei Vice President Charles Ding announced Huawei's ICT talent training program for Africa. According to him, Huawei would train 10,000 ICT professionals for Africa over the next 5 years. This program is part of Huawei's flagship CSR program Seeds for the Future.

Mr. Ding said at the forum that Huawei is committed to developing its business in Africa where its commitment will create mutually beneficial opportunities and win-win outcomes. In 2014, Huawei and the Federal Ministry of Communication Technology of Nigeria commenced the 1,000 Girls ICT Training Programme, which trained 1,000 Nigerian girls on ICT technologies to enable them to find employment when they come of working age. This programme is part of Huawei's commitment to localization and ICT technology transfer to Nigeria.

We will continuously contribute to Africa and roll out the Seeds for the Future program in other African countries. Through these initiatives, we strive to nurture more ICT professionals for Africa and create more job opportunities to drive economic prosperity on this continent.

10,000

Huawei would train 10,000 ICT professionals for Africa over the next 5 years

Huawei Vice President Charles Ding announcing that Huawei would train 10,000 ICT professionals for Africa over the next 5 years

Nurturing ICT Professionals in Myanmar

Huawei spares no effort to nurture ICT professionals and transfer ICT knowledge in local communities. In doing so, we aim to increase people's engagement in the digital society and make information technology available to all.

Huawei believes that "if you give a person a fish, you feed them for a day; if you teach a person to fish, you feed them for life". Acting on this belief, Huawei has cooperated with the training organization KMD to provide end-to-end ICT training in Myanmar. Specifically, Huawei offered a wide array of training materials; donated equipment to create a practical training environment; trained trainers; arranged internships; and developed a pool of ICT talent. Through these initiatives, Huawei contributed greatly to the development of ICT professionals in Myanmar.

Huawei trained more than 1,500 ICT professionals in 2014 and plans to train 5,000 more over the next 3 years to address the shortage of technical personnel and boost socioeconomic growth in Myanmar.

Huawei–KMD joint training program for ICT professionals in Myanmar

2.4 ICT – The Power that Changes the World

ICT makes life better by changing the way we work, entertain, and consume. ICT also delivers efficiency gains, and enables flexible resource use and management to facilitate value creation. It is a powerful tool that allows businesses to disrupt existing business models, innovate new offerings, and stay competitive in new business environments.

ICT has shifted from a support system to a production system that drives value creation. Connectivity has become a new factor of production, alongside land, labor, capital, and technology.

Technologies are changing dramatically, creating new opportunities for countries, industries, and individuals who develop and utilize those technologies and who can apply them to create value. In 2014, Huawei released a report entitled the *Global Connectivity Index: Building a Better Connected World*. This report identifies a gap in the ability of governments, industries, companies, and consumers to understand, develop, and utilize these technologies. Huawei will continuously innovate technologies and drive their application in the hope of contributing more to society.

Huawei has actively promoted the application of ICT technologies in governments, public utilities, and industries such as transportation and energy. Our telemedicine, e-education, and HD conferencing technologies have significantly increased resource utilization efficiency hand decreased resource consumption. Our products and solutions play a meaningful role in driving forward the sustainable development of society.
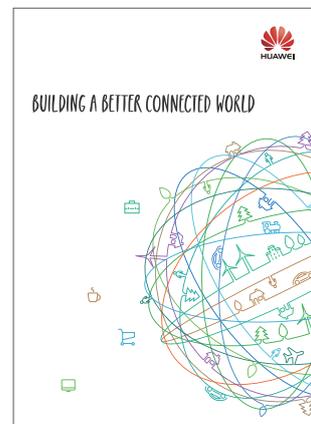
To download the report, click

http://www.huawei.com/ilink/en/download/hw_367219

Connectivity has become the normal, and it will continue to increase. Huawei estimates that by 2025 there will be 100 billion connections worldwide, including 8 billion smartphones.

Expanding the Reach of Medical Services to People in Remote Areas

Quality healthcare is essential to quality of life as well as to social stability and progress. ICT is now a key driving force behind the strategic transformation of the healthcare industry.

Karamay is a city in Xinjiang Autonomous Region in the far north-west of China. People in Karamay expect to enjoy a similar level of quality medical services as those in large cities, reduce patient traveling time, and increase treatment efficiency.

To meet these expectations, Huawei has launched a telemedicine solution. The solution provides a telepresence system and seamlessly integrates hospital information systems with medical instruments from mainstream vendors. Using this solution, hospitals can collect, transmit, and share patient data in real time. The solution also supports multiple application scenarios to address diverse healthcare needs, such as remote consultations, emergency rescue, and home nursing.

Convenient remote consultation for patients

100

Huawei's telemedicine platform connects about 100 departments from 4 hospitals as well as 11 community health centers and rural health clinics

In Karamay, Huawei's telemedicine platform connects about 100 departments from 4 hospitals as well as 11 community health centers and rural health clinics. The platform maximizes the utilization of internal and external medical resources. It can allocate medical resources to lower-level hospitals in Xinjiang, and bring in resources from outside Xinjiang by connecting to multiple hospitals in large cities such as Beijing, Shanghai, and Wuhan. This platform enables doctors from the same departments in different hospitals to consult with each other remotely.

Our telemedicine platform effectively addresses the inequality of medical resources, boosts the efficiency of emergency rescue, reduces patients' traveling costs, and expands the reach of medical resources. Huawei's telemedicine platform puts convenient healthcare services into the hands of all people in Xinjiang.

3.
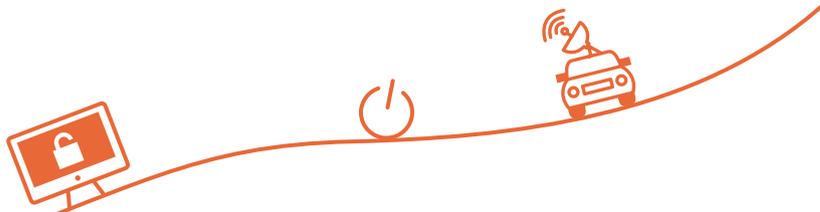
Supporting Stable and Secure Network Operations

Overview

ICT is progressing at full speed. It is leading to a wave of digital change and has become the major driving force behind global economic growth. Ubiquitous connectivity is reshaping the way we live, ushering in a new digital society. These changes have opened up infinite opportunities for individuals and contributed to a thriving age for networks, which are now an integral part of daily life and production. Nevertheless, these developments also pose challenges to the mission of guaranteeing stable and secure network operations worldwide 24/7.

Supporting customers' network stability is at the core of Huawei's commitment to social responsibility. To that end, we have established a comprehensive assurance system that encompasses product design, solutions, and delivery. We have also developed efficient emergency response mechanisms that allow us to quickly restore customer networks and ensure smooth communications for users at critical moments, such as earthquakes, tsunamis, upheavals, wars, and cyber attacks. Thanks to these measures, we can provide the stable communications services that are necessary to safeguard life and property.

As the ICT industry continues to advance rapidly, a wave of unprecedented risks has emerged. One of these is cyber security, which requires the joint efforts of all stakeholders to manage. Huawei constantly puts cyber security at the forefront of its efforts and calls for all industry players and governments to make it a priority. Network coverage is now higher than ever. Customers not only require secure and reliable networks, but also secure data storage. Therefore, protecting customers' information assets and user privacy is absolutely critical.

3.1 Supporting Network Stability

Huawei invests heavily in network support, striving to ensure that everyone is able to communicate, access data, and share information anytime anywhere. Specifically, Huawei has established a comprehensive customer network support system that considers a range of factors, including organizational structures, designated personnel, processes, and IT tools. We have established three global technical assistance centers, nine regional technical assistance centers, nine global spare parts operation centers, and five global spare parts supply centers. More than 3,900 Huawei engineers worldwide provide technical assistance services 24/7.

In 2014, Huawei ensured smooth communications for nearly 3 billion people worldwide, and supported the stable operations of over 1,500 networks in more than 170 countries and regions. We guaranteed network availability in over 150 major events, natural disasters (e.g., the Ludian earthquake in China), and special occasions (e.g., the Sochi Winter Olympics, the FIFA World Cup in Brazil, and the Hajj).

Sharing the Glory of the World Cup Around the Globe

The 2014 FIFA World Cup came to a splendid end with Germany winning the championship and Shakira's voice still lingering in the Maracanã Stadium. The breathtaking 64 matches captured the attention of the entire world.

As a major network equipment supplier in Brazil, Huawei offered customized communications support services to four major Brazilian carriers: Vivo, Oi, Claro, and TIM. With our professionalism, precision, perseverance, and solidarity, our team supported stable network operations during the World Cup.

A Digital Sports Feast: From June 12 to July 13, 2014, the 20th FIFA World Cup was held in 12 cities across Brazil. Nearly 3.3 million spectators watched matches in the stadiums, while millions more did so in football parks, bars, and other locations. They employed a variety of devices – mobile phones, laptops, tablets, and even smart watches – to upload photos and videos to hundreds of social networking platforms and apps (e.g., Facebook, Twitter, and WeChat). Some shared special moments with friends over their phones. Additionally, media outlets in more than 100 countries and regions broadcast the matches live to hundreds of millions of people around the world.

Statistics showed that mobile subscribers grew by 48% and data traffic by 400% in Brazil during the event. During the final on July 13, more than 70,000 live spectators uploaded nearly 2.6 million photos, equivalent to 1.43 TB of data. This year's World Cup was an indisputable digital sports feast.

A digital sports feast

Efforts Behind a Superior User Experience: Many challenges – spikes in users and data traffic, numerous hotspots, complicated user behaviors, and unpredictable business models – might compromise network stability. Failure to promptly restore networks would have seriously affected broadcasting.

Huawei has amassed considerable experience in supporting networks in previous key sports events; for example, the Beijing Olympics, the London Olympics, and the FIFA World Cup in South Africa. Nevertheless, Huawei's team took its job seriously by offering consulting services for network technology, monitoring network operations, and ensuring the availability of spare parts. With Huawei's support, the carriers successfully delivered quality voice and data services to ensure a superior experience for people all over the world.

3 Billion

Huawei ensured smooth communications for nearly 3 billion people worldwide

170

Huawei supported the stable operations of over 1,500 networks in more than 170 countries and regions

150

Huawei guaranteed network availability during 150 major events, natural disasters (e.g., the Ludian earthquake in China), and special occasions (e.g., the Sochi Winter Olympics, the FIFA World Cup in Brazil, and the Hajj)

Supporting Stable and Secure Network Operations

The Huawei team working to support network stability during the World Cup

In the year leading up to the event, Huawei provided network consulting services for carriers' live networks and identified network risks through traffic model analysis, traffic volume forecasting, network evaluation, network coverage & capacity analysis, and user behavior and experience assessments. The team also conducted special analysis and forecasting on the LTE traffic model.

During the World Cup, Huawei's team monitored carriers' networks in real time, analyzed problems, and optimized dynamic parameters. Together with the carriers, Huawei developed emergency plans for immediate response to network faults, guaranteeing optimal network performance at all times. Following the event, Huawei quickly restored and optimized temporary parameters to keep the networks stable over the long term.

To ensure network continuity during all 120 key occasions in 12 cities, Huawei's team was divided into two groups that took turns supporting the networks 24/7.

Ensuring Zero Network Interruptions: Although the peak data traffic volume during the event was 92% higher than usual, Huawei guaranteed unexpectedly high network Key Performance Indicators (KPIs). During the final between Germany and Argentina, the carrier that provided coverage for the stadium reached an access success rate of over 96% for traditional voice services and over 98% for 3G data services. Notably, the access success rate for 4G services even reached 99%. Through unremitting efforts, Huawei successfully ensured zero network interruptions or incidents, contributing to the huge success of the World Cup.

It was precisely the stable networks that rapidly spread news around the globe as it happened, whether it was witnessing Chile creating miracles on the pitch, when the Algerian team battled with the Germans, or when famous faces left the field in defeat. These networks wouldn't have been able to run stably without Huawei, whose efforts contributed greatly to this digital sports feast.

Rapidly Restoring Networks in the Aftermath of a Disaster to Honor Our Commitment

On August 3, 2014, a magnitude 6.5 earthquake struck Ludian County in Zhaotong City, Yunnan Province, China. This deadly earthquake caused many casualties and dealt a heavy blow to property and communications networks in Ludian and neighboring areas.

Immediately after the earthquake, Huawei initiated an emergency plan to establish a communications support team and set up two coordination centers, one in Kunming (capital of Yunnan Province) and one in Longtoushan (the epicenter). Responsibilities were clearly defined in terms of communications recovery, network stability monitoring, and resource supply. The remote support team of Huawei's technical assistance center kept in constant contact with the field team in Kunming, and built an operation room to facilitate rapid network recovery in disaster-stricken areas.

Rapidly Building a "Lifeline" for Disaster Relief: The communications support team rushed to the scene with supplies such as emergency kits and satellite phones. Together with local carriers, the team formulated a network recovery plan, aiming to bring communications networks – the lifeline of disaster relief – up and running as quickly as possible.

Within the first 12 hours, Huawei restored communications in the Longtoushan-based coordination center by utilizing its microwave systems and super base stations. Then, Huawei deployed the eLTE solution to provide smooth communications for the local government and firefighting department. Relief efforts were impeded by strong aftershocks coupled with serious challenges such as steep mountains, blocked roads, and collapsed bridges. In spite of these difficulties, Huawei employees managed to bring vital supplies to the epicenter by carrying them by hand or driving bulldozers across torrential rivers. Thanks to these efforts, Huawei was able to activate equipment and migrate services within 48 hours of the disaster, thus laying the foundation for subsequent batch network recovery.

Ensuring Supplies for Network Recovery: After learning about the exact conditions in the disaster areas, Huawei quickly developed a resource plan and opened a special "green channel" for prompt transportation of resources. Within just 5 days, we delivered and quickly installed over 310 sets of equipment in Ludian to recover communications networks.

To keep communications stable, nearly 200 Huawei technical engineers worked around the clock to monitor equipment operations, resolve network faults, eliminate equipment problems, and launch emergency services. Their efforts contributed greatly to network stability.

Supporting Post-disaster Reconstruction to Fulfill Our Social Responsibilities: After working for seven days and nights, Huawei recovered communications in all disaster areas at around 8 p.m. on August 9. The three major local carriers thanked Huawei for its dedication, quick response, professional emergency support mechanisms, and effective response approaches.

In addition, Huawei donated 3,000 mobile phones and 1,500 mobile chargers to victims in disaster areas. Huawei's employees also provided financial support, donating uniforms to over 2,400 students and 120 faculty staff in Longquan Middle School in Ludian County.

Huawei employees restoring the network

Bulldozer transporting emergency equipment

3.2 Proactively Responding to Cyber Security Challenges

Building and implementing a global, end-to-end cyber security assurance system is a key corporate strategy at Huawei. We are fully aware that threats will never cease and that cyber security is a global challenge – one we must all face together. At Huawei, cyber security is a top priority and we place cyber security assurance above our commercial interests.

Huawei is passionate about being open and transparent. We are more than happy to share our cyber security management practices with all stakeholders, including customers, industry players, governments, and the media. These practices include our end-to-end cyber security assurance system, our management approach that is oriented towards built-in processes, and our "Assume nothing, Believe nobody, Check everything" philosophy. We also provide documents, white papers, and methods to customers to satisfy their cyber security requirements. In 2014, we presented a stronger voice on a variety of platforms around the world to communicate Huawei's position and views on cyber security:

- We actively participated in international workshops and action projects in the industry and forums organized by think tanks. In January and February, Huawei attended the RSA Conference USA, Munich Security Conference, and ETIS's annual information security conference and cyber security workshop, where we delivered our cyber security policies and position characterized by transparency and visibility. In April, Huawei delivered the following speech at the Information Security Forum in Russia: *Open Innovation, A Necessity for Cyber Security Solutions and Regional Development*. In September, Huawei attended the third Information Security Conference in Budapest and the 19th European Symposium on Research in Computer Security in Warsaw. We introduced our cyber security perspectives and practices, and looked for opportunities in technical research and cooperation projects for our 2012 Laboratories. In late November, Huawei shared its practices in cyber security incident response at the 25th Information Security Forum (ISF) Annual World Congress. At the Global Mobile Broadband Forum 2014, Huawei convened its first cyber security workshop and discussed MBB security solutions at length with customers.

- We boosted stakeholder trust by communicating our cyber security strategies, approaches, and end-to-end assurance system with governments, customers, and industry players in countries such as the UK, France, Germany, Canada, Denmark, and New Zealand. In mid-November, CyberSecurity Malaysia honored Huawei with the Cyber Security Organization of the Year award.

- In December, Huawei attended the Global Cooperation in Cyberspace Summit held by EastWest Institute (EWI) in Berlin, and released the third cyber security white paper, *Cyber Security Perspectives—100 requirements when considering end-to-end cyber security with your technology vendors*. This white paper documents the top 100 things

our customers talk to us about in relation to cyber security. When we developed this white paper, we studied the existing legal requirements and best practices to help technology buyers systematically analyze vendor cyber security capabilities and jointly raise the security levels of all technologies. EWI has agreed to take this Top 100 concept and use its extensive knowledge and networks to lead its future optimization.

Huawei has established an auditable, sustainable, and reliable cyber security assurance system by integrating security requirements into internal business processes. We use what we call the ABC model, "Assume nothing, Believe nobody, Check everything." We apply this approach in every part of our processes, with visibility into the progress and measurement of each part.

- We have continued to improve employees' cyber security awareness and capabilities through cyber security awareness education, the BCGs, and human resource policies and processes. We have incorporated human factors into security management, and implemented security measures to minimize the risk of both intentional and unintentional compromise.

- We have embedded cyber security activities into our Integrated Product Development (IPD) process to ensure that security is an integral part of everyone's work when we design and develop products and services. Based on the security activities defined in processes, we work to improve the security capabilities of our R&D employees, and promote threat modeling and secure coding. These approaches aim to enhance products' security quality and ensure our processes deliver products with security built in, rather than bolted on.

- We take a "many hands and many eyes" approach to mitigate risks during product testing and evaluation. We have established a multi-layered cyber security evaluation process with different test teams performing high-quality and independent testing. These include tests by Huawei's Internal Cyber Security Lab and UK-based Cyber Security Evaluation Centre (UK CSEC), evaluations by customers such as Telefonica, and audits and evaluations by third parties.

- We require our suppliers to implement the same security mechanisms as we do; constantly improve their compliance with supplier security agreements and delivery quality standards defined in procurement processes; and promptly provide solutions, patches, and fixes for software vulnerabilities. We believe we are the sole vendor to have signed security agreements with suppliers to improve the security of components they provide.

- We have continued to enhance our security capabilities in supply and manufacturing by validating our production and

shipment activities. These improvements eliminate loopholes and prevent them from moving down the production line. We have improved structured item and tracing management on third-party software packages, and provide world-leading traceability in software development and manufacturing to protect the integrity of hardware and software.

- We have improved the compliance levels and delivery quality of our cyber security activities in the service delivery (SD) process, and re-evaluated and enhanced our managed services and Global Network Operation Center (GNOCs). We have also validated all tools in use and improved customer data management to ensure security in all delivery activities.

- We closely coupled our vulnerability management process with our core R&D process to ensure prompt and effective responses to security vulnerabilities. We have connected our Product Security Incident Response Team (PSIRT) to the Computer Emergency Response Teams (CERTs) of multiple major customers, and established regular communication and emergency response channels to boost mutual trust regarding security.

- Our internal audit teams have provided additional security assurances by auditing all business areas to ensure that corporate cyber security policies, processes, and standards are implemented and suited to Huawei's cyber security practices.

Releasing the Third Edition of the Cyber Security White Paper

On December 3, Huawei attended the Global Cooperation in Cyberspace Summit held by EastWest Institute (EWI) in Berlin, and released the third cyber security white paper, *Cyber Security Perspectives—100 requirements when considering end-to-end cyber security with your technology vendors*.

Huawei's Global Cyber Security Officer John Suffolk giving a speech at the summit

Huawei's report provides much needed support for addressing one of the most vexing problems in cyber security today. The list of questions across 11 categories provides a strong foundation for valuable dialogue between customers and their vendors and suppliers."

—Bruce McConnell, Senior Vice President of EWI

To download the white paper, click http://www.huawei.com/ilink/en/download/HW_401430

Huawei Received the Cyber Security Organization of the Year Award

On November 13, Huawei was honored with the Cyber Security Organization of the Year award from CyberSecurity Malaysia, the national cyber security specialist agency under the Ministry of Science, Technology and Innovation (MOSTI), Malaysia. The award recognizes Huawei's best practice in building a comprehensive and reliable end-to-end global cyber security assurance system.

MALAYSIA CYBER SECURITY AWARDS

We congratulate Huawei for its tireless contribution to raising the standards of cyber security in the industry… I'm very pleased to see that Huawei has developed and implemented a comprehensive built-in end-to-end cyber security system, including aspects from strategies, management and control, standard and process, human resources, verification and to supplier management. I encourage more and more Malaysian organizations and companies to follow Huawei's initiatives, adopt cyber security best practices and build a more resilient network in Malaysia to fuel sustainable economic growth."

—Dr. Amirudin Bin Abdul Wahab, CEO of CyberSecurity Malaysia

The world in which we live is seeing unprecedented ICT coverage that will one day fully connect the whole planet. In addition to demanding secure and reliable networks, customers also need secure storage for all types of data on all network equipment. User privacy protection is an increasing concern of the public, governments, and customers. The Global Cyber Security Committee, chaired by Huawei's Deputy Chairman Ken Hu, has increased its focus on user data privacy and protection. This will help ensure Huawei's approach stands up to the most rigorous scrutiny in this complex world. We must make a solemn commitment to the public, governments, and customers to protect user privacy, just as we have done on cyber security. We will honor this commitment as a responsible corporate citizen, and continue to use every means possible to protect user privacy in compliance with applicable laws and regulations.

Technology is fundamentally changing our lives for the better, making the world a much smaller place. In the future Better Connected World, we will position cyber security and user privacy assurance as a core corporate strategy, making cyber security part of our corporate DNA. We will continue to advocate, develop, and implement unified, international cyber security standards to strengthen cyber security and user privacy protection for everyone. At Huawei, we believe international collaboration will be instrumental to ensuring cyber security in the future. Together, we can improve the quality of security considerations in products and services, and from this we can collectively do more to enrich life through ICT.

Supporting Stable and Secure Network Operations

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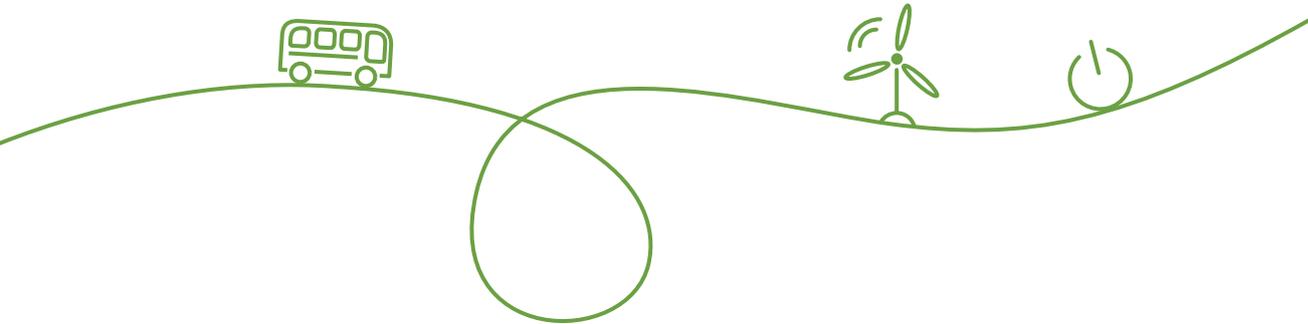
Innovating for a Greener Environment

Overview

The booming ICT industry has improved work efficiency and quality of life. It has also increased resource utilization efficiency and decreased waste and emissions. Connectivity-focused ICT technologies – such as cloud computing, the Internet of Things, Big Data, and broadband networks – are the engines that drive global sustainability. The continuous integration of ICT with different industries is accelerating the transition towards a digital economy. The ICT industry will inevitably play a major role in addressing challenges such as climate change, pollution, and resource shortages. It will certainly create new value for individuals, businesses, and society.

As a leading global ICT solutions provider, Huawei follows a strategy of "Green Pipe, Green Operations, Green Partner, Green World". We explore innovative ways to maximize products' energy utilization efficiency and operating efficiency, and at the same time minimize our carbon footprint and negative environmental impacts. In addition, we invest in innovative green initiatives to provide energy-saving products and green ICT technologies that empower all industries – and even society as a whole – to decrease carbon emissions.

4.1 Green ICT

Huawei strives to provide highly efficient and energy-saving green products and solutions that help customers minimize operating expense (OPEX) and carbon emissions. To make this happen, we have embedded green requirements into our end-to-end process from product development and manufacturing to delivery and transportation. In addition, we have consistently innovated and invested in product R&D. Thanks to these efforts, all of our offerings can meet or even exceed applicable laws, regulations, and customer requirements.

Leading Green ICT

Huawei has constantly explored innovative ways to increase products' energy efficiency and tap into new energy. These efforts have resulted in a number of energy-saving products and solutions that enable customers to increase energy efficiency and decrease carbon emissions. Huawei also actively cooperates with industry players and universities to innovate green technology, and has led the formulation of energy efficiency standards and technical specifications. Our involvement has promoted the innovation and development of green ICT, and increased our competitiveness and influence in terms of energy conservation and emissions reduction. We have helped develop and apply the G.fast broadband standard, which was officially approved by the ITU Telecommunication Standardization Sector (ITU-T) in December 2014. In this process, we contributed to multiple core G.fast technologies, including the power-saving mode and the multi-line crosstalk cancelation technology. Through its partnerships, Huawei has driven the formulation and optimization of energy efficiency standards for wireless products. To ensure the accuracy and feasibility of testing standards, Huawei has submitted numerous proposals for the standards projects of the European Telecommunications Standards Institute (ETSI) and the China Communications Standards Association (CCSA). These standards project focused on the energy efficiency assessment methodologies for base stations, controllers, and networks. As a major contributor to these projects, Huawei has made mobile networks more energy efficient.

With bandwidth demand growing and the transition from copper to optical networks accelerating, optical access equipment is consuming an increasing proportion of energy in the network. Therefore, it is crucial to reduce the energy consumption of such equipment. At Huawei, our optical line terminals (OLTs) and optical network terminals (ONTs) consume over 20% less energy than rival products, which is equivalent to an annual electricity reduction of nearly 200 million kWh and a CO_2 emissions reduction of over 180,000 tons. This is achieved by utilizing our proprietary energy-saving chips; optimizing the system architecture and energy management of equipment; matching energy conservation measures with use cases; adopting end-to-end systematic approaches to energy conservation; and implementing advanced consumption reduction technologies.

Increased the energy efficiency of OLTs and ONTs by over

20%
compared to rival products

a CO_2 emissions reduction of over

180,000 tons
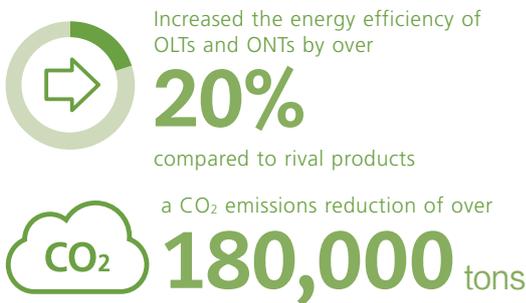
Through continuous innovation, Huawei has made huge breakthroughs in new power amplifier applications and new energy-saving technologies for LTE and HetNet (heterogeneous network). In 2014, we increased the energy efficiency of our wireless products by nearly 23% compared to 2012, and sold energy-saving features and solutions to a huge number of carriers worldwide.

Increased energy efficiency of wireless products — J/Mbit

Year	J/Mbit
2010	23
2012	9
2014	7

Increased the energy efficiency of our wireless products by nearly

23%
compared to 2012
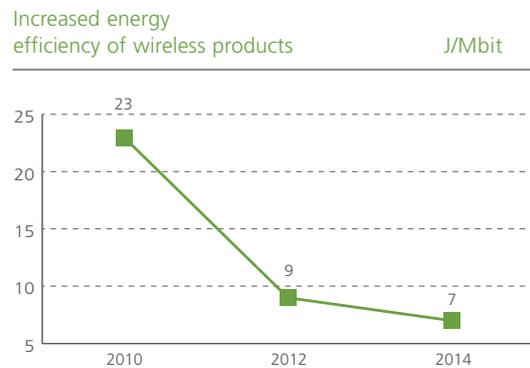
A long battery life is crucial for smartphones. To save energy, a mobile phone must have a powerful chip. In 2014, Huawei launched the Kirin 920 and 925 chips, which boast leading octa-core big.LITTLE architecture and 28 nm technology. These chips ensure high performance while decreasing energy consumption. Coupled with Huawei's smart energy-saving technology, they boost smartphones' performance and battery life. Powered by the Kirin 925 chip, the battery of the Huawei Ascend Mate7 smartphone can last for over two days with ordinary use.

LCA-based Eco-design

In the ICT industry, Huawei is one of the leaders in ecological impact assessment and standardization, especially when it comes to ICT equipment lifecycle assessment (LCA) and mobile device eco-rating. In 2014, Huawei facilitated and contributed to the agreement between ITU and ETSI on the environmental impact assessment methodology and standards for ICT products, networks, and services. Huawei also played a crucial part in setting and promoting eco-rating standards for the mobile phone industry.

Over the years, Huawei has been adopting the Quick-LCA methodology to assess the environmental impact of its product design. In 2014, Huawei expanded this methodology and combined key product ecological indicators to develop the EcoSmarT methodology that guides the product eco-design and development process.

World's First Mobile Phone with a Product Water Footprint Verification Statement

The product water footprint refers to the amount of freshwater consumed directly or indirectly throughout a supply chain to produce a product. It is a multidimensional indicator involving total water consumption, water source type, total pollution, and pollution type. The product water footprint assessment is designed to evaluate the direct and indirect water use of a consumer or producer. It can be viewed as a comprehensive indicator for measuring water use.

In cooperation with TÜV SÜD (an international certification organization) and based on industry standards, in 2014, we developed our capabilities at analyzing the water footprint of device products. As a result, we were able to assess the water footprint of two mobile phones. Huawei's Honor 6 Plus became the world's first mobile phone to be issued with a Product Water Footprint Verification Statement.

Huawei is the first company to assess the water footprint of mobile phones, and attaches great importance to water management and protection. Our efforts are conducive to promoting environmental protection in the mobile phone industry. Mobile phones are now an integral part of daily life. Therefore, Huawei mobile phones that feature the Product Water Footprint Verification Statement will greatly raise consumers' environmental awareness and reshape their consumption habits.

During product design and manufacturing, results of water footprint assessments are taken into account to maximize water utilization and minimize water consumption and pollution.

In the future, Huawei will continue to adopt leading sustainability assessment methodologies and tools during its operations, product design, manufacturing, and sales processes. We aim to offer more eco-friendly products to consumers.

The world's first mobile phone with a Product Water Footprint Verification Statement

34.9% **65.1%**

Blue water footprint

Grey water footprint

Total water footprint: 1,412.3kg
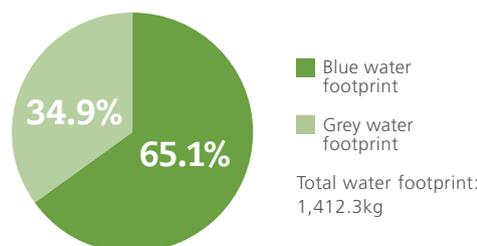
Result of Assessment on the Water Footprint of Huawei Honor 6 Plus

Notes:
Blue water footprint is the volume of surface and groundwater consumed as a result of the production of a good or service. Consumption refers to the volume of freshwater used and then evaporated or incorporated into a product. It also includes water abstracted from surface or groundwater in a catchment and returned to another catchment or the sea. It is the amount of water abstracted from groundwater or surface water that does not return to the catchment from which it was withdrawn;
Grey water footprint of a product is an indicator of freshwater pollution that can be associated with the production of a product over its full supply chain. It is defined as the volume of freshwater that is required to assimilate the load of pollutants based on natural background concentrations and existing ambient water quality standards.

New Eco-friendly Materials

Eco-friendly materials promise multiple benefits to minimize negative environmental impacts. At the beginning of the product lifecycle, eco-friendly materials can indirectly reduce resource consumption and environmental damage. At the end of the product lifecycle, they can minimize waste and reduce the amount of energy needed for waste disposal. Compared to traditional materials, eco-friendly materials can be applied more flexibly and on a larger scale. Huawei has enthusiastically explored and utilized new eco-friendly materials to reduce environmental impact to the greatest extent possible.

Use of Bioplastics

Huawei has used bioplastics in its mobile phones since 2013. Bioplastics are much more eco-friendly than traditional plastics because they are made from plant extracts rather than petroleum – a non-renewable energy source. Therefore, bioplastics can help greatly reduce environmental pollution and damage.

In 2014, bioplastics were used in more Huawei products, including the G730, P7, Mate7, and Honor 6 Plus mobile phones. The bioplastics of each product contain over 10% of castor oil.

Soy Ink for Greener Printing

Soy ink contains a proportion of soy oil. It reduces reliance on petroleum, prints well, and is much safer than traditional inks due to fewer volatile organic compounds (VOCs).

Products printed with soy ink are easy to de-ink, which enables packaging materials to be recycled. Huawei has extensively used soy ink in its device product packaging since January 2014.

Bioplastic front shell of the Huawei Mate7

Soy ink is used for the packaging box and user manual of the mobile gateway E5180

Green Packaging

At Huawei, compliance with environmental protection requirements has always been a top priority throughout the lifecycle of packaging materials, from selection and manufacturing to use and disposal. We use packaging materials that are eco-friendly, safe, reusable, renewable, and that meet sustainability requirements. Our commitment to green packaging reduces both resource use and CO_2 emissions.

We have developed the green packaging strategy of "6R1D": Right Packaging (the core), Reduce, Returnable, Reuse, Recycle, Recovery, and Degradable.

In 2014, we shipped a total of 247,193 units in green packaging, saving 44,164 m³ in wood and cutting CO_2 emissions by 19,130 tons.

Total shipments in green packaging (unit)

93,185	214,882	247,193
2012	2013	2014
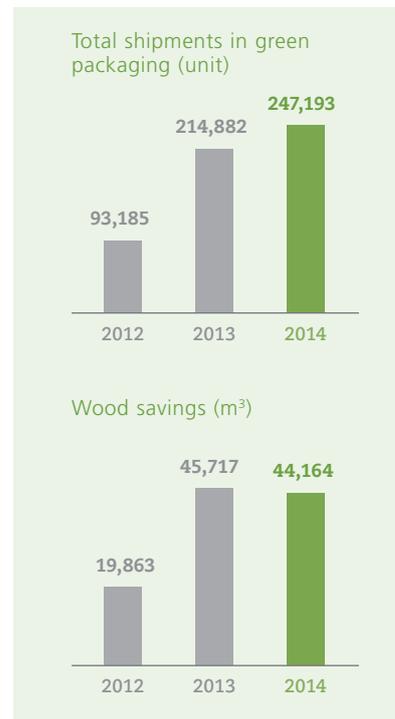
Wood savings

44,164 m³

CO_2 emissions reduction

19,130 tons

Wood savings (m³)

19,863	45,717	44,164
2012	2013	2014

Green Logistics

Green logistics cuts OPEX and reduces energy consumption and pollution. As such, it is an important part of Huawei's end-to-end green strategy.

Fuel consumption and exhaust emissions during transportation are the major sources of logistics-related pollution. To realize green logistics, Huawei has analyzed huge amounts of data to plan shorter transportation routes and increase the loading rate of vehicles. In 2014, Huawei adopted the following measures to reduce carbon emissions and achieve green logistics.

Transportation by sea rather than by air

Review the transportation models and transport goods by sea rather than by air as long as the delivery plan can be achieved.

Outcome

Transport **478** batches of goods weighing **1,759** tons by sea instead of by air.

Diverse transportation solutions

Optimize routes and adopt low-cost transportation solutions (e.g., multimodal transportation of sea-air, air-road, and rail-road) to shorten the transportation cycle and reduce energy consumption.

Outcome

Transport **487** batches of goods weighing **1,345** tons based on the multimodal transportation solution.

Lightweight trays

Use lightweight trays that are 70% lighter than traditional trays, to reduce the total load.

Outcome

Use **53,000** lightweight trays that decrease the load by **208** tons.

More containers

Reduce the number of small orders and implement flexible transportation plans to combine small orders for transportation by sea and increase the utilization rate of containers.

Outcome

Use containers to transport **2,279** batches of goods weighing **920** tons.

Innovating for a Greener Environment

4.2 Minimizing Our Own Energy Consumption

Social progress over the past centuries depended heavily on the consumption of natural resources. In the future, Earth will have to support a growing population, more cities, and more consumption. Traditional growth patterns will meet immense challenges – sustainability will be impossible if we don't change our ways of production and consumption.

Huawei advocates a Better Connected World in which everything will be connected and grow sustainably. While using ICT technologies to help society reduce energy consumption, Huawei also strives to minimize the direct environmental impact of its operations. Indeed, this is an important indicator for our sustainable development. We have decreased our energy consumption and CO_2 emissions through a range of measures. These include introducing energy management systems, promoting clean energy use, and adopting technological and managerial approaches to energy conservation.

In 2014, Huawei redoubled its efforts to manage energy. Our energy consumption (measured in standard coal) totaled 148,000 tons. Huawei faced challenges in reducing energy consumption as its business and construction area continued to grow. Nevertheless, by leveraging managerial and technological approaches, we decreased our energy consumption per unit sales revenue by 0.25%. Huawei's China Region saved 43 million kWh of electricity in 2014, which is equivalent to a CO_2 emissions reduction of approximately 40,000 tons.

To reduce energy consumption during operations, we have built energy management systems, promoted technological approaches to energy conservation, and better managed lab equipment.

- **Strengthened energy management:** We set and met our energy conservation targets, regularly collected and analyzed energy statistics, and promoted training and communication concerning energy management and conservation to increase employee awareness.

- **Improved electricity metering and management systems:** We built and connected our electricity management systems, and established a nationwide facility operations management center that monitored and analyzed real-time electricity use in different locations to achieve refined management.

43 million kWh

Huawei's China Region saved 43 million kWh of electricity in 2014

40,000 tons

This is equivalent to a CO_2 emissions reduction of approximately 40,000 tons

- **Optimized energy conservation management in labs:** We significantly reduced our energy consumption by replacing obsolete DC power equipment with energy-efficient products; monitoring equipment utilization with IT tools; identifying and removing equipment that had been idle for a long time; and enclosing the hot and cool air conduits of air-conditioners. Through these measures, we saved over 26 million kWh of electricity, equivalent to a CO_2 emissions reduction of 23,000 tons.

- **Promoted technological approaches for energy conservation projects:** We upgraded multiple systems, including lighting systems (e.g., T5 energy-efficient bulbs, LED bulbs, and light control systems) and air conditioners (e.g., controlling refrigeration stations by group; cleaning condensers, and modernizing and connecting building automation BA systems).

Huawei's Energy Consumption Statistics from 2011 to 2014:

Energy	Unit	2011	2012	2013	2014
Natural gas	10,000 m³	630	450	423	490.64
Gasoline	Ton	1,474	1,543	1,668	390
Diesel	Ton	67	48	60	46
Electricity	10,000 kWh	71,793	86,885	94,158	113,235
Construction area	10,000 m²	268	349	369	407

Using Energy-efficient LED Bulbs on a Larger Scale

For sustainable development, energy conservation is no longer a choice but a necessity. Compared to traditional lighting, new lighting technologies, particularly LED bulbs, have superior light output and longer life spans, thereby greatly reducing power consumption.

In 2014, Huawei installed more than 12,000 LED bulbs, saving nearly 1 million kWh of electricity and reducing over 900 tons of CO_2 emissions.

LED bulbs were also installed in new construction projects in Huawei's Shenzhen, Nanjing, and Wuhan campuses, contributing to our objective of lowering energy consumption during operations.

New LED bulbs in an office area
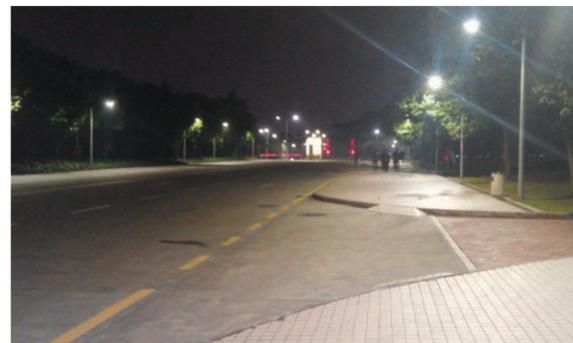
New LED lamps inside a Huawei campus

1 million
saving nearly 1 million kWh of electricity

900 tons
reducing over 900 tons of CO_2 emissions

Green Buildings – Exploring New Fronts for Energy Conservation

Green buildings offer a conformable living space and ensure efficient resource utilization, while lowering resource consumption and pollution throughout the building lifecycle.

In 2014, Huawei began constructing a new lab building at its Songshanhu Campus, and chose it as a pilot project for green building concepts. Every aspect of its design and construction – from site selection and energy & water conservation to materials use and indoor environment quality – is in line with green standards, including the five assessment factors of the Leadership in Energy and Environmental Design (LEED) certification. Huawei aims to establish the building as a benchmark for green buildings.

Five Main Assessment Factors of LEED:

🌱 Sustainable Sites (SS)

💧 Water Efficiency (WE)

☀ Energy & Atmosphere (EA)

♻ Materials & Resources (MR)

🏠 Indoor Environmental Quality (IEQ)

Five LEED factors for the design and construction of Huawei's new lab building

Innovating for a Greener Environment

Using Clean Energy to Lower Carbon Emissions

In recent years, Huawei has researched and utilized new energy sources to reduce product carbon footprint while seeking to slash OPEX.

In 2014, Huawei continued to construct solar power stations to increase its use of clean energy and minimize carbon emissions. Over the past year, Huawei constructed 15-megawatt grid-connected photovoltaic power stations on its Hangzhou and Dongguan campuses, generating approximately 16 million kWh of electricity.

By the end of 2014, Huawei had built many 19-megawatt photovoltaic power stations to generate nearly 20 million kWh of electricity per year, equivalent to a CO_2 emissions reduction of over 18,000 tons.

Huawei's solar power station

20 million
nearly 20 million kWh of electricity per year

18,000 tons
equivalent to a CO_2 emissions reduction of over 18,000 tons

4.3 Managing Greenhouse Gas

Greenhouse gas (GHG) management is an integral part of Huawei's operations. We have adopted ISO14064 to identify GHG emissions and taken concrete measures to save energy and reduce emissions.

After quantifying and analyzing its GHG emissions, Huawei has set the goal of reducing the GHG emission per unit sales revenue by 10% over the next 5 years. We have continuously monitored and improved our performance in GHG management. To decrease our carbon footprint, we have established energy management systems, rolled out energy conservation projects, and introduced clean energy.

Huawei's Greenhouse Gas Policy
- Set increasingly challenging goals for GHG emissions reduction, conduct regular internal audits and management reviews, and continuously monitor and improve performance in GHG management;
- Introduce green concepts at the design phase to maximize products' energy efficiency and reduce GHG emissions at the use stage;
- Develop a procurement strategy that highlights safety and green concepts, and strive to influence suppliers in terms of GHG management;
- Actively reduce resource consumption and promote clean production approaches to lower GHG emissions during operations.

List of GHG emissions:

Type of GHG	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	Total Emissions (Unit: Ton)
Emissions amount (t-CO_2e)	1,051,431.58	5,938.10	44.85	14,418.00	0.00	0.00	1,071,832.53
Ratio	98.10%	0.55%	0.004%	1.35%	0.00%	0.00%	100.00%

Proportion of Each Scope's GHG Emissions:

In 2014, Huawei's GHG emissions totaled 1,071,832 tons, an increase of approximately 18.9% over 2013.

The increase is attributable to two major factors. First, our business grew significantly, with global annual revenue totaling CNY288.2 billion, up 20.6% year-on-year. Second, we expanded our construction areas in different locations.

In 2014, Huawei's CO_2 emission per unit sales revenue was 0.00371 kg, which was 1.6% lower than in 2013.

0.80%
1.90% 0.11%

97.19%

- Stationary combustion emissions
- Mobile combustion emissions
- Fugitive emissions
- Indirect emissions from energy

Note:
Scope 1 includes stationary combustion emissions, mobile combustion emissions, and fugitive emissions.
Scope 2 includes indirect emissions from energy.

In 2014, Huawei's CO_2 emission per unit sales revenue was

CO_2 0.00371kg

which was 1.6% lower than in 2013

1.6%

4.4 Maximizing Resource Efficiency

With accelerating socioeconomic progress and population growth, natural resources are consumed faster than they are replenished. If we carry on this way, we will never achieve sustainable development. This resource dilemma is also a major challenge for enterprises: they have to use resources efficiently to maximize value, increase competitiveness, and reduce OPEX.

Water Resource Management

In recent years, the water shortage problem has increased in severity for two reasons. First, water resources are in tremendous demand but they are not used responsibly. Second, the quickening pace of industrialization is leading to severe water pollution; for example, the chemical, printing, dyeing, paper, and electroplating sectors use a high volume of water and produce high levels of emissions.

Huawei takes water conservation seriously and has launched water conservation initiatives to strengthen water management. By adjusting the proportions of water types and changing the way we use water, we have increased water utilization and reduced waste. For example, we have rapidly built facilities to recycle and reuse rainwater, wastewater, reclaimed water, cooling water, and condensates. We have also effectively managed and maintained water supply networks, water facilities, equipment, and appliances to prevent water leakage.

Most of the water we consume in operations is used for landscaping, canteens, and air-conditioning systems. To reduce water consumption, Huawei has promoted clean production technologies and adopted a variety of measures such as collecting rainwater, recycling cooling water, and buying reclaimed water for cleaning and landscape maintenance on campuses.

In 2014, Huawei used 5.48 million m³ of water, an increase of 530,000 m³ over 2013. This increase is mainly attributable to our business growth and larger construction area. If water consumption is measured by unit construction area, the volume in 2014 was slightly lower than in 2013.

In its new projects in 2014, Huawei built rainwater harvesting systems and water reclamation facilities to use reclaimed water and increase water utilization efficiency. For example, by using reclaimed water for cleaning and landscaping on its Beijing Campus, we managed to reduce mains water use by 70,000 m³.

Huawei's effluent discharge comes primarily from domestic sewage. Domestic sewage at all of Huawei's campuses is sent to the municipal wastewater plants for treatment, and is monitored by third parties to ensure compliance with local and national standards.

Water consumption in Huawei's China Region from 2012 to 2014 (Unit: 10,000 m³)

2012	2013	2014
449	495	548

By using reclaimed water for cleaning and landscaping on its Beijing Campus, we managed to reduce mains water use by

70,000 m³

Lowering the Landfill Rate of Waste

Huawei obeys the laws and regulations on e-waste in all the countries in which it operates. By recycling and reusing as many waste products as possible, we have lowered our landfill rate.

In 2014, we disposed of 8,089 tons of waste globally, of which 97.63% was recycled or reused and only 2.37% ended up in landfill. The landfill process met environmental regulations.

97.63%
of waste was recycled or reused and only

2.37%
of waste ended up in landfill

Huawei's landfill rate from 2012 to 2014

2012	2013	2014
3.40%	2.57%	2.37%
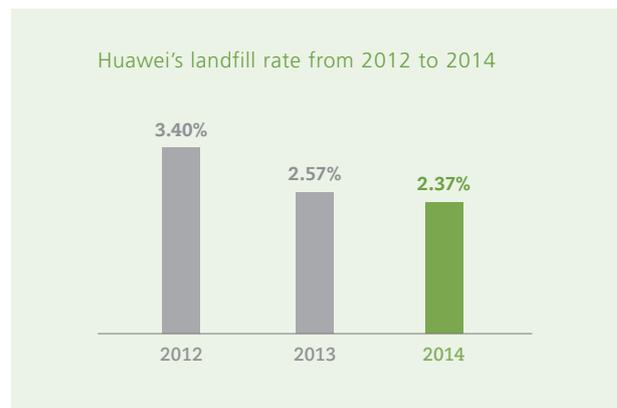
Circular Economy

Traditional economic development models create many problems, including resource shortages and environmental pollution. As a result, the circular economy business model is garnering more attention. We strive to systematically manage resources and have adopted various innovative approaches to improve resource utilization efficiency. We have also incorporated the key elements of a circular economy into our product lifecycle to build a circular economy business model and implement the "cradle to cradle" circular economy methodology for sustainable resource use.

Circular Economy Product Design

Incorporating circular economy concepts into product design is the prerequisite for minimizing pollution and creating as much value from products as possible. Huawei designs products as platforms or modules to prolong their lifespan, ensure their reliability, maintainability, and eco-friendliness, and support technological and network evolution. These design concepts enable Huawei to maximize the value of products.

Huawei's Approach to Circular Economy Product Design

- Design high-value and general-purpose components (e.g., general-purpose chips on printed circuit boards PCBs) in ways that ensure the recyclability and reusability of such products.
- Optimize product designs to ensure that products are reused rather than returned to Huawei for recycling. For example, add a data deletion program to PCBs to delete data so that Huawei can resell boards rather than destroy them.
- Use more eco-friendly materials, such as paper packaging, lightweight recyclable pallets, and integrated glue-free buffers. Avoid using materials that will end up in landfill.
- Use as few materials as possible to produce a product, and ensure the ease of product disassembly to decrease recycling costs and increase the benefits of recycling.

Innovating for a Greener Environment

The Road Towards a Circular Economy

Huawei assesses all returned materials and categorizes each according to its lifecycle stage and quality status. Reusable materials are allocated to Huawei's internal reuse channels – such as the R&D, manufacturing, spare parts, and assets departments – where materials are reused or resold through competitive bidding. Non-reusable materials are allocated to the raw materials recycling channel in which qualified recycling service providers dismantle and recycle the materials. These measures enable us to maximize the value of the materials we use. The following table shows some of Huawei's circular economy projects in 2014.

Circular Economy Projects

Reselling IT Servers

1. Certain IT products for enterprise networks are highly customized. Without consistent codes for typical configurations, these products cannot be stored in warehouses after they are returned. Instead, they are disassembled into components for testing. As a result, some of the components are scrapped. To change this practice, Huawei's Reverse Management Department worked with the IT Product Line, New Product Introduction Department, and Quality Department to improve capabilities at storing major types of returned products and conducting integrated testing. These departments also established channels and incentive mechanisms that encourage Huawei's R&D, spare parts, and assets departments to use returned products as long as their quality is ensured.

2. In the past, IT products that were at the end of their lifecycle were crushed and destroyed. Now, these products are resold through competitive bidding after they pass integrated performance testing. The data stored on them is deleted through low-level formatting to ensure information security. This resale model prolongs product lifecycle, reduces resource consumption, and decreases emissions from landfill and pollutants.

This resale model reduced 306.7 tons of carbon emissions

CO_2 **306.7** tons

Past:

| Returned equipment | Disassembly | Inbound | Test/Repair/Reuse |

Server

Hard disk   Memory   CPU

Hard disks, memory, and CPUs that cannot be shipped for reuse

Scrap

Hard disk   Memory   CPU

Present (Circular economy model):

| Returned equipment | Whole equipment acceptance and inbound | Test/Repair | Reuse by R&D, spare parts, and assets departments |

Server   Server   Server   Server
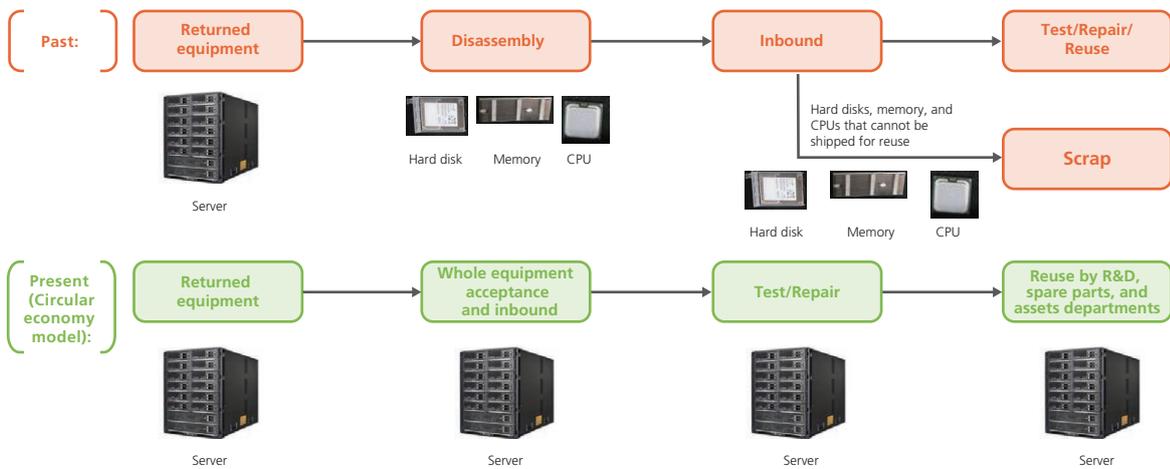
Circular Economy Projects

Reusing Scrapped Enterprise Products Instead of Destroying Them

Huawei's product lines have optimized their scrapping policy by reselling scrapped enterprise products (e.g., set-top boxes STBs, cameras, and network devices) through competitive bidding instead of destroying them. This new approach gives new life to products and minimizes resource consumption.

This resale model reduced 304.9 tons of carbon emissions

CO_2 **304.9**tons

STB for resale

Camera for resale

Network device for resale

Thin client (TC) for resale

Giving New Life to Used Mobile Phones

Due to smartphones' increasing popularity and frequent upgrades, the number of used mobile phones is rising dramatically. Reusing and recycling used mobile phones helps reduce e-waste and increase resource utilization. Recycling service providers pay consumers for their used phones, which in turn encourages consumers to hand in their old phones and develop greener consumption habits.

As a responsible manufacturer, Huawei is aware of its responsibilities concerning scrapped product processing. In compliance with national laws and regulations on e-waste management, Huawei has recycled and reused waste products whenever and wherever possible. As a responsible producer, Huawei has obeyed regulations on product recycling recording, registration, and payment. Huawei launched the Green Recycling Program in countries where there had been no laws on what responsibilities producers must take concerning used mobile phones. Under this program, Huawei set up recycling stations in many countries to recycle and reuse mobile phones provided by consumers. This program has driven up energy utilization and promoted environmental protection.

In 2014, Huawei set up over 190 recycling stations in 8 countries, including China, Saudi Arabia, and Thailand. Consumers can locate their nearest recycling stations on Huawei's official website to have their used mobile phones recycled.

Consumers can hand in any brand of used mobile phones at the recycling stations. Huawei then sends the phones to leading recycling service providers for recycling and reuse. During the process, consumers' personal data is deleted, and requirements on health, safety, and environmental protection are complied with.

In 2015, Huawei will continue to expand the program to let more consumers know about its recycling channels and take part in recycling activities. We will seek to maximize the value, use, and reasonable disposal of used mobile phones to create a circular economy.

http://consumer.huawei.com/en/support/recycling/index.htm

Huawei's recycling station in Thailand

Innovating for a Greener Environment

4.5 Contributing to a Greener World

Our environment is facing unprecedented challenges due to worsening pollution, resource shortages, and climate change. ICT companies can play a vital role in reversing this trend to build a greener world. At Huawei, we offer green ICT solutions to enable industries to save energy and reduce carbon emissions, thus building an energy-conserving, environmentally-friendly, and low-carbon society.

Enabler of a Green World

Research by Huawei shows that, with increasing mobile Internet speeds, carriers' energy consumption is increasing much faster than revenue growth – a trend that will eat into profits if it continues. Carriers can therefore benefit greatly from energy-saving solutions.

Huawei manages the energy efficiency of communications networks at two levels: equipment and infrastructure. This managerial approach allows us to design well-targeted energy-saving measures. In addition, Huawei has proposed the Top N methodology for energy efficiency management. This quantitative approach maximizes carriers' network energy efficiency and profits.

Using Huawei's leading electricity management solution and optimized temperature control approach, carriers can reduce the energy consumption of power and temperature control systems by 40–80%.

Carriers can reduce the energy consumption of power and temperature control systems by

⬇ 40-80%

| Voice network | High-speed network | Triple-play network | Multicasting network |

■ Traffic grows 100%   ■ Energy consumption grows 12%   ■ Revenue grows 7%
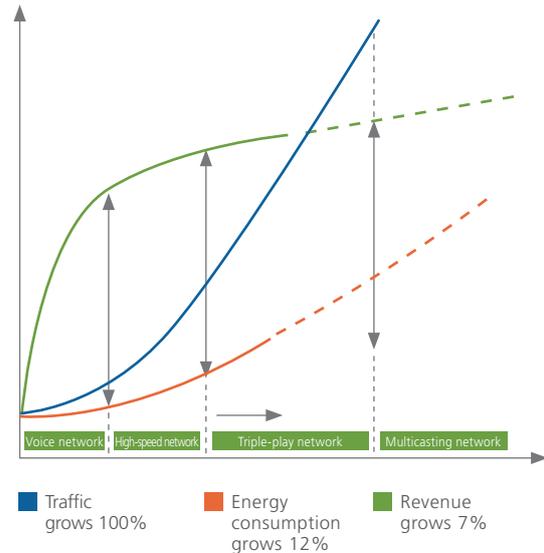
Source: Huawei

Smart ventilation

⬇ Air-conditioner ➞ Ventilation
40-80%
(energy consumption of the temperature control system)

Outdoor base station

⬇ Separated temperature control
40-80%
(energy consumption of the temperature control system)
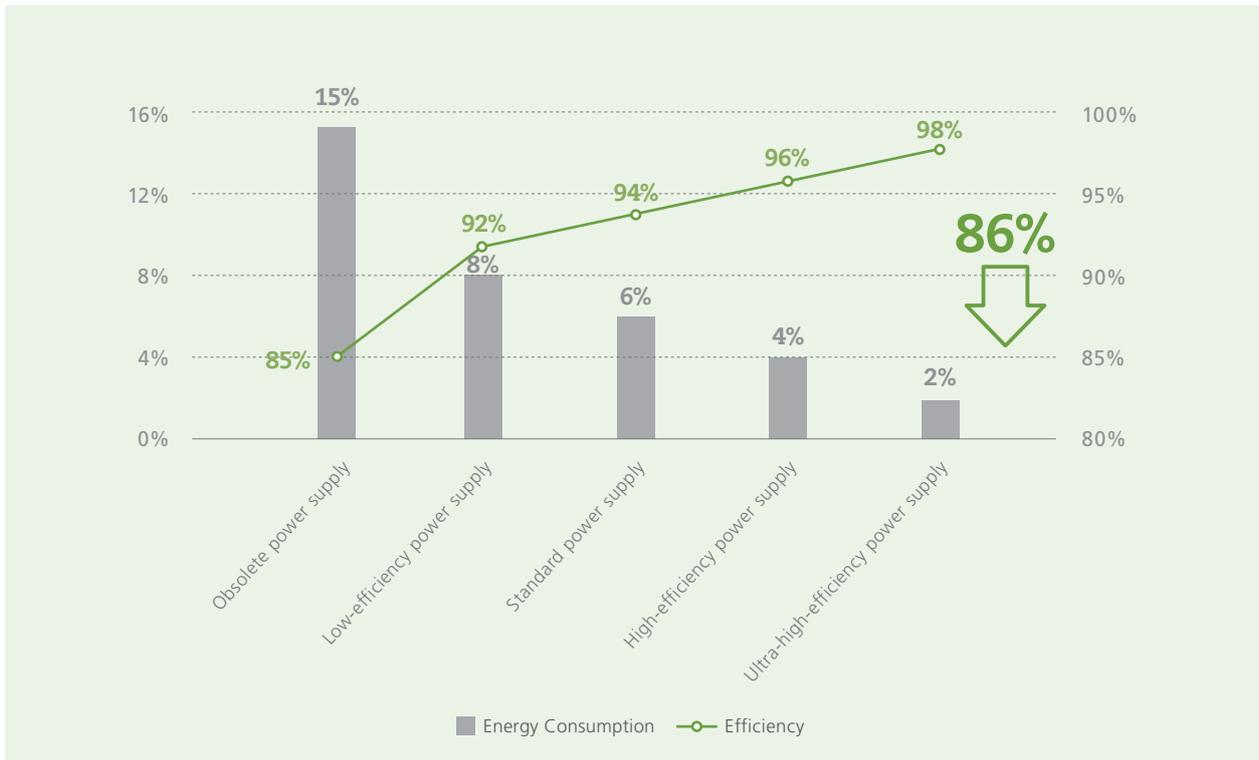
Industry-leading power system that decreases energy loss by over 80%

Huawei's products and solutions enable enterprises and industries to operate more efficiently with less energy use. In the future, we will continue to build a greener, low-carbon world. The following diagram shows some of our successful cases in helping enterprises and industries increase energy efficiency.

Successful case studies

1. Tencent's modular DC in Tianjin, China

The DC covers 1,000 m² (the largest data storage and processing center in Asia), with a PUE of 1.5.

3. Telefonica's global energy partner

Huawei has offered efficient energy solutions to Telefonica's subsidiaries for five years. In 2014, Huawei was honored with the Prize for the Best Energy Partner.

2. Phoenix TV's new media modular DC in Beijing, China

The DC consumes 30% less energy than traditional DCs, with a PUE lower than 1.6.

4. Hybrid power solution for Mobilink in Pakistan

After analyzing the characteristics of power outage in Pakistan, Huawei offered an innovative hybrid power solution to reduce over US$30 million in energy expenses per year.

Enterprises

Carriers

Constructing an IoT-enabled Building

All countries have recognized the importance of conserving energy and reducing emissions. This has given rise to an increasing number of green buildings that greatly reduce carbon emissions. However, re-planning is almost impossible for many existing buildings, especially when it comes to redesign the high- and low-voltage current systems of old buildings.

DTZ is a global leader in property services. One of its customers – University of Melbourne – follows the Green Star certification program championed by the Australian government, and thus has stringent requirements on the energy consumption of its buildings. Both DTZ and the university found it hard to comply with the five-star criteria to modernize buildings that were built decades ago, if not over a century ago. They needed smarter and greener buildings.

With the help of Huawei and DTZ, University of Melbourne deployed an energy efficiency management solution to intelligently control lighting systems and air-conditioners inside all its buildings. Huawei also helped the university expand its network capacity with software services. In addition, all buildings were centrally managed and connected by a new flexible access system. Thanks to these measures, the university met the Green Star five-star criteria, reducing energy costs by as much as 30%.

The IoT will do more than just reduce energy consumption – Internet-connected buildings can put context-aware services into the hands of everyone. The IoT will definitely bring new business opportunities and services.
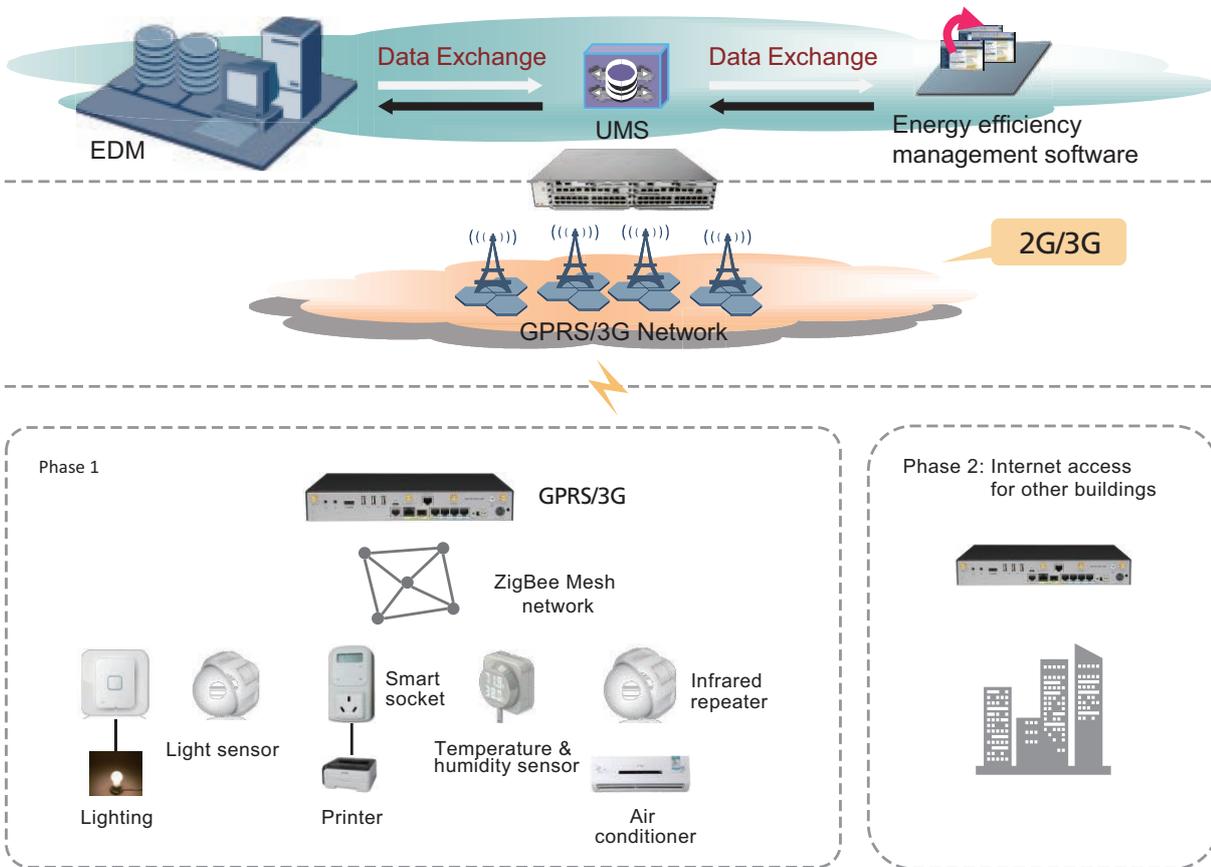
Energy efficiency solution for buildings at University of Melbourne

Building a greener world cannot be achieved by a single company; it requires joint efforts. Huawei plays an active part in setting green standards, and has joined green organizations and forums. Through close collaboration and smooth communication, we aim to exert a positive influence and contribute to a greener world.

Hosting the 4th ITU Green Standards Week to Set the Vision for Smart Sustainable Cities

The Huawei-hosted ITU Green Standards Week was officially convened in Beijing on September 22, 2014. This was the first time that the ITU had held a Green Standards Week in China. Attendees included the ITU-T Secretary-General, ITU-T SG5 Chair, and representatives from government departments (e.g., China's Ministry of Industry and Information Technology and other national authorities from Asia Pacific countries) and carriers (e.g., NTT, Telefonica, and Orange).

Attendees discussed a range of topics at the Forum on "Green ICT for a sustainable resource efficient economy", Forum on "E-waste: the inconvenient truth", High-Level Forum on "Setting the vision for smart sustainable cities", Forum on "Using EMF to achieve the smartest sustainable city", and regional meeting of ITU-T Study Group 5 Regional Group for Asia and the Pacific. Smart cities were a hot topic during the event. In this context, we are committed to building smart sustainable cities, and have developed a series of solutions for smart governance, safe cities, smart transportation, smart campuses, smart healthcare, and smart education. Our smart city solutions have already been applied in more than 100 countries worldwide.

At this year's ITU Green Standards Week, we comprehensively explored the features of smart sustainable cities and discussed methods for building sustainable cities to set the pace and contribute to a greener world.

The Huawei-hosted ITU Green Standards Week was convened in Beijing in September

Anders Karlborg, President of Huawei's Logistics Department, introduced the "Huawei Reverse Strategy Under Circular Economy"

5.
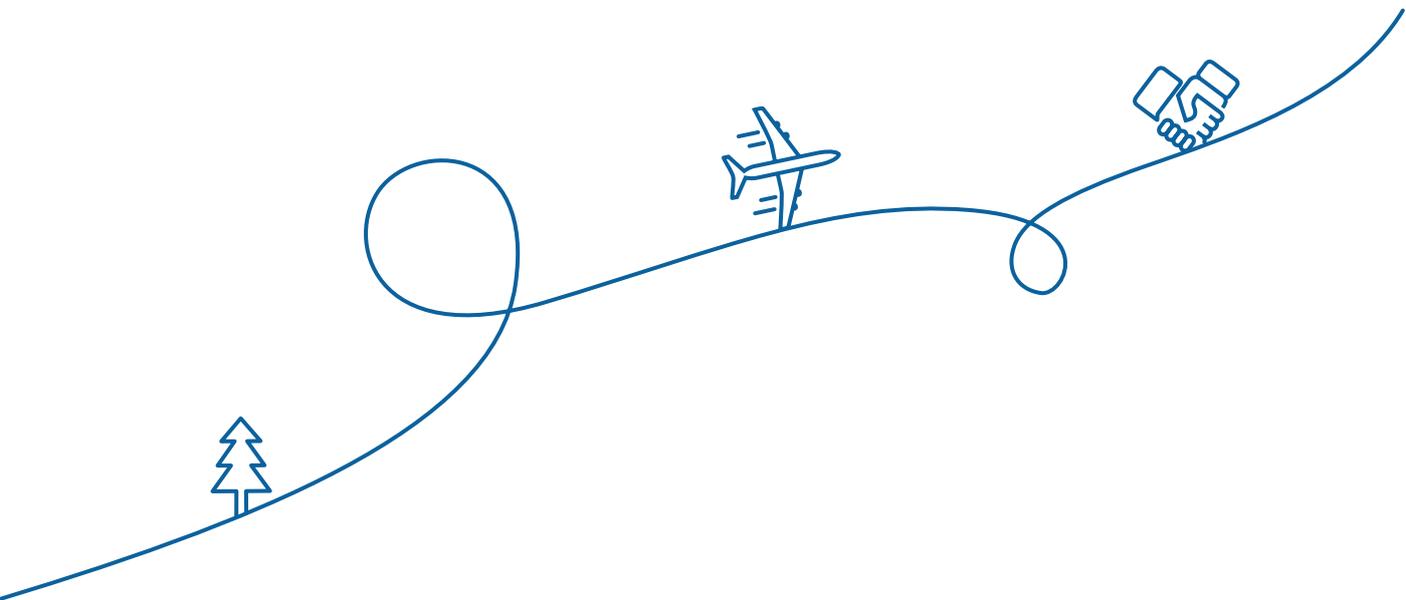
Seeking Win-Win Development

Overview

With deepening global economic integration and a growing social consciousness, companies around the world are facing new challenges. In addition to seeking growth and profits, companies are now expected to fulfill more social and environmental responsibilities. Apart from the minimum expectations of integrity and operational compliance, companies must prioritize employees' health and personal development, contribute to communities, drive supply chain players to be more socially responsible, and promote sustainability within the entire industrial chain.

Our 170,000 employees position customers at the center of their work. The company bases healthy long-term growth on integrating its core values, management duties, and social responsibilities into its daily operations. We firmly believe that close collaboration with upstream and downstream industry players can result in a robust business ecosystem where all players share resources, benefits, and value while jointly managing risks. We can then build a unique, comprehensive set of competitive advantages under an industrial chain whose members all succeed together.

5.1 Caring for Employees

Employees are the backbone of Huawei's sustainability drive, and an important factor in maintaining competitiveness and industry leadership. Huawei believes that caring for employees means putting employees first and increasing their sense of belonging. Only in this way can the company achieve dynamic and robust business growth.

We consistently prioritize the well-being of our employees. To that end, we have created a safe and healthy working environment. We have also adopted an incentive policy that attaches equal importance to monetary and non-monetary incentives, to reward dedicated employees in a timely and reasonable manner. As Huawei continues to grow, we have emphasized the career development of our employees, offering our diverse pool of employees equally varied paths to realize their individual value.

Dedicated Employees Are Our Foundation

The value each employee creates contributes to Huawei's total value. Believing that dedicated employees are its foundation, Huawei encourages its employees to develop expertise and helps them realize their individual value. At the same time, Huawei provides both monetary and non-monetary incentives to promote employees' well-being.

Caring for employees is an important part of Huawei's responsibilities, and has been integrated into its corporate operations. Through a variety of initiatives, we enable our employees to enjoy their work and life. These include providing employees with competitive salaries; providing a diverse array of training programs; creating a comfortable working environment; purchasing social and commercial insurance; and creating a positive work atmosphere filled with respect and trust.
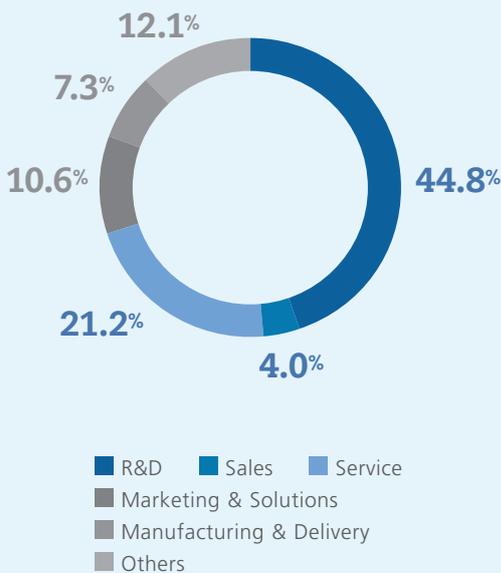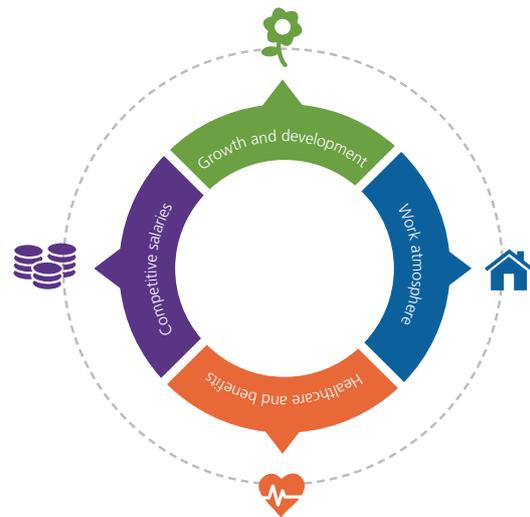
As of December 31, 2014, Huawei employed 170,000 staff in various business segments. In total, 45% of its employees were involved in R&D.

12.1%
7.3%
10.6%
44.8%
21.2%
4.0%

- R&D
- Sales
- Service
- Marketing & Solutions
- Manufacturing & Delivery
- Others

Huawei employed 170,000 staff in various business segments

170,000

45% of its employees were involved in R&D

45%

Workforce Diversification

With operations in more than 170 countries and regions, Huawei believes in the importance of diverse teams that can provide timely and efficient services to global customers. Workforce diversification is also crucial to our competitiveness and innovation capabilities. The company has developed and launched many diversification initiatives in areas such as nationality, gender, age, race, and religion.

Age range of employees in 2014

36.9%
1.5%
61.6%

■ Below 30 ■ 30–50 ■ Over 50

Ratio of female employees to male employees (2012–2014)

	2012	2013	2014
Male	79.1%	78.9%	79.3%
Female	20.9%	21.1%	20.7%

■ Male ■ Female
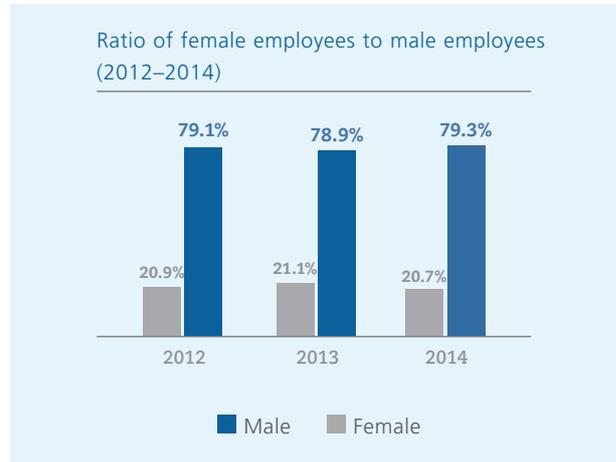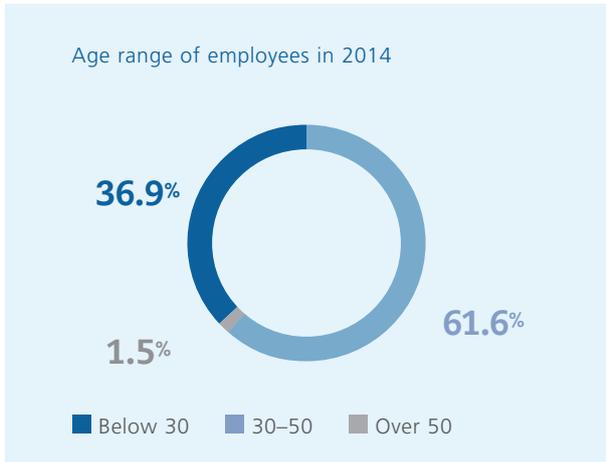
As Huawei operates in the ICT industry and the majority of its employees come from technical backgrounds, there is a relatively low ratio of female employees. As part of our efforts to address this issue, we strictly comply with all applicable international conventions and local laws and regulations to ensure gender equality in employment and prohibit job discrimination. As a result, the ratio of female employees has remained stable over the past three years. Additionally, we prioritize the selection of female managers – we have adopted a female manager development plan that gives female employees priority for promotion when they have the same qualifications as their male counterparts. In 2014, women made up 8.8% of our management team. Of our 17 board members, 4 are women.

As a global company, we actively recruit staff from all over the world to accelerate our workforce localization. Hiring local employees enables us to better understand the unique culture of each locale where we operate, while boosting local employment and economic growth. In 2014, Huawei hired over 35,000 employees in countries outside China, with a localization rate of over 75% for non-managerial employees and 18.7% for middle and senior managers.

8.8%

In 2014, women made up 8.8% of our management team

75%

The localization rate was over 75% for non-managerial employees and **18.7%** for middle and senior managers

From different countries, races, and ethnicities, Huawei's 170,000 employees form a diverse family. Its employees come from 162 countries and regions around the world. In China alone, our employees are from 36 ethnic groups.

Seeking Win-Win Development

Helping Our Employees' Dreams Take Flight

Training is about more than sharpening employees' skills – it helps them develop, realize individual value, and contribute to the company's business growth. Training also facilitates communication between the company and its employees and between employees and the management, helping to create the cohesion essential to developing an outstanding corporate culture.

To help employees grow and realize individual value, we offer ample and equal opportunities for training and promotion. Every day there are a multitude of training courses offered at Huawei University and local training centers, and in departmental training rooms. These include training on general skills and knowledge, and also more specialized competencies. In 2014, the attendance at training reached 1.72 million, with each employee spending an average of 28.16 hours on training.

1.72 million

In 2014, the attendance at training reached 1.72 million, with each employee spending an average of **28.16** hours on training

e-Learning

Huawei has established an e-Learning platform that allows employees to access online training courses anytime, anywhere. The platform keeps them abreast of the latest practical skills, allowing them to develop their personal competencies and keep pace with the knowledge economy.

The e-Learning platform offers a variety of high-quality training courses. Its interactive training mode makes training efficient and interesting to employees.

In 2014, attendance at e-Learning training sessions totaled 4.92 million.

Total attendance at e-Learning training sessions from 2012 to 2014 ('00,000)

2012	2013	2014
408	332	492
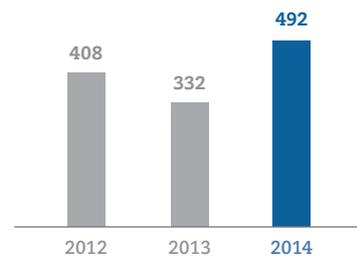
We value individual development. We encourage employees to chart their own career courses according to their abilities and interests, and provide two career development paths: a management path and a professional path. In 2014, all employees received a performance appraisal and career development assessment. In line with its talent demand and corporate policies, Huawei has accelerated the promotion of outstanding employees, helping them realize career aspirations.

Providing Reasonable and Timely Rewards to Employees

Huawei implements a competitive compensation system that shares the benefits of growth with all its employees. Our Human Resource Management Department has established long-term partnerships with consultancies such as the Hay Group, Mercer, and Aon Hewitt. We regularly survey compensation data and promptly adjust employee compensation based on the survey results together with corporate and individual performance. We ensure no gender bias when setting compensation standards.

Huawei employs a "Contribute and Share" bonus distribution system, which links employees' bonuses to corporate, departmental, and individual performance. In line with our corporate compensation policy, we review the bonus distribution plan each year and make adjustments as necessary.

Under our long-term incentive mechanism, Huawei shares benefits with employees worldwide and grows with them. The long-term incentive mechanism aligns the personal contributions of employees with the company's long-term development. As a result, the mechanism encourages employees to remain dedicated and share benefits with Huawei over the long term.

Emphasizing Non-monetary Employee Incentives

In 2014, Huawei further optimized its non-monetary incentive framework to make such incentives more employee-centric.

Huawei provides non-monetary incentives in three aspects: health, development, and relationships. Factors such as working environment, employee health, training, promotion, and emotional care are considered when Huawei seeks to motivate employees. Our non-monetary incentives not only unlock employees' creativity and individual initiative, but also give them a sense of belonging and happiness.

Huawei has implemented a well-designed employee benefits system, which is an "umbrella" that protects its employees. Apart from mandatory insurance schemes in each locale where the company operates, Huawei also offers every employee global accident insurance, critical illness insurance, life insurance, medical insurance, and business travel insurance, as well as other forms of commercial insurance. Additionally, Huawei has implemented medical assistance mechanisms that protect employees during special circumstances.

Our investment in global employee benefits in 2014 amounted to CNY7.39 billion.

Our investment in global employee benefits in 2014 amounted to
CNY**7.39**billion

Investment in global employee benefits from 2012 to 2014 (CNY1 billion)

		7.39
5.81	6.3	
2012	2013	2014
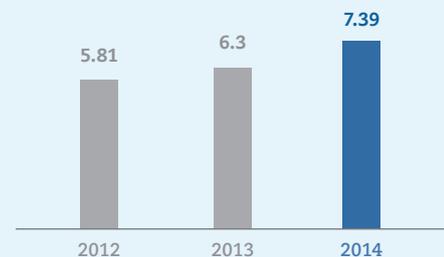
Creating a Relaxing and Efficient Working Environment

Huawei believes in creating a workplace where employees can enjoy both their work and life. We have created an efficient, relaxing, caring working environment, which gives employees a strong sense of happiness and encourages them to find the right work-life balance. Every year we organize a series of activities, including "Family Day" and "3+1", and call on employees to attend. Through these activities, we encourage employees to work efficiently and take care of each other both at work and in life.

Increasing Employees' Health Awareness

The "3+1" program encourages employees to "make a friend", "join in a sports activity", "take up a hobby", and "read a thought-provoking book". This program aims to make our employees more health-conscious and positive. It helps us create an efficient and happy working environment.

In 2014, the "3+1" program was expanded to cover all departments across the company, attracting a total of 115,000 participants. In addition, Huawei launched various online activities such as "My Show", "Share Your Concerns", and

"Testimonials" on its Xinsheng Community (an internal forum) and WeChat public account. These activities encouraged employees to cultivate and showcase their hobbies, talk about concerns, and find solutions. These activities were very helpful in reducing employees' stress and raising their health awareness.

Huawei has implemented the "3+1" program for six consecutive years, and it has been well received by employees.

Employees participating in "3+1" activities

Seeking Win-Win Development

Ensuring Compliance with Labor Laws

Huawei never discriminates on the basis of race, gender, nationality, age, pregnancy, or disability when recruiting, promoting or setting compensation for employees. We prohibit the use of forced, bonded or indentured labor. Moreover, we have enacted detailed, equitable regulations covering each major phase of an employee's relationship with the company, including recruitment, employment, and resignation. As a result, no incident of forced labor has taken place in the course of Huawei's history.

We strictly prohibit the use of child labor, and has effective measures in place to prevent the recruitment and use of child labor. We also demand the same of our suppliers and conduct regular audits to ensure their compliance.

Company-wide Complaint Channels:
Employees can file complaints through the following channels: complaint hotline of the Committee of Ethics and Compliance (CEC); BCGs violation hotline; HR services complaint and suggestion hotline; grievance mailbox regarding performance appraisals; complaint/whistle-blowing mailbox regarding procurement, and complaint/whistle-blowing mailbox of engineering inspections.

Huawei on LinkedIn's The World's 100 Most InDemand Employers: 2014
LinkedIn, the world's largest career-oriented social media network, published "The World's 100 Most InDemand Employers: 2014" at the 2014 Talent Connect conference on October 22, 2014. Huawei was the only Chinese company on the list, coming in at number 95.

Derek Shen, LinkedIn's Global Vice President and China CEO, said, "Huawei has globalized more successfully than almost any other Chinese company, and is one of China's most competitive technology companies. We congratulate it on its entry into our list."

5.2 Health and Safety First and Foremost

Huawei prioritizes employee health and safety. Huawei has passed the OHSAS 18001 certification and complied with the safety management requirements in all countries and regions where it operates. In addition, we have created a robust and accountable culture of safety to minimize risks and ensure the health and safety of our employees, subcontractors, and other parties.

Employee Health and Safety

In 2014, we increased our focus on employee health, spending more than CNY100 million on health examinations, which is a 200% increase over the previous year. We granted paid leave for employees to take health examinations, increased the items tested, and tailored them to different posts. In 2014, the number of health examinations exceeded 100,000.

We also built a platform for sharing health information on our intranet, and disseminated professional health knowledge about special diseases. We developed engaging and informative videos to raise employees' health awareness.

The number of health examinations exceeded

100,000

Huawei is doing more to make sure we stay healthy; for instance, the air conditioners in our offices were modernized, and procurement channels were set up to ensure our canteens provide safe food. We built park-like campuses, and created a relaxing place to meet at Staff Plaza cafes. We set up a health platform on Xinsheng Community, and provided expert health guidance and assistance for employees. In the past year, we also raised the standards of health examinations, and offered employees paid leave for health examinations. Each of these initiatives reflects the company's high regard for its staff."

— Huawei's Chief Health and Safety Officer

Ensuring the Health and Safety of Employees in Ebola-affected Areas

In February 2014, the Ebola virus struck the Republic of Guinea and spread to Sierra Leone and Liberia, with more deaths soon reported in Nigeria, Mali, and Senegal. By the end of 2014, over 20,000 cases of Ebola infection had been reported throughout West Africa, with a mortality rate as high as 40%. People in affected areas faced huge risks to their personal well-being.

Huawei responded quickly to protect the health of its employees, arranging for multiple departments to initiate preventative and treatment measures. At headquarters, we established an emergency response team to support field offices. We compiled the *Ebola Epidemic Emergency Plan*, set up daily communication and response systems, launched training programs for treating and preventing Ebola, and sent medical supplies even though flights were canceled.

To further ease the distress and anxiety caused by the epidemic, Huawei quickly enlisted external resources, hiring professional medical agencies and cooperating with aid agencies to offer day-to-day health services.

Thanks to these efforts, none of our employees in the affected areas was infected and all our business activities continued as normal.

Checking the temperature of an office worker

Huawei has appointed a Chief Health and Safety Officer and set up an Occupational Health and Safety Committee and a leadership team. They meet regularly with representatives from Huawei's Union and employee representatives to resolve health and safety issues.

Manufacturing Safety: Building a culture of safety is the foundation of safe manufacturing. Huawei raises the safety awareness of all employees through initiatives like Safe Production Month and Fire Prevention Week. In 2014, we launched 143 level-3 safety training sessions, with a total attendance of 11,239. Manager engagement is extremely important for safety management. We ran four training sessions of safety skills for managers to build leadership in the area of manufacturing safety.

Huawei continued to ensure a high level of manufacturing safety, with no major manufacturing incidents in 2014. The injury frequency rate in 2014 was 0.06 per million man hours of manufacturing, down 34% from 2013.

The injury frequency rate in 2014 was 0.06 per million man hours of manufacturing

0.06

Down 34% from 2013

34%

Working Environment Safety: Huawei strives to maintain a safe, healthy working environment that suits employees' individual needs. In 2014, we continued to improve the quality of indoor air and drinking water, as well as our dining, leisure, exercise, and green facilities. We also implemented standardized construction safety requirements campus-wide, and assessed and rectified any potential risks with our facilities.

Improving the Quality of Indoor Air and Drinking Water

In 2014, we renovated the air purifying and fresh air systems on our campuses in Beijing, Langfang, Shanghai, Chengdu, Nanjing, and Hangzhou. As a result, indoor inhalable particles (PM 2.5) dropped to below 35 µg/m³. We also improved our tap water systems on our campuses in Shenzhen, Dongguan, and Hangzhou and plan to do so on other six campuses in 2015.

Seeking Win-Win Development

Fire Control Safety: In 2014, Huawei focused on managing fire safety responsibility systems and hardware systems. Over the past year, we increased the number of part-time fire prevention managers to 682 and organized 95 fire drills, resulting in 113,861 people evacuating. Through regular fire safety inspections and other focused inspections like lab safety and gas safety inspections, we rectified 10,398 fire hazards, accounting for 94.24% of the total discovered. We also organized fire safety training around the world, with over 110,000 employees passing the fire safety exam.

94.24%
of discovered fire hazards were rectified

We conducted research into how to design better fire control system architecture and establish more effective fire prevention mechanisms. We also hired a third party to perform safety evaluations on all our campuses. Besides, we established accountability systems and implemented a series of new practices to improve fire safety management. These practices included setting up virtual spare parts warehouses, connecting fire prevention networks with access control systems, and connecting fire prevention networks with major stations.

Food Safety: In 2014, each of our representative offices around the world established a Staff Life Management Committee to monitor food safety and supervise the procurement of raw materials for 161 employee canteens. Huawei strives to provide employees with a diverse range of safe, nutritious, and healthy food. In 2014, we implemented 27 projects across China to diversify our dietary offerings, and improved the dining facilities in 15 locations. Each day, over 30% of employees choose diverse diets. Huawei requires its meal suppliers to purchase raw materials from designated brands and channels. To further reduce food safety risks, Huawei also purchases major raw materials by itself.

Road Traffic Safety: Huawei has taken a series of initiatives to manage road traffic safety, including implementing vehicle safety management systems, developing innovative management tools, and fostering an atmosphere of road traffic safety.

- Implementing vehicle safety management systems: As the competence center, Huawei's headquarters formulated global vehicle safety management regulations and a service level agreement (SLA) for vehicle services. Huawei also defined the entry standards for vehicles and drivers, periodically maintained vehicles, trained drivers on road traffic safety, and established safe driving awards.

- Developing innovative vehicle management tools: Last year, we installed the on-board diagnostics (OBD) system on 4,321 vehicles (79% of the total) in over 60 representative offices outside of China and more than 40 offices in China. With the OBD system, we monitored driving behavior and tightened controls over risks like speeding, driver fatigue, and sudden turns.

- Fostering an atmosphere of road traffic safety: In 2014, we implemented a Traffic Safety Week under the theme of "Give Way for Safer Roads". This initiative included escape drills, traffic safety camps, safe driving camps, vehicle safety lectures, and traffic safety knowledge competitions.

Building a First-rate Safety Culture – Huawei Egypt Hosted the 4th EHS Forum

From July 14 to 15, 2014, Huawei Egypt hosted the 4th EHS Forum, which was attended by officials from the Egyptian Ministry of Manpower and Immigration, Ministry of Communications and Information Technology, and the Embassy of China in Egypt. Attendees praised Huawei for its commitment to the health and safety of its employees.

The forum garnered enthusiastic support from the Egyptian Ministries and the Embassy of China in Egypt. Speakers at the ceremony included Dr. Nabil Mohamed Amen (President of the National Institute of Occupation Safety & Health NIOSH), Dr. Abeer F. Shakweer (advisor to the Minister of Communications and Information Technology), and Mr. Han Bin (Minister Counselor of the Embassy of China in Egypt). Dr. Amen called for more collaboration to raise occupational safety awareness in the Egyptian telecom industry.

"

We are pleased to be a part of Huawei Safety Month, as health and safety is an essential ingredient of the corporate culture in Egypt. This is the perfect platform to call on companies across the telecom industry to take action as Huawei did and ensure that their staff are both trained and qualified to face any occupational hazard."

— Dr. Nabil Mohamed Amen, NIOSH President

Activities at Huawei Egypt's EHS Forum

NIOSH President Amen giving a speech

Seeking Win-Win Development

Engineering Delivery Safety

EHS management is one of the most important facets of project management at Huawei, and has been incorporated into the entire lifecycle of delivery projects. Huawei runs a dedicated Project Management Assurance Department. Under the department, EHS management groups are established, responsible for EHS management of engineering delivery. These groups ensure the health and safety of employees involved in project delivery.

EHS management strategies for delivery projects

1. Practice EHS leadership and build an EHS culture and atmosphere
2. Require subcontractors to implement EHS
3. Apply the minimum EHS standards and comply with EHS absolute rules
4. Warn about accidents ahead of time, report violations, and hold violators accountable

Goals for EHS management of delivery projects

0 incident

0 injury

0 pollution

Practice EHS Leadership and Build an EHS Culture and Atmosphere

Building EHS leadership is the key to effective engineering safety management. Managers from our delivery departments have built a positive culture of EHS by regularly participating in safety patrols and emphasizing the importance of health and safety to employees. Huawei also works closely with customers to demonstrate its EHS management practices including how Huawei creates a culture of EHS, develops capabilities, and commits resources to EHS management.

In 2014, Huawei completed 26 campaigns to promote EHS knowledge related to engineering delivery. Subjects included EHS leadership, subcontractor management, driving safety, construction safety, and first aid. To better strengthen EHS management during engineering delivery and respond more quickly to customers' EHS requirements, we developed and executed documents such as the *Announcement on Strengthening the EHS Requirements of Delivery Management, Requirements on Strengthening Onsite Walk-around Management*, and *Notice on Early Warning and Self-checks for Falls*. These documents significantly raised global delivery managers' EHS consciousness and improved their EHS management capabilities.

Collaborating with Customers is the Key to Delivery Safety

At the Huawei EHS and Delivery Conference, held from September 30 to October 1, 2014 in Prague, Vodafone's procurement director addressed the opening ceremony and praised Huawei for its commitment and continued investment in EHS.

The success of the conference reaffirmed both companies' goal of zero work-related deaths and strengthened their cooperation and knowledge sharing. This conference also inspired Huawei to provide customers with the best EHS management practices in the world.

Huawei EHS and Delivery Conference

Require Subcontractors to Implement EHS

In 2014, Huawei published the Manage Engineering Supplier CSR Process, which incorporated CSR and EHS requirements into the entire lifecycle of subcontractor management, from introduction, contract signing, and onsite management to performance management and exit. We also launched a series of measures including reviewing and rechecking the EHS system, inspecting construction sites, and ceasing business with under-qualified subcontractors. These measures dramatically improved the EHS abilities of our subcontractors.

Apply the EHS Redline Standards and Comply with EHS Absolute Rules

Huawei has set the redline standards for safety management and defined the safety requirements for project delivery to minimize risks and safety incidents.

For transportation, working at heights, operating powered-on machinery, and other high-risk activities, Huawei has set absolute rules for EHS management to which all delivery-related employees must adhere.

EHS Absolute Rules

Remind
- Wear seat belts when driving
- Fall protection for working at height
- No electrical work without qualification

Prohibit
- Never work under alcohol & drugs
- Never exceed speed limits when driving
- Never use the phone when driving

Minimum Standard

Facility Configuration		**Operator Qualification**	
Vehicle	PPE	Certification	Health

Strengthening Professional Management to Ensure Safe Engineering Delivery

In 2014, Huawei improved its EHS management in delivery projects. Specifically, we enforced EHS absolute rules, set up dedicated teams for EHS management, and aligned our EHS management system with international standards. In addition, we proactively participated in setting EHS standards for project delivery to ensure professional EHS management. In 2014, our major EHS management practice improvements included:

- Received the Best EHS Management Practice award at the QuEST Forum in New Delhi, India in April 2014. Participated in developing the *Tower Safety Standards* as a chief standards developer;
- Developed the *Safety Manual for Working at Heights*, an effective guide for worksite safety;
- Researched hoisting safety technologies and removed weak links in hoisting safety management;
- Initiated NEBOSH certification management for all EHS managers in the subsidiaries of the Vodafone Account Department worldwide, and provided EHS training on working at heights for all onsite management personnel;
- Organized on-line tests on driving safety, safe operation of powered-on equipment, construction safety, and tower safety for site engineers. Each test was designed to improve site engineers' safety knowledge and skills.

Huawei attended the Best Practices Conference of the QuEST Forum in New Delhi, India, and received the Best EHS Management Practice award

In 2014, the Best EHS Management Team award was presented to four teams: our Australia Representative Office, Telenor Myanmar Project Team, Vodafone Egypt's GU Project Team, and the Huawei-Vodafone EHS Joint Work Team.

Best EHS Management Team award recipients

Product Safety

Product safety directly impacts the health and safety of our customers, including consumers; it has always been the focus of public attention. Huawei is committed to product safety, and has enforced strict standards in this regard. We frequently pursue breakthroughs and innovations in this area, and do everything in our power to deliver safe and reliable products and services to our customers.

Ergonomic Engineering

Ergonomic engineering ensures that products comply with health and safety standards. Huawei operates a dedicated ergonomic engineering design team that applies product safety design concepts based on actual user scenarios throughout the end-to-end R&D process (e.g., product planning, design, development, and testing). This approach enables our products to match users' engineering habits and technical requirements, while minimizing health risks caused by products.

By the end of 2014, we had analyzed user scenarios of major carriers in 21 countries in Europe, North America, Latin America, Africa, and Asia. By adopting the innovative user-scenario-based design, we have been able to develop products that are easy to install and operate. Our in-depth understanding of user scenarios and ergonomic designs ensure that our products fit with our users' engineering habits and skill requirements.

User scenarios analyzed by Huawei globally

2012	2013	2014
71	95	105
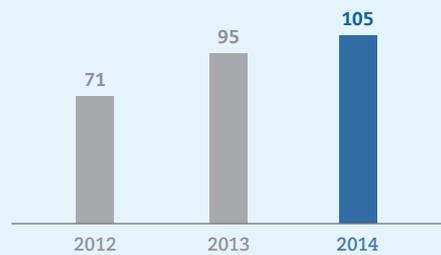
Number of countries in which user scenarios have been analyzed

2012	2013	2014
18	19	21

Ergonomic Engineering Projects

Easy Macro

Huawei's Easy Macro solution allows for fast installation and network construction even if base station space is extremely limited. Its pillar design means it can fit easily into various environments, and can be installed on street lamps, camera poles, electric poles or other common structures.

Easy Macro is easy to install, adaptable to many different scenarios, and requires 60% fewer visible components. Each station requires only three cable connections, and it takes only two hours to install an Easy Macro solution at one station. Therefore, Easy Macro greatly reduces the installation workload and is much safer for installation engineers.

Easy Macro deployed in a Thai carrier network

Optical Distribution Network (ODN)

During the deployment of box-shaped fiber access equipment in the last 100 m of Fiber to the Home (FTTH) networks, certain tasks for installing ODN products, such as fiber entry and slicing, are very time-consuming and tiring. Considering these problems from the customers' perspective, Huawei has developed a pre-connected solution that uses aviation connectors and blind-mate technologies to outdoor connectors. This solution dramatically reduces the number of labor hours and intensity of work required for installation. Thanks to this solution, customers can now quickly respond to user demand for high speed fiber access and improve user experience.

This solution has the following features:
1. Aviation connectors and blind-mate technologies raise installation efficiency by over 50% thanks to a simple 30° insertion and 45° lock movement.
2. Simple, tool-free installation, with FMC technology eliminating the need for complex operations like slicing or fiber entry and layout. Installation is now efficient and easy.
3. Standardized parts and a box-shaped design make the solution suitable for flexible installation on walls or on pole structures. Well-protected components mean they can be deployed in dry, cold, and wet environments.
4. The open box-shaped design avoids narrow working spaces. Larger space makes installation quicker and more intuitive.

Quick and easy onsite installation

Noise Reduction

Huawei continuously invests in technologies that locate the source of noise in products. Using our existing noise location technology, we have enjoyed initial progress in researching noise location through sound intensity tests. In addition, we have improved the design of noisy equipment by adding external noise dampers, which are very small and also help dissipate heat.

We closely follow the latest industry advances in noise reduction, and participate in many international conferences on noise testing and control. We also work with universities and research institutes worldwide on noise control research.

Our Environmental Acoustics Lab has obtained A2LA certification from the American Association for Laboratory Accreditation (A2LA) and ISO/IEC 17025 certification from the China National Accreditation Service for Conformity Assessment (CNAS). The Lab has also been recognized by international testing agencies such as UL, MET Laboratories, and National Technical Systems (NTS). Equipped with advanced acoustic testing and analysis devices, our Environmental Acoustics Lab provides strong support for researching noise control technologies.

Electromagnetic Radiation

Huawei imposes strict safety controls on electromagnetic radiation from our products, and has researched and innovated to ensure that its products comply with related laws and standards.

In 2014, we worked with multiple industry experts in China to draft a standard for safety testing on electromagnetic radiation from base stations, with accompanying case studies. The new standard will be used by law enforcement and regulation agencies in their work to protect the interests of both enterprises and consumers. At the Huawei-hosted ITU Green Standards Week, we discussed and shared our latest research results and experience in electromagnetic radiation with industry experts from around the world. Together we worked to promote a green, sustainable, and smart city development model. As base stations have become lighter and smaller and are deployed at lower locations, we have researched how to design and test features that shield electromagnetic radiation to ensure both ease of communications and safety.

In addition to base stations, our terminals and small, specialized equipment for consumers, households, and small businesses fully conform to the radiation limits set out in the related standards. By conducting research and improving our capabilities at electromagnetic protection, we are better able to improve product quality and support the rapid R&D, manufacturing, and sale of new products.

5.3 Sustainable Supply Chain

In 2014, Huawei set the following goals for supply chain sustainability: satisfying customer requirements, exceeding customer expectations, making continuous improvements, driving business success, and striving to set the industry benchmark. Alongside these goals, we devised the following strategies: systematic risk prevention, proactive management, efficient internal/external collaboration (customers, suppliers, and industry partners), and continuous improvement. We also incorporated sustainability requirements into our end-to-end procurement process, including supplier qualification, selection, assessment, performance management, procurement fulfillment, and supplier exit.

We recognize that passive sustainability is a cost while active sustainability is a profit. Raising our levels of sustainability requires us to collaborate with customers, suppliers, and the entire value chain. Together we can construct efficient models of sustainability management, and thus achieve our goals. In 2014, Huawei's supply chain management efforts focused on the following areas:

- Working with customers to fully understand their requirements and expectations for sustainability, and incorporating these elements into Huawei's procurement, supply chain management, and supplier lifecycle management processes;

- Working with suppliers to clearly convey customer requirements to suppliers and make them part of our suppliers' business processes and daily operations;

- Strengthening our assessments on supplier sustainability, and urging suppliers to make continuous improvements and convey sustainability requirements to their vendors until they are adopted across the entire value chain;

- Working with suppliers to jointly improve our processes for the benefit of end users and the public. Incorporating Huawei's sustainability standards and requirements into joint processes and IT systems to maximize efficiency;

- Joining industry organizations and engaging in industry-wide collaborations and dialogues with suppliers to jointly explore sustainability requirements and standards, and thereby improving sustainability management across the industry;

- Working with our engineers to ensure our products are designed for the circular economy.

Supplier Sustainability Agreements

Based on the Electronic Industry Code of Conduct (EICC), Huawei has developed its *Supplier Sustainability Agreement*. Huawei requires every supplier to sign the *Supplier Sustainability Agreement* as a key step in supplier qualification. The compliance level with the agreement is one of the key factors that Huawei considers during supplier audits and performance appraisals.

Huawei requires that its suppliers comply with the *Supplier Sustainability Agreement* as well as applicable laws, regulations, and international standards. The company also requires that suppliers incorporate sustainability requirements into their business decision-making and day-to-day operations, and that they cascade the requirements across the supply chain.

Electronic Industry Code of Conduct (EICC)
The EICC covers five areas: labor, health and safety, environment, business ethics, and management systems. It requires companies to comply with laws and regulations of the countries and regions in which they operate, and encourages companies to adopt international standards, take on social and environmental responsibilities, and maintain high standards of business ethics.

New Supplier Qualification

Huawei implements a comprehensive qualification process for all new suppliers. The assessment covers suppliers' capacity and their compliance with applicable laws and regulations and with the *Supplier Sustainability Agreement*.

- Screening phase: Sustainability requirements are one of the minimum conditions that potential suppliers must follow. Those who fail are excluded before selection begins;

- Qualification phase: Onsite audits are performed to assess whether a supplier meets the criteria stipulated in the sustainability agreement. The audits include activities such as management interviews, employee interviews, document reviews, onsite inspections, and third-party information searches;

- Review phase: An expert panel reviews the results of the supplier audit. Compliance with sustainability requirements is the precondition for acceptance: any supplier that fails to meet the standards will not be accepted.

Suppliers that are successfully qualified are required to develop plans for continuous improvement as per the *Supplier Sustainability Agreement*. They are also required to conduct regular internal audits to ensure continued compliance with Huawei's sustainability requirements and make continuous improvements.

Table 1: New Supplier Qualification

Year	Number of New Suppliers	Number of Qualified New Suppliers
2011	55	55
2012	48	48
2013	38	38
2014	**56**	**56**

Supplier Audits

Huawei divides suppliers into different categories to ensure their continued compliance with our sustainability requirements. Every year we audit suppliers, which combined represent at least 90% of our procurement value, and assign them one of three priority levels: high, medium, and low. On this basis, a list of suppliers for particular attention is drawn up. The factors considered during the audits are: country where a supplier is based; product/material type; potentially high risk manufacturing process; business volume and relationship; sustainability performance; environmental risk; and risk management system.

Table 2: Supplier audit results from 2011 to 2014

Year	Number of Audited Suppliers	Number of High-priority Suppliers	Number of Medium-priority Suppliers	Number of Low-priority Suppliers
2011	633	19	144	470
2012	686	45	56	585
2013	735	28	146	561
2014	**753**	**20**	**67**	**666**

We focus on managing high-priority and medium-priority suppliers by conducting onsite audits on them every year. Before the audits, we require suppliers to perform self-assessments based on the terms of the *Supplier Sustainability Agreement*, to identify their own strengths and weaknesses and formulate a correction plan. During onsite audits, we assess each supplier's ability to manage its own sustainability, and identify any potential problems, particularly high-risk problems and those that exist with management systems and capabilities.

If we discover a problem during an audit, we help the supplier analyze the cause; identify ways to solve it; and take targeted action using the Check, Root cause, Correct, Prevent, and Evaluate (CRCPE) methodology. All problems are logged on the Supplier Corrective Action Requirement (SCAR) system for follow-up until closure.

Table 3: Supplier onsite audit results from 2011 to 2014

Year	Number of High-priority Suppliers Audited	Number of Medium-priority Suppliers Audited
2011	19	68
2012	45	56
2013	28	57
2014	**20**	**67**

Typical Problems Discovered during 2014 Supplier Audits

Supplier Performance Management

Huawei appraises suppliers' sustainability performance annually based on onsite audit results and improvement outcomes. Performance appraisals cover a total of 15 indicators, including redline management requirements and key factors such as labor, health and safety, environment, business ethics, and management systems. Suppliers are classified into four grades (A, B, C, and D) based on their sustainability performance, which represent their performance level in descending order.

The sustainability performance of each supplier is published internally, and is conveyed by our procurement managers to the supplier's managers to drive continuous improvement. Huawei's level of business with each supplier depends on their sustainability performance, which is also a factor considered in tendering, supplier selection, portfolio management, and other processes. Suppliers that perform well are given higher procurement quotas and more business opportunities, while the reverse is true for low-performing suppliers. Depending on the situation, Huawei instructs low-performing suppliers to correct existing issues within a specified timeframe and may even terminate business relationships with suppliers that have exceptionally poor performance.

In 2014, two suppliers had their tendering rights restricted due to their sustainability performance. Procurement from these suppliers was reduced by US$80 million.

Notes:
In 2014, no serious incidents of child labor or forced labor were discovered. Typical issues are mainly due to no formal policies being in place or incomplete formal remediation policy. N.B. Even if serious violations are observed, Huawei will not terminate the relationship with the supplier. We will continue to work with the supplier to drive improvement. If it becomes apparent that the supplier will not or cannot comply then we will stop doing business with them. If critical issues are found with a potentially new supplier to Huawei, business will not commence until the issues are remedied.

In 2014, two suppliers had their tendering rights restricted due to their sustainability performance. Procurement from these suppliers was reduced by US$80 million

US$**80**million

Building a Greener Supply Chain

Green Partner Certification

The Huawei Green Partner (HW GP) Program aims to ensure that no products or parts contain any chemicals banned by law or restricted by our customers. It requires full compliance with environmental laws, directives, standards, and requirements. The program encourages suppliers to systematically manage their environmental protection efforts and follow green initiatives throughout a product's lifecycle, from green design to green manufacturing. By controlling the use of restricted substances from the outset, we contribute to a greener supply chain. In 2014, 47 suppliers were certified as Green Partners.

Green Procurement

Since 2011, Huawei has been a member of the Green Choice Alliance, which was set up by the NGO Institute of Public and Environmental Affairs (IPE). IPE maintains a national database of corporate environmental performance, which can be used for supplier sustainability management. In 2014, Huawei began using IPE's Ferret software to regularly investigate suppliers' environmental performance and encourage suppliers to improve their management.

Also in 2014, Huawei and the Shenzhen Municipal Government launched the Shenzhen Green Supply Chain Pilot Project. As an experiment in a new public-private partnership model of environmental governance, this project uses the procurement power of large companies under government leadership to encourage environmentally friendly work by SMEs. The project has defined the environmental protection requirements that large companies have of their suppliers, and has built a platform for companies to learn from and communicate with each other. It helps companies in different links of the supply chain to cooperate on environmental protection. Companies are encouraged to procure more from suppliers with the best environmental records, and to limit the business opportunities of suppliers that breach environmental regulations. Under this project, companies can share cases about energy conservation and emissions reduction, and are encouraged to voluntarily manage themselves – and as a result – make the supply chain more competitive. After analyzing the incentive mechanism for a green supply chain, the project will establish a guide on how companies can build a greener supply chain. It will also set up a green supply chain association on the basis of the established platform to promote project achievements.

In 2014, Huawei received the Best Practice Award from the UN Global Compact Local Network China in recognition of its new public-private partnership model for building a green supply chain and protecting the environment. We have received similar such awards from the UNGC for three years in a row, recognizing our achievements and efforts in CSR Supply Chain management practices.

Reducing Carbon Footprint in the Supply Chain

Huawei has a very extensive supply chain. Therefore, reducing the carbon emissions of our suppliers is an important step in decreasing the carbon footprint of both Huawei and its customers. Huawei has carried out an energy audit of some key suppliers to reduce their energy consumption and carbon emissions. Huawei has also incorporated emissions reduction requirements into its supplier qualification and audit processes. In partnership with its suppliers, Huawei constantly looks for innovative ways to reduce energy use and build a greener supply chain.

In 2012, Huawei began a pilot program for energy conservation and emissions reduction. To date, 24 suppliers have been involved in the program and created their own specific projects with impressive results. In 2014, 20 suppliers participated in Huawei's energy conservation and emissions reduction program, reducing CO_2 emissions by 53,652 tons. We have targeted an additional 10 suppliers in 2015.

In 2014, 47 suppliers were certified as Green Partners

47

Year	Number of Certified Suppliers
2011	27
2012	23
2013	34
2014	**47**

Signing of the Shenzhen Greener Supply Chain agreement with the Shenzhen Municipal Government

In 2014, 20 suppliers participated in Huawei's energy conservation and emissions reduction program, reducing CO_2 emissions by 53,652 tons. We have targeted an additional 10 suppliers in 2015

53,652 tons

Year	Number of Suppliers	CO_2 Emissions Reduction (Tons)
2013	4	23,839
2014	**20**	**53,652**

Seeking Win-Win Development

Global Supplier Sustainability Conference

Supply chain sustainability lies in the shared awareness and collective action of all players in the supply chain. Communication and information sharing between different companies helps the entire community reach a consensus and achieve synergies. The Global Supplier Sustainability Conference is a key opportunity for Huawei, its suppliers, and all other stakeholders to talk with and learn from each other. It is greatly appreciated by all attendees.

The Global Supplier Sustainability Conference and Regional Supplier Conferences have been held every year since 2009. At the conferences, we invite our senior executives to introduce Huawei's sustainability strategy and requirements. Our key customers are invited to explain sustainability trends and their own demands directly to our suppliers. Industry experts, municipal government speakers, and NGOs are invited to discuss industry trends and business opportunities, and suppliers also share their success stories. Additionally, suppliers learn about global trends and customer needs, increase their expertise, and set the direction for their own sustainability efforts.

In September 2014, Huawei hosted the Sixth Global Supplier Sustainability Conference in Shenzhen under the theme of "Building a Connected World – a Greener Supply Chain and Greater Competitiveness". The event attracted 220 attendees, including representatives from customers, suppliers, government agencies, and NGOs.

Huawei Rotating CEO Eric Xu addressed the conference, calling for deeper collaboration with suppliers to discover opportunities for innovation, develop new products, enter new markets, explore new business models, and improve business efficiency. In collaboration with suppliers and other key stakeholders, Huawei strives to drive sustainability across the industry chain.

Huawei Global Supplier Sustainability Conference

Prohibiting the Use of Conflict Minerals

"Conflict minerals" refers to tin, tantalum, tungsten, gold, and other minerals that are mined under conditions of armed conflict, notably in the Democratic Republic of the Congo and adjoining countries. The profits from the sale of these minerals finance ongoing armed conflicts in countries where they are mined or smelted. The problem of conflict minerals has drawn the attention of the electronics industry and others. In fact, the US government has passed a law to help address this problem. The problem is complex and will only be resolved through collective commitment and deep cooperation between businesses, governments, and NGOs.

Huawei takes the problem of conflict minerals very seriously, and has taken action to reduce the risk of using these minerals on an ongoing basis. Since 2002, Huawei, in tandem with our customers, has investigated the use of conflict minerals in the supply chain. Huawei has published a *Huawei Statement on Conflict Minerals*, pledging to never knowingly procure or support the use of conflict minerals. Huawei also requires all its suppliers to boycott conflict minerals and asks them to extend this requirement to their vendors.

In 2014, Huawei conducted a survey of its suppliers using the latest *Conflict Minerals Reporting Template* published by the Conflict-Free Sourcing Initiative (CFSI), and shared the results with its customers. Huawei requires its suppliers to select CFSI-certified conflict-free smelters (CFSs), and urges uncertified smelters to get certified.

Huawei will continue to play an active role in the programs organized by industry organizations such as the Global e-Sustainability Initiative (GeSI), Association Connecting Electronics Industries (IPC), and CFSI. Together with its customers and suppliers, Huawei will actively seek sustainable solutions to the problem of conflict minerals.

Huawei Statement on Conflict Minerals:
http://www.huawei.com/en/about-huawei/declarations/statement-on-conflict-minerals/

Industry Cooperation

Collaboration with industry players is a key factor when it comes to improving supply chain sustainability. Together with the industry players, we keep a close eye on sustainability opportunities and challenges, hold interdisciplinary dialogue, and cooperate with industry organizations. Maintaining a consistent understanding, taking coordinated action, and sharing resources help us combine our strengths and gain leverage on these issues. Ultimately, we can boost the competitiveness of the industry.

Huawei experts discussing IPC's sustainability standard

One of the challenges currently facing our supply chain management is that not all companies take sustainability as seriously as we do. They understand sustainability standards differently and take different measures. Therefore, suppliers find it difficult to cope with inconsistent requirements, and often end up expending resources on compliance checks rather than on systemic improvements. Huawei has worked actively with the industry to draft industry standards, benchmark itself against industry leaders, and push for coordinated action to help suppliers improve their sustainability.

United Nations Global Compact (UNGC)	We fully implement the ten principles of the Global Compact, make them part of our supplier sustainability requirements and share cases about suppliers' sustainability.
Global e-Sustainability Initiative (GeSI)	Together with industry leaders, we research opportunities and challenges in relation to sustainability and take coordinated action to solve key industry issues.
Joint Audit Cooperation (JAC)	We undergo joint audits organized by customers, and contribute to uniform standards and methodologies. We advocate the sharing of joint audit reports to avoid repeated audits and to make the audit process more efficient.
China Electronics Standardization Association – Social Responsibility Committee (CESA-CSR)	We participate in setting the CSR standards for the electronics industry and support international exchanges and cooperation on sustainability in the industry. We were honored with the CESA-CSR Outstanding Member Award in 2014.
Association Connecting Electronics Industries (IPC)	We actively support IPC to help draft the sustainability standard for the electronics industry, and share our experience in managing supply chain sustainability.

IPC is a global standards organization for the electronics industry. Founded over 50 years ago, it has drafted 225 industry standards, of which 7 are CSR and sustainability standards.

In 2014, IPC asked Huawei and Flextronics to jointly lead the development of the IPC-1401, a standard for supply chain sustainability. This standard will be written by volunteer experts on the basis of the common demands and best practices of members of the electronics industry supply chain. Going beyond the traditional audit-based model, this standard will incorporate CSR into business practices, the business lifecycle, and procurement processes. It will encourage collaboration along the supply chain, and give companies a structured guideline for their supply chain management systems.

Additionally, we have been collaborating closely with highly respected academics from prestigious universities in Germany, Japan, Australia, and the US to share best practices via case studies and speaking engagements.

5.4 Supporting the Local Communities

As a global company that operates in over 170 countries and regions, Huawei is a responsible corporate citizen and a trusted partner. We promote the development of the local communities by providing training and educational opportunities, supporting local infrastructure build-out, improving local environments, and supporting local social programs.

Huawei believes that ICT has the power to break social, economic, and geographical boundaries. By applying ICT and implementing the Bridging the Digital Divide program, we have nurtured ICT professionals and increased information access around the globe.

Huawei contributes to the communities in which it operates. We seek to build a harmonious business ecosystem that creates environmental, economic, and social benefits over the long term.

Seeking Win-Win Development

OVERVIEW OF GLOBAL CHARITY ACTIVITIES

Japan:
- Organized the Charity Relay Marathon.
- Supported the "Summer Dance Festival at Shinkoiwa" and facilitated the post-disaster reconstruction efforts in Tohoku.

China:
- Launched the 2014 InnoApps Hackathon Contest together with the EU, and initiated the China tournament.

Bangladesh/Kuwait

Pakistan:
- Signed an MoU with the National University of Computer and Emerging Sciences to authorize the university as a Huawei Authorized Learning Partner (HALP) and to promote training and certification programs in Pakistan.

UAE:
- Donated computer-equipped classrooms to schools for disabled children. The Deputy Minister of UAE Municipal Ministry praised Huawei for its strong support.

Saudi Arabia:
- Donated ICT equipment to the King Fahd University of Petroleum and Minerals, Saudi Arabia's leading university. Huawei and the university established a joint lab, benefiting over 1,200 students.

Cambodia:
- Made donations to the Cambodian Red Cross to support poverty alleviation and education. The President of the Cambodian Red Cross thanked and praised Huawei for its efforts.

Malaysia:
- Set up the Huawei University Teaching Laboratory in the Universiti Teknologi PETRONAS.

The UK/Sweden/Denmark

Portugal:
- Huawei VP Zhang Peng and the Chairman of the Trade & Investment Agency of Portugal signed a five-year MoU for the Seeds for the Future program. The signing was witnessed by Chinese President Xi Jinping and Portuguese President Aníbal Cavaco Silva.

Spain:
- Supported Red.es to promote the responsible use of ICT.
- Organized the "Leading the LTE Era" program to provide students with internship and training opportunities at Huawei.
- Signed an agreement with the Technical University of Madrid to promote LTE knowledge transfer.

France:
- Partnered with Ardian to hold a math contest between Chinese and French middle school students. The French foreign minister thanked Huawei, remarking that Huawei is a socially responsible company.

Germany:
- Conducted the "Chinese 2.0" CSR project with the North Rhine-Westphalia government to promote digital education and cultural exchanges with Germany.

The Netherlands:
- Partnered with the Netherlands-Asia Honours Summer School to select 100 students for training and internship in China.

Belgium:
- Worked with the non-profit organization European Young Innovators Forum to hold the 2014 EU-China InnoApps Hackathon Contest.

Country where the Seeds for the Future program was implemented

Morocco:
- Held the opening ceremony of the GENI Forum 2014 for ICT Universities. The Minister of Higher Education and Scientific Research attended the event and praised Huawei for its efforts.

Tunisia/Hungary/Poland

Ghana:
- Released the CSR report to demonstrate Huawei's contribution to local communities from 2009 to 2013.

Nigeria:
- Received the Best Social Cooperation and Contribution award and the Best Enterprise for Supporting Talent Development award.
- Announced a plan to train 10,000 ICT professionals in Africa as part of the Seeds for the Future program, at the closing ceremony of the World Economic Forum on Africa in Abuja.

South Sudan:
- Worked with Zain (a local carrier) to enable over 3,000 children from multiple schools to access the Internet for the first time.

Uganda:
- Provided a three-month internship and training program for 31 students, who finally received certification at Huawei's HQ.

Kenya:
- Worked with the Vodafone Foundation to donate tablets to a refugee camp in Kenya and built an Instant Network School.
- Made donations to St. Gabriel's Gwassi Girls Secondary School to build education facilities.

Zambia:
- Donated 40 computers as well as desks and chairs to Mulungushi University to build computer-equipped classrooms.

Botswana:
- Worked with the Presidential Office of Botswana to hold the computer laboratory donation ceremony themed "Bridging the Digital Divide".

Belarus:
- Exclusively sponsored the "China Trip" essay and photography contest attended by teenagers from the areas destroyed by the Chernobyl nuclear accident.

The US:
- Made donations to Communities In Schools and Bowman Middle School in Plano, Texas, to support education and local community development.
- Partnered with K to College to provide educational support for students in Stockton, California.

Mexico:
- Signed an online course donation agreement with the National Autonomous University of Mexico.

Costa Rica:
- Donated notebook computers to Orosi Elementary School in Cartago Province, in an effort to support educational development in remote areas of Costa Rica.

Panama:
- Supported child protection and education initiatives in high-risk environments.

Argentina:
- Supported education and donated hundreds of pianos.

Indonesia:

Australia:
- Signed an MoU with the Griffith University to offer opportunities for cooperation on joint innovation programs.

Creating Opportunities Through Education

Huawei believes that access to education is critical to creating opportunities that will support sustainable and equitable levels of development in the countries in which it operates. Huawei applies ICT to improve education facilities and gives young people the opportunity to access schooling. Together with our partners, we spread ICT knowledge and technology, nurture local talent, and increase people's engagement in the digital society.

Flagship CSR Program: Seeds for the Future

It's hard for me to describe using simple language that Seeds for the Future has shown me: China's people, its culture, its history and its development. The study and time spent with field experts during my internship at Huawei's HQ deepened my understanding of trends in the ICT industry, while building up my resume and expanding my horizons. I am deeply thankful to Huawei for giving me a learning opportunity like this one."
— Leo Gebbie, Oxford University

This was the feedback from a UK student who participated in Seeds for the Future in 2014. Like Leo, many other students were empowered by the program to learn about cutting-edge communications technologies, gain exposure to Huawei's global operations, enrich their time at the university, and have a clear career direction.

ICT is an important engine for growth in all industries. As an ICT leader, Huawei has developed the ICT industry in the countries and regions in which it operates. Moreover, it has promoted the sustainable development of the environment, the economy, and society over the long term. In particular, Huawei believes that access to education is critical to creating opportunities that will support sustainable and equitable levels of development in the countries in which it operates. Therefore, Huawei focuses its investment on global CSR programs on education.

Since its debut in Thailand in 2008, Seeds for the Future has become Huawei's flagship CSR program. It has been implemented in 35 countries worldwide, benefiting over 10,000 students from more than 100 universities. The program enables Huawei to share its ICT expertise and innovative technologies with local communities in multiple ways. In addition, Huawei has helped local communities develop highly efficient education systems that nurture ICT professionals who drive the ICT industry forward.

What makes this program unique is that it offers first-hand learning opportunities through interactions with Huawei staff and visits to Huawei labs, where program participants can get hands-on practice and witness live demonstrations of the latest ICT technology.

Before we initiate each program, Huawei reaches out to local governments, NGOs, higher education institutes, and universities to select top students through academic competitions and essay contests. To date, nearly 1,000 students from around the world have come to Huawei's HQ for visit and study. Some of the very best of those students have already joined Huawei or other ICT companies, contributing to a stronger industry.

Huawei has signed MoUs with local governments or universities, pledging to develop local ICT industries, educate young people, and create opportunities. In doing so, we strive to drive the long-term and sustainable development of the environment, the economy, and society in each locale we operate. Huawei's efforts have been widely recognized by governments in various countries such as the UK, Germany, France, the Netherlands, Malaysia, Thailand, Indonesia, Singapore, Nigeria, and Russia. These governments agree that this kind of sharing program can help bridge the knowledge gap and promote local industry development, and lend their long-term support to Huawei.

Vietnamese university students taking part in the Seeds for the Future selection process

Opening ceremony for Seeds for the Future in the Netherlands

The first stop for Seeds for the Future participants in China was Beijing, capital of China.

During their week in Beijing, students had the opportunity to study and experience traditional Chinese culture. By studying Mandarin, calligraphy, and traditional Chinese painting, students were able to deepen their understanding of China's millennia-old cultural heritage. During their visits to the Great Wall and the Forbidden City, the students were deeply impressed by the beauty of Chinese architecture as well as the diligence and wisdom of the Chinese people. Over the seven days, they developed a great interest in China and experienced the diversity of Chinese culture.

One week after their arrival in China, the students flew from the ancient cultural capital of Beijing to China's most modern, dynamic city, Shenzhen, which is home to Huawei's HQ. Here, they learned about Huawei's history, corporate culture, and how Huawei became the global industry leader in less than 30 years. Huawei also provided training sessions with experts, inviting the students to labs where they learned about cutting-edge ICT technologies and received hands-on practice. Various courses on trends in the ICT industry, cloud computing, and 5G technology taught the students how modern communications technology had driven social progress and changed every aspect of life. In the labs, Huawei experts demonstrated, for example, how to implement voice services, transmit data, and set up virtual networks. Students then practiced

A Belgian student studying Chinese calligraphy

Kuwaiti students painting the traditional opera mask

Seeking Win-Win Development

the theories they had learned, like real communications engineers. In Huawei's high-tech exhibition hall, the students were introduced to the comprehensive solutions that make Huawei the industry leader, as well as the futuristic technologies. For students majoring in non-ICT subjects, Huawei arranged internships in departments across the company. They experienced what it is like to work in a cross-cultural global company, and became aware of the attributes that employers look for. During the weekend, the students visited isolated elderly people and disabled children in Shenzhen. By taking care of the needy, the students gained a deeper appreciation of what it meant to fulfill one's social responsibilities.

During their two weeks in China, the students experienced the charm of Chinese culture and the dedicated work spirit of Huawei employees. At the graduation ceremony, the students – witnessed by representatives from their home country's government and senior Huawei executives – voiced their increased confidence and hopes about the future. Seeds for the Future has no doubt played a meaningful role in nurturing talent and promoting knowledge transfer.

We believe that the Seeds for the Future program will help these students stand out from the crowd in their future career, and inspire them to be committed to building a Better Connected World and contributing to ICT development.

A Huawei expert demonstrating how to operate equipment to Danish students in the lab

Romanian students visiting isolated elderly people

Huawei Collaborated with the Technical University of Madrid on the "Leading the LTE Era" Project

In March 2014, Huawei signed a five-year agreement with Technical University of Madrid (UPM) under the theme "Leading the LTE Era". The main goal of the program was to offer both knowledge and practical courses on cutting-edge LTE technologies to Spanish university students, and to select outstanding students to join Huawei. The program was in line with Huawei's global CSR strategy of "Creating Opportunities Through Education". It demonstrated Huawei's continuing commitment to supporting Spanish education and employment. Specifically, the program included providing 200 hours of LTE classes taught by Huawei experts at UPM each year, establishing an online LTE lab, selecting top students for a six-month internship at Huawei, and sponsoring an LTE research report.

On March 21, 2014, nine professors from UPM's school of communications visited Huawei Spain and received some training at its LTE Star Lab. On June 16, 18 Spanish students from the Huawei-sponsored LTE class visited Huawei Spain to learn about Huawei and the internship process. They also visited our device exhibition hall, network operation center, and the Huawei-Vodafone Joint Innovation Center.

At the graduation ceremony for the LTE class held in UPM's school of communications on July 15, 18 Spanish students passed the exams and received the graduation certificates. Carlos Conde, UMP's Rector, remarked that UPM was extremely proud to partner with Huawei, a leader in ICT around the world, and that he was satisfied with the university's cooperation with Huawei in the "Leading the LTE Era" program, a great step forward for the university.

"

Huawei has demonstrated its steadfast support for Spain's ICT industry and Spanish society as a whole. I want to congratulate Huawei on its success in this program, particularly the classes that were taught by teachers from Huawei, and its establishment of an online lab, both of which were great innovations when compared with our previous classes. Also, I'd like to thank Huawei for making possible a survey of LTE deployment in Spain's rural areas, an extremely important issue for the country at this point."

— Alberto Rodriguez Raposo, Spain's Director General for Telecommunications and Information Technology

Contributing to Local Communities Where Huawei Operates

When a company fully considers its impacts on the communities where it operates and proactively takes effective actions to cope with these impacts, it will win the support and respect of those communities. As a responsible corporate citizen, Huawei works with local communities to carry out ongoing charity activities such as disaster relief, healthcare, and social welfare initiatives. Together, we strive to create a better world.

Providing Educational Support for Children in a Kenyan Refugee Camp

Together with the Vodafone Foundation, Safaricom, and the UN High Commission on Refugees (UNHCR), Huawei rolled out a mobile education program to build an Instant Network School for 18,000 students aged 7–20 in 13 schools within the Dadaab refugee camp in Kenya.

By the end of 2013, there were 16,700,000 refugees worldwide, half of whom were under the age of 18. UNHCR has found that, of the 279,000 children living in Dadaab, 41% are enrolled in primary schools and only 8.5% are in secondary education. The goal of the mobile education program, therefore, is to allow the camp's children to enjoy the same high level of education as children elsewhere. The Vodafone Foundation donated funds to build 13 solar-powered schools, Safaricom provided network access, and Huawei donated 235 tablets. The program was a huge boost to the education of refugee children in Kenya, expanding the scope of mobile education in the country.

Donating tablets to primary school students in Kenya's Dadaab refugee camp
Photo from: Vodafone Foundation

Helping Families in Need in Zambia

On September 27, 2014, Huawei held a major charity event with the famous Zambian charity organization Families Are Nations, helping Zambian families struggling under the poverty line or desperately in need of medical treatment.

During the event, six families received prizes or cash donations encouraging them to keep a positive attitude and continue to rise above difficulties. The funds raised during the event were used to build a family aid center that would support more families in need of help.

Offering aid to poor families in Zambia

I want to thank Huawei for its unceasing support. I hope that it will continue to develop and act as a responsible corporate citizen in Zambia, and ultimately grow with Zambia."

— Zambian Vice President Dr Guy Scott

Establishing a "Huawei Prize" as Part of the Science Intercollegiate Competition in Japan

"Science Intercollegiate" is a science competition organized by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) for university students in the science, technology, and engineering disciplines. It is designed to cultivate the innovation capabilities of future science professionals. In this year's competition, students from around Japan showed off the results of more than 200 research projects.

Nurturing ICT talent is one of the main CSR events held by Huawei Japan. Huawei Japan's support for Science Intercollegiate was welcomed and recognized by MEXT. Huawei also established a "Huawei Prize" for the competition. Other companies offering prizes include Tokyo Electron and Hatakeyama.

Overview of Some of Huawei's Charity Activities

- On August 12, 2014, Huawei Botswana joined local carriers for CSR activities related to the World Telecommunication and Information Society Day. We donated 90 MediaPads to three local schools as part of our efforts to improve local education and help bridge the digital divide in Botswana. Botswana's Minister of Communications said, "Huawei devotes itself to charity activities and assisting the ICT development in Botswana. Thanks a lot for Huawei's great contribution."

- On September 21, 2014, Huawei Costa Rica attended the 2014 Book Donation event, donating reading materials to over 10,000 young people under the age of 16 across the country. Costa Rica's Vice Minister of Culture thanked Huawei for its contribution to both the event and education in the country. On July 30 of the same year, Huawei Costa Rica donated 57 notebook computers to Orosi Elementary School in Cartago Province to support education and basic IT literacy in remote areas.

- On September 30, 2014, Huawei Germany and the North Rhine-Westphalia government collaborated on the "Chinese 2.0" CSR project, aiming to use digital technology to teach Mandarin to middle school students and spur digital education and cultural exchanges in Germany.

- On October 2, 2014, Huawei Panama signed an agreement with the New Generation Movement (NGM) to establish a program aimed at supporting and protecting children living in high-risk environments. Huawei would offer scholarships to ten students at the Integral Attention Center in Barraza for one year.

- In October 2014, Huawei Mexico signed a framework agreement with the National Autonomous University of Mexico (UNAM) and implemented the first project under the framework. Twelve UNAM professors and 150 students participated in Huawei's hi-tech training and certification. UNAM's faculty and administration thanked Huawei for sharing its knowledge and providing cooperation opportunities for academic groups.

- In 2014, Huawei Brazil donated two sets of cloud computing equipment to the Brazilian government, and worked with the Ministry of Technology to install the equipment in two under-developed cities in the northeast of the country: Manaus and Recife. The two installations helped the Brazilian government promote a positive image to Brazilian people; drove the development of education, healthcare, and science and technology in the northeast of Brazil; and accelerated Brazil's integration. On October 30, 2014, at an event in Recife for inaugurating the Huawei Brazil cloud computer donation program, Brazil's Minister of Technology thanked Huawei for its contribution to innovation in Brazil, and for sharing its world-class technologies and resources with Brazil.

- On December 11, 2014, Huawei Philippines and the Mapúa Institute of Technology signed an MoU on a Seeds for the Future training and internship program. Huawei planned to offer on-the-job training for Mapúa students, including bringing five outstanding students to China for two weeks of training in ICT technologies.

2014 Sustainability Goals and Results

Item	Goal in 2014	Goal Attainment in 2014
Bridging the Digital Divide	Hold two Broader Way Forums.	Held a Broader Way Forum on "Enabling the Next Industry Revolution" at the Barcelona Mobile World Congress in February 2014. Held a Broader Way Forum in June 2014 in Ireland in collaboration with industry partners to drive broadband development in Ireland.
	Work with carriers and UNESCO to help more than 1,000 students in South Sudan gain access to the Internet.	Enabled over 3,000 children from four schools to gain access to the Internet for the first time in the phase-1 project in 2014, thanks to the joint efforts of a carrier, UNESCO, and Huawei.
	Help Myanmar develop 1,000 ICT professionals.	Helped Myanmar train over 1,500 ICT professionals, with plans to train 5,000 more in the next 3 years.
	Publish a white paper on Building a Better Connected World.	Published a white paper on Building a Better Connected World, calling for shared efforts from all stakeholders to promote the healthy development of the ICT industry and build a Better Connected World.

Item	Goal in 2014	Goal Attainment in 2014
Supporting Stable and Secure Network Operations	Provide prompt and effective network support during disasters and major events around the world.	Guaranteed network availability during over 150 major events (e.g., the Sochi Winter Olympics, the FIFA World Cup in Brazil, and the Hajj), natural disasters (e.g., the Ludian earthquake in China), and special occasions.
	Guarantee zero network interruptions at the Brazil World Cup.	Provided 24/7 support at the Brazil World Cup, ensuring network continuity on all 120 key occasions in 12 cities.
	Publish the third edition of the cyber security white paper.	Published the third edition of the Huawei cyber security white paper at the EastWest Institute's Global Cyberspace Cooperation Summit in Berlin in December 2014.

Item	Goal in 2014	Goal Attainment in 2014
Innovating for a Greener Environment	Improve the energy efficiency of wireless products by 20% compared with 2012.	Decreased wireless products' energy consumption to 7 J/Mbit in 2014, a 23% improvement over 2012.
	Assess the water footprint of a mobile phone.	Completed a water footprint assessment for two of Huawei's mobile phones. The Huawei Honor 6 Plus was the world's first mobile phone with a Product Water Footprint Verification Statement.
	Use bioplastics in more than three products.	Used bioplastics in four Huawei mobile phones (G730, P7, Mate7, and Honor 6 Plus).
	Use eco-friendly soy ink for the packaging of over 10 products.	Used soy ink for the packaging of 30 mobile phone models and 29 other products.

Item	Goal in 2014	Goal Attainment in 2014
Innovating for a Greener Environment	Ship 220,000 units in green packaging, an increase of 10% over 2013.	Shipped a total of 247,193 units in green packaging in 2013, saving 44,164 m³ of wood.
	Cut electricity use by 40 million kWh during daily operations.	Saved 43 million kWh of electricity by using managerial and technological approaches to energy conservation.
	Construct more than 15-megawatt solar power stations.	Built 19-megawatt photovoltaic power stations to generate nearly 20 million kWh of electricity per year.
	Ensure that less than 2.5% of waste ends up in landfill.	Reduced the landfill rate to 2.37% by adopting a circular economy model.
	Launch the Green Recycling Program and complete the pilot in at least five countries.	Set up over 190 recycling stations in 8 countries, including China, Saudi Arabia, and Thailand as part of the Huawei Green Recycling Program.
	Grant Huawei Green Partner (HW GP) status to 40 suppliers.	47 suppliers received HW GP certification in 2014.

Item	Goal in 2014	Goal Attainment in 2014
Seeking Win-Win Development	Increase the employee localization ratio to 75% outside of China.	Recruited more than 35,000 employees outside of China, 75% of whom were local hires.
	Increase the ratio of female managers to 8.5%.	8.8% of management roles were women.
	Expand the "3+1" program from the R&D division to cover more departments and involve at least 100,000 employees.	Rolled out the "3+1" program ("make a friend", "join in a sports activity", "take up a hobby", and "read a thought-provoking book") in every department at Huawei, reaching 115,000 employees.
	Establish a non-monetary incentives framework.	Optimized Huawei's non-monetary incentives framework, with a focus on employee health, development, and relationships.
	Decrease the injury frequency rate per million man hours of manufacturing by 30%.	Reduced the injury frequency rate to 0.06 per million man hours of manufacturing, a 34% drop from 2013.
	Sign the *Supplier Sustainability Agreement* with 100% of new suppliers.	Signed the *Supplier Sustainability Agreement* with 100% of new suppliers.
	Conduct on-site audits on all suppliers.	Conducted on-site audits on all medium- and high-priority suppliers.
	Conduct greenhouse gas investigations on 20 suppliers and reduce carbon emissions by 50,000 tons.	Conducted greenhouse gas investigations on 20 suppliers, helping suppliers reduce carbon emissions by 53,652 tons.
	Ensure over 99% of employees sign the *BCGs*.	Succeeded in getting 99.42% of employees to study and sign the *BCGs*.
	Roll out the Seeds for the Future Program in 30 countries.	Cooperated with more than 100 universities in 35 countries to roll out the Seeds for the Future program.

Appendix I: GRI Index

STANDARD DISCLOSURES FIRST PART: GENERAL STANDARD DISCLOSURES

1. STRATEGY AND ANALYSIS

Profile Disclosure	Disclosure	Page
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	4-7
G4-2	Provide a description of key impacts, risks, and opportunities.	4-7

2. ORGANIZATIONAL PROFILE

Profile Disclosure	Disclosure	Page
G4-3	Report the name of the organization.	13
G4-4	Report the primary brands, products, and services.	14-15
G4-5	Report the location of the organization's headquarters.	13
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	13
G4-7	Report the nature of ownership and legal form.	17
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	16
G4-9	Report the scale of the organization.	13,16
G4-10	Report the total number of employees by employment contract and gender.	64-65
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	64-65
G4-12	Describe the organization's supply chain.	76-81
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	No significant changes
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	18-19
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	23
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: • Holds a position on the governance body • Participates in projects or committees • Provides substantive funding beyond routine membership dues • Views membership as strategic This refers primarily to memberships maintained at the organizational level.	23

3. IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES

Profile Disclosure	Disclosure	Page
G4-17	a. List all entities included in the organization's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	16
G4-18	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	22
G4-19	List all the material Aspects identified in the process for defining report content.	22
G4-20	For each material Aspect, report the Aspect Boundary within the organization.	22
G4-21	For each material Aspect, report the Aspect Boundary outside the organization.	22
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	/
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	No significant changes

4. STAKEHOLDER ENGAGEMENT

Profile Disclosure	Disclosure	Page
G4-24	Provide a list of stakeholder groups engaged by the organization.	20-21
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	20-21
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	20-21
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	20-21

5. REPORT PROFILE

Profile Disclosure	Disclosure	Page
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	Inside the front cover
G4-29	Date of most recent previous report (if any).	Inside the front cover
G4-30	Reporting cycle (such as annual, biennial).	Inside the front cover
G4-31	Provide the contact point for questions regarding the report or its contents.	Inside the front cover
G4-32	Report the 'in accordance' option the organization has chosen.	Inside the front cover
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report.	Inside the front cover 92-93

6. GOVERNANCE

Profile Disclosure	Disclosure	Page
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	17,24
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	17
G4-36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	17
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	20-21
G4-38	Report the composition of the highest governance body and its committees by: • Executive or non-executive • Independence • Tenure on the governance body • Number of each individual's other significant positions and commitments, and the nature of the commitments • Gender • Membership of under-represented social groups • Competences relating to economic, environmental and social impacts • Stakeholder representation	17
G4-39	Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	17
G4-40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members.	17
G4-41	Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders.	17
G4-42	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	18-19
G4-43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	24
G4-44	a. Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment. b. Report actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice.	24
G4-45	a. Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes. b. Report whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities.	19

G4-46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	24
G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	24
G4-48	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.	24
G4-49	Report the process for communicating critical concerns to the highest governance body.	/
G4-50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	/
G4-51	a. Report the remuneration policies for the highest governance body and senior executives for the below types of remuneration b. Report how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' economic, environmental and social objectives.	/
G4-52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.	66
G4-53	Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.	/
G4-54	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	/
G4-55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	/

7. ETHICS AND INTEGRITY

Profile Disclosure	Disclosure	Page
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	26
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	27
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	27

STANDARD DISCLOSURES SECOND PART: SPECIFIC STANDARD DISCLOSURES

DISCLOSURES ON MANAGEMENT APPROACH

G3.1 DMAs	Disclosure	Page
G4-DMA	Generic Disclosures on Management Approach	22

Indicator	Economic	Page
G4-EC1	Direct economic value generated and distributed	10
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	52-53
G4-EC3	Coverage of the organization's defined benefit plan obligations	67
G4-EC4	Financial assistance received from government	/
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	66-68
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	65
G4-EC7	Development and impact of infrastructure investments and services supported	/
G4-EC8	Significant indirect economic impacts, including the extent of impacts	82-89
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	77

Indicator	Environmental	Page
G4-EN1	Materials used by weight or volume	/
G4-EN2	Percentage of materials used that are recycled input materials	55-57
G4-EN3	Energy consumption within the organization	50
G4-EN4	Energy consumption outside of the organization	50
G4-EN5	Energy intensity	50
G4-EN6	Reduction of energy consumption	50-52

G4-EN7	Reductions in energy requirements of products and services	54
G4-EN8	Total water withdrawal by source	54
G4-EN9	Water sources significantly affected by withdrawal of water	54
G4-EN10	Percentage and total volume of water recycled and reused	54
G4-EN11	Generic Disclosures on Management Approach	/
G4-EN12	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	48
G4-EN13	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	/
G4-EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	/
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	53
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	53
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	53
G4-EN18	Greenhouse gas (GHG) emissions intensity	53
G4-EN19	Reduction of greenhouse gas (GHG) emissions	46-57
G4-EN20	Emissions of ozone-depleting substances (ODS)	/
G4-EN21	NO_x, SO_x, and other significant air emissions	/
G4-EN22	Total water discharge by quality and destination	54
G4-EN23	Total weight of waste by type and disposal method	55
G4-EN24	Total number and volume of significant spills	No significant spills
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	55
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	/
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	46-48
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	49
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	No fines

G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	49
G4-EN31	Total environmental protection expenditures and investments by type	5
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	77
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	77-79
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	/

Indicator	Labor Practices And Decent Work	Page
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	64
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	66-67
G4-LA3	Return to work and retention rates after parental leave, by gender	/
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	/
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	69
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	69
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	68-69
G4-LA8	Health and safety topics covered in formal agreements with trade unions	69
G4-LA9	Average hours of training per year per employee by gender, and by employee category	66
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	66
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	66
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	65
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	66

G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	77
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	68-78
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	/
Indicator	**Human Rights**	**Page**
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	/
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	66
G4-HR3	Total number of incidents of discrimination and corrective actions taken	68
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	68,77
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	68,77
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	68
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	100%
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	No related incidents
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	/
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	77
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	77-78
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	/
Indicator	**Society**	**Page**
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	82-89
G4-SO2	Operations with significant actual and potential negative impacts on local communities	/
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	27

G4-SO4	Communication and training on anti-corruption policies and procedures	27
G4-SO5	Confirmed incidents of corruption and actions taken	27
G4-SO6	Total value of political contributions by country and recipient/beneficiary	No related contributions
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	/
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No related fines
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	77
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	77-78
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	/

Indicator	Product Responsibility	Page
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	74
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	/
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	/
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	No incidents of non-compliance
G4-PR5	Results of surveys measuring customer satisfaction	20
G4-PR6	Sale of banned or disputed products	74-76
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	No incidents of non-compliance
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	41-43
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	No fines

Appendix II: Terms and Abbreviations

Abbreviation	Full Name
3G	The Third Generation Mobile Communication Technology
4G	The Fourth Generation Mobile Communication Technology
5G	The Fifth Generation Mobile Communication Technology
AA1000	AccountAbility 1000
APP	Application
CEO	Chief Executive Officer
CSR	Corporate Social Responsibility
CSD	Corporate Sustainable Development
CAGR	Compounded Annual Growth Rate
CNAS	China National Accreditation Service for Conformity Assessment
EHS	Environment, Health and Safety
EICC	Electronic Industry Code of Conduct
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GeSI	Global e-Sustainability Initiative
GRI	Global Reporting Initiative
ICT	Information and Communications Technology
IPD	Integrated Product Development

Abbreviation	Full Name
IPC	Association Connecting Electronics Industries
ISO	International Standardization Organizations
ISO26000	Guidance on Social Responsibility
ITU	International Telecommunication Union
JAC	Joint Audit Cooperation
LCA	Life Cycle Assessment
LTE	Long Term Evolution
LED	Light Emitting Diode
NGO	Non-government organization
OHSAS	Occupational Health and Safety Assessment Series
PCB	Printed Circuit Board
PCT	Patent Cooperation Treaty
SA8000	Social Accountability 8000
TD-LTE	Time Division-Long Term Evolution
TUP	Time-based Unit Plan
UNGC	United Nations Global Compact
UPS	Interruptible Power Supply
VoCs	Volatile Organic Compounds
WEEE	Waste Electrical and Electronic Equipment
WTO	World Trade Organization

Appendix III: Verification Statement

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Independent Assurance Statement

Introduction:

TÜV Rheinland (Guangdong) Ltd., member of TÜV Rheinland Group, Germany (TÜV , We) has been entrusted by the management of Huawei Investment & Holding Co., Ltd. (HUAWEI, the Company) to conduct independent assurance of HUAWEI Corporate Sustainability Report 2014 (the Report). All contractual contents for this assurance engagement rest entirely within the responsibility of HUAWEI. Our task was to give a fair and adequate judgment on the HUAWEI Report 2014.

The intended users of this assurance statement are stakeholders having relevance to the HUAWEI overall Sustainability Performance and impacts of its business activities during 2014 (January 2014 ~ December 2014). TÜV Rheinland is a global service provider of CSR & Sustainability Services in over 65 countries, having qualified professionals in the field of Corporate Sustainability Assurance, Environment, Social and Stakeholder Engagement. We have maintained complete impartiality and independence during the assurance engagement and were not involved in the preparation of report contents.

Assurance Standard:

The Independent Assurance was carried out in accordance with AccountAbility, U.K Standard AA 1000 AS (2008) and related standards AA 1000 APS(2008), AA 1000 SES (2011), Principles of Inclusivity, Materiality & Responsiveness, Global Reporting Initiative (GRI) , 'In accordance'-Core" reporting guidelines as per G-4.0

Scope & Type of Assurance:

Our Assurance engagement covers the following:

- HUAWEI Corporate Sustainability performance as described in the report 2014 in accordance with GRI reporting guidelines and performance indicators and according disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- Evaluation of disclosed information in the report as per the Assurance Standards.
- Type-1, Moderate as per AA 1000 AS (2008)

Limitation: The assurance engagement was carried out at HUAWEI Headquarter at Bantian Longgang, Shenzhen and site visits to major manufacturing unit located at Dongguan within P. R. China(Songshan Lake Factory). The consultations with external stakeholder were not carried out. We have not observed any significant situations to limit our assurance activity. The verification is carried out based on the data and information provided by HUAWEI, assuming they are complete and true. We did not verify the reported financial data as same is verified by another third party in annual report.

Assurance Methodology:

TÜV has challenged the report contents and assess the process undertaken by HUAWEI from source to aggregate in disclosure of information/data related to Sustainability performance. Our judgment is based on the objective review of reported information as per criteria defined under Assurance standards.

Analytical methods and the performance of interviews as well as verification of data, done as random sampling, to verify and validate the correctness of reported data and contents in light of contractual agreement and the factual HUAWEI Corporate Sustainable Development strategy (CSD) as mentioned in the report. Our work included consultation with over 50 HUAWEI representatives including senior management and relevant employees. The approach deemed to be appropriate for the purpose of assurance of the report since all data therein could be verified through original proofs, verified database entries.

The Assurance was performed by our multidisciplinary team of experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement. We are of the opinion that our work offers a sufficient and substantiated basis to enable us to come to a conclusion mentioned below and based on the content of our contract.

Positive Observation:
We would like to mention some of the positive aspects observed during HUAWEI assurance engagement as below:

- HUAWEI has established Corporate Sustainable Development Management System (CSD), makes an effort to deepen the corresponding CSD management procedure in 2014 (including the stakeholders engagement process), and continuous focus on four strategies of suitability development.
- Huawei keeps on undertaking effort to the transfer and sharing of ICT knowledge and skills, as an approach of Strategy 'Bridging the digital divide'. The company also provides support to transition based on ICT technology of all industries, to increase the efficiency and build a Better Connected World.
- HUAWEI incorporates the concept of Green ICT into their products full-lifecycle and develops capabilities in product water footprint analysis. In their own operation, HUAWEI positively introduces clean and renewable energy, deepening the circular economy model of 'from cradle to cradle ', and launches Green Recycling Program of used mobile phone, to increase efficiency of resource utilization and maximize the value.

Adherence to AA 1000 principles:
Inclusivity: HUAWEI has identified the issues that internal and external stakeholders focus, and prioritized them as a response to sustainable development issue, through formal and informal mechanism like Customer Satisfactory Survey and Supplier Sustainability conference. Furthermore, HUAWEI also initiates the training project 'Golden Seed for Sustainable Development'.
Materiality:
HUAWEI has identified the material issues related to sustainable development viz. economic, environment & social performance as an outcome of its stakeholder engagement and business priorities and provide balance information in the report. The Corporate Sustainable Development (CSD) strategy is aligned to address identified material issues.
Responsiveness: HUAWEI has responded to its stakeholders against identified material issues critical to sustainable development through disclosure made in report 2014, Corporate Sustainable Development strategy, Policies, implementation systems and processes, allocation of resources to stakeholder engagement and communication.

Conclusion:
In conclusion, we can mention that no instances or information came to our attention that would be to the contrary of the statement made below:

- HUAWEI Corporate Sustainability Report 2014 meets the requirement of Type-1, Moderate Assurance according to AA1000AS(2008) and Global Reporting Initiative (GRI) , 'In accordance'-Core" reporting guidelines as per G-4.0
- The Report includes statements and claims that reflects HUAWEI achievements and challenges supported by documentary evidences and internal records
- The performance data we found in the report are collected, stored and analyzed in a systematic and professional manner and were plausible.
- TÜV Rheinland shall not bear any liability or responsibility to a third party for perception and decision about HUAWEI based on this Assurance Statement.

For TÜV Rheinland Group

Daniel Pan   **Andreas Muench**

Lead Verifier   **General Manager**

Guangzhou, 28 April 2015

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