



Huawei Consumer Business Sustainability Progress Report

(2022-2023)



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Executive Letter



He Gang

Chief Operating Officer, Huawei Consumer Business Group
Sustainable Development Committee Director,
Huawei Consumer Business Group

Digital technology is reshaping the world. Digitalization and low carbon initiatives are leading industrial transformation and development and permeating every aspect of people's lives. As society goes green and intelligent, global industry chain partners need to work together and take effective action to accelerate the achievement of the UN's Sustainable Development Goals (SDGs). For example, joint efforts in developing the digital low-carbon economy would promote industry transformations and upgrades and improve the ability to cope with climate change.

Over the past year, Huawei Device Co., Ltd. ("Huawei Device" for short) has always prioritized consumers' interests above all else. We aim to build a green and

friendly smart device brand that consumers trust. Huawei believes that achieving sustainability should not merely be a verbal commitment, but that it should be reflected in our actions. We continue to focus on four sustainability strategies: information accessibility, education and health, environmental protection, and corporate social responsibility (CSR). Under the leadership of the Sustainable Development Committee of Huawei's Consumer Business Group, we are promoting the implementation of our goals. As a technology company, we are continuing to promote sustainable development through ongoing technological innovation and to contribute to building a green, environmentally friendly, and low-carbon society.

No one should be left behind in the digital world

Huawei has been striving to enable everyone to equally enjoy the benefits of technological development. To this end, we continue to invest in the information accessibility field and optimize basic functions by leveraging AI and software-hardware synergies. Our technological innovation is improving information accessibility experiences. Each generation of HarmonyOS brings more powerful accessibility features. In August 2023, Huawei launched HarmonyOS 4, which further upgrades accessibility capabilities such as Smart Q&A, hearing aid-device connection, Senior mode, and Celia Call. These features help users with special needs and elderly

people overcome accessibility challenges in their work and lives and give them more ways to communicate with the world.

We are well aware of the value and significance of accessibility. In recent years, Huawei's ongoing efforts to improve accessibility have been widely recognized. In 2023, HUAWEI Mate 50 Pro was ranked first in the annual accessibility assessment done by ifeng.com. In addition, HarmonyOS 3 received five-star rating and ranked No. 1 for the second year in a row in China Telecom's 2023 assessment of elderly-friendly smartphone OSs/UIs.

Producing more environmentally friendly products for a better future

Huawei has always been committed to protecting nature using technology. By carefully developing advanced sustainable products, we safeguard the environment throughout the product lifecycle.

Huawei incorporates green requirements into product design and utilizes 14 types of renewable material to manufacture products, including paper, gold, copper, glass, and plastic. For damaged products or products coming to the end of their lifecycles, we try to keep them in good working order again by repairing their motherboards, screens, or other components. We have already given more than 16 million devices a new lease on life. In addition, we have extended the lifespan of nearly 4.5 million devices through battery replacement and memory upgrades.

Huawei is committed to reducing energy

consumption and carbon emissions during production and operations. We continue to switch to using renewable and clean energy for our operations. In 2022, Huawei used more than 390 million kWh of renewable energy and nearly 1.8 billion kWh of clean electricity, a year-on-year increase of 25% and 15% respectively. Huawei attaches great importance to the sustainable development of the entire industry chain and works with partners to promote the green and low-carbon transformation of the supply chain. We require suppliers to set energy conservation and emission reduction targets, encourage them to carry out product carbon footprint (PCF) analysis, and work towards using renewable energy to manufacture Huawei products. In 2022, the carbon emissions of Huawei Device suppliers decreased by 10% compared with the previous year.

Putting in the work to build a sustainable ecosystem

Huawei's goal is to play a positive role in society. We focus on employee growth, provide opportunities for different types of talent, and encourage employees to learn and develop new skills. In 2022, we offered more than 15,000 online courses and our employees received more than 2 million hours of training. We also attach great importance to community development and actively integrate into communities to offer support. Huawei Device has created more than 75,000 jobs worldwide and continues to promote local employment, economic development, and prosperity within communities.

Huawei is working with industry chain partners to build a harmonious and mutually beneficial business ecosystem. In the past year, Huawei Device conducted a total of 217 sustainability reviews on our suppliers and all newly introduced suppliers passed the QC 080000 Hazardous Substance Process Management (HSPM) system certification. Huawei

also helps suppliers establish a zero-landfill waste management system which can reduce pollution by recycling resources.

Through diligent work, we can make a major difference, one small effort at a time. With an open mind and clear goals, we will continue to work with governments, industry associations, public welfare organizations, supply chains, and our consumers to boost sustainable development and fulfill our social responsibilities.

Looking ahead, we still face a variety of difficulties and challenges. We will stick to our original plan, which is to resolutely increase investment in research and development (R&D) and develop innovative technologies to promote green and sustainable development. Though the road ahead is long and tough, we can reach our goals by working hard constantly.

Sustainability Management

Building a friendly and socially
responsible brand focused on
enterprise sustainability



Organization and strategy

Sustainable development organization

Under the guidance of the Corporate Sustainable Development (CSD) Committee of Huawei, Huawei Consumer Business Group (Consumer BG) has established its own Sustainable Development Committee.

As the highest-level decision-making organization for matters related to sustainable development within Consumer BG, the Sustainable Development Committee develops and monitors the implementation of related strategies, objectives, guidelines, policies, and regulations.

Sustainable development strategy

Staying in line with the CSD Committee strategy, Consumer BG is focusing on information accessibility, environmental protection, education and health, and corporate responsibility within the context of the consumer electronics industry to build our brand image as a friendly, green, and trustworthy company focused on sustainable enterprise development.

Every year, we identify sustainability risks and opportunities and set annual sustainable development goals based on our external stakeholders' priorities, local laws and regulations, and internal sustainability management affairs.

Information Accessibility

Using technology for the benefit of all

Education and Health

Using technology to empower change

Environmental Protection

Harnessing technology for a better planet

Corporate Responsibility

Repaying trust with responsibility, through technology

Management system

Management system based on international criteria

Huawei Device has established a sustainability management system based on the PDCA (plan, do, check, act) cycle by considering both the internal and external environments and referring to standards such as ISO 26000 and SA8000. This system focuses on six key areas: leadership, planning, organization and skills support, process operations, performance appraisal, and system improvement. We are using this closed-loop system to manage our sustainability strategies and goal.

Communication with stakeholders

Huawei values our stakeholders' opinions and uses them to guide improvements to our sustainability management practices. Our stakeholders include customers, consumers, suppliers, ecosystem partners, and industry organizations. Every year, Huawei carries out several stakeholder communication activities to convey sustainability concepts and practices to consumers, hear their views, and understand their needs and expectations for Huawei in the field of sustainable development.

Some of the stakeholder activities in 2023



From August 4 to 6, 2023, the HUAWEI DEVELOPER CONFERENCE (HDC) was held at Huawei Songshan Lake Campus in Dongguan. Many technical experts, industry leaders, and developers around the world gathered to demonstrate the benefits of the HarmonyOS ecosystem.



On June 30, 2023, Huawei held its third Supplier Carbon Emissions Reduction Conference at the Huawei Industrial Base in Bantian, Shenzhen. The conference conveyed Huawei's position on environmental protection and its carbon emission reduction requirements to suppliers. A total of 552 participants from 224 Huawei Device suppliers attended this conference.



On May 25, 2023, the annual Technology Accessibility Development Conference (TADC) was held by the Shenzhen Accessibility Research Association in Beijing.

As a member of the Association, Huawei Device attended the conference and shared our experiences and best practices with industry peers.



On Global Accessibility Awareness Day (May 18) in 2023, Huawei worked with local associations representing people with visual or hearing impairments in 20 cities and carried out accessibility feature experience activities in its offline stores.

Through explanations, demonstrations, and hands-on activities, Huawei store staff introduced the accessibility features of Huawei smart devices to the attendees with visual or hearing impairments and showed them different ways to experience the benefits of technologies.



On June 18, 2023, a series of lectures about fitness and health were given to consumers at HUAWEI Flagship Stores (HFS). The lectures discussed how modern and information technologies improve health and enrich people's lives.

From time to time, Huawei stores organize community activities, such as city bike rides, indoor surfing, concerts, and urban photography workshops.

Honors and awards

Huawei's dedication and efforts to improve sustainability have also been recognized externally. These honors show us that we are making a positive impact and renew our motivation to pursue breakthroughs, drive sustainable development, and make greater contributions to society.

Award/Honor Name	Awarding Organization
2022 CDP Climate Change "A list"	CDP
2022 CDP Excellent Environmental Leadership Award	CDP
2022 ESG Innovator for New Growth in China	Harvard Business Review (Chinese Edition)
No. 1 in Forbes World's Best Employers List for 2022	Forbes
Huawei HarmonyOS 3 Technology Accessibility Solution: selected as the CCF 2022 Technology Charity Annual Case Study	China Computer Federation (CCF)
HUAWEI Mate 50 Pro: rated as five stars in the annual accessibility assessment by ifeng.com	ifeng.com
HarmonyOS 3: rated as five stars in China Telecom's assessment of the elderly-friendliness of smartphone OSs/UIs	China Telecom
Huawei: ranked 58th in the list of the Top 100 Most Valuable Brands of 2023	BrandZ

Information Accessibility

Using technology for the benefit of all

NO. 1

The HarmonyOS 3-powered Mate 50 Pro was ranked No. 1 in the annual visually-impaired user experience report released by ifeng.com, and it received a five-star rating.

5-star

HarmonyOS 3 received a five-star rating in the 2023 assessment of the elderly-friendliness of smartphone OSs/ UIs published by China Telecom Research Institute.

Upgraded

The accessibility features provided by HarmonyOS 4, including Smart Q&A, hearing aid-device connection, and Celia Call, have been upgraded.

100+

Huawei worked with more than 100 local associations which represent people with visual or hearing impairments to carry out accessibility feature experience activities in 44 cities across 30 provinces in China.

5,000+

By 2023, Huawei store staff had provided more than 5,000 in-person training sessions on smart device skills for elderly users in residential blocks.

30,800

In 2022 alone, authorized Huawei experience stores in China delivered more than 30,800 training sessions related to the Bring Digital to You series courses.



Accessibility honors and awards

May 2023

- HarmonyOS 3 received a five-star rating in the assessment of the elderly-friendliness of smartphone OSs/UIs published by China Telecom Research Institute.

January 2023

- The HarmonyOS 3-powered Mate 50 Pro was ranked No. 1 in the annual visually-impaired user experience report released by ifeng.com, and it received a five-star rating. ifeng.com recognized Mate 50 Pro as the most valuable product for users with visual impairments and Huawei as a brand that champions technology for this user group.

August 2022

- HUAWEI P50 Pro, which is powered by HarmonyOS 2, earned a five-star rating in this year's China Telecom smartphone accessibility assessment, due to the phone's outstanding basic capabilities, biometric recognition, AI-powered visual perception, and other traits, surpassing all other smartphone brands being assessed. The results were announced at the online launch event of the China Telecom Device Assessment Cooperation Forum.

June 2022

- The StorySign app which was developed by Huawei Device was hailed as a prime example of how AI can promote inclusive and fair education in the "AI and education: Guidance for policy-makers" report published by UNESCO.

May 2022

- HarmonyOS 2 was singled out as the only five-star-rated OS on the World Telecommunication and Information Society Day, according to the smartphone OS/UI elderly-friendliness ratings released by China Telecom Research Institute.

April 2022

- HUAWEI Vision V Pro was certified by the China Electronics Standardization Institute as one of the first certified elderly-friendly products in China, and obtained the highest-level certification (A++).

January 2022

- HUAWEI P50 ranked No. 1, with a score of 93.30 points, in the annual accessibility assessment launched by the Phoenix Lab of ifeng.com.

Making technology accessible to all

Building accessibility capabilities

Data from the World Health Organization (WHO) indicates that more than 1 billion people are inconvenienced by physical disabilities, which means that one out of every seven people require assistance from accessibility designs. China has 17 million visually impaired people, 23 million hearing impaired people, 70 million people with dyslexia, and 150 million elderly people aged above 65. The China Accessibility Product Alliance (CAPA) was established by multiple Chinese enterprises, with the goal of

helping these individuals better assimilate into society and enjoy the benefits of technology.

Huawei has long been committed to the information accessibility field, which is crucial to the company's sustainable development. We have provided a broad array of accessibility features and services that are designed for users with vision, hearing, physical, or cognitive impairments, and have brought enormous benefits to such users.

Comprehensive information accessibility, bringing technology to all

- Huawei's brand-new Smart Q&A interactive feature enables visually impaired users to ask whether the desired item is in front of them and get the answer as well as other information about the ambient environment.
- The user experience for those requiring a hearing aid has been improved. Huawei phones now support direct connection to hearing aids via Bluetooth Low Energy and this allows users to answer incoming calls and listen to music and other audio content more easily and clearly.
- When a hearing-impaired user makes a call or when a user is not able to answer a call, Celia Call can convert the speech received by the mobile phone

into text and display it for the user to read. The user can type in their reply and Celia Call can convert it into speech and send it to the other party.

- In addition to a dedicated accessibility hotline, we have also deployed full-time consultants at 75 service centers in China to provide a thorough service for our users, helping them address challenges related to both product usage and maintenance.
- Huawei worked with more than 100 local associations which represent people with visual or hearing impairments to carry out accessibility feature experience activities in 44 cities across 30 provinces in China.

HarmonyOS 4: Improving accessibility and user experiences

HarmonyOS 3 was officially released in July 2022. In addition to improving basic accessibility features, it provides a wide range of more advanced features such as image recognition and photography assistance to ensure premium accessibility experiences.

In August 2023, Huawei officially released HarmonyOS 4. This version of HarmonyOS offers even better accessibility capabilities. In addition to ensuring the reliable performance of its basic accessibility features, Huawei launched a new set of intelligent features to assist users in a wider range of scenarios. These user-friendly features and capability optimizations, such as Smart Q&A, hearing aid-device connection, and Celia Call upgrade, can help to improve the lives of those with certain impairments.

Smart Q&A on HarmonyOS 4 is the first-ever simple human-machine interaction solution for visually impaired users. For example, by enabling Smart Q&A

while taking photographs, the user can ask and find out whether their desired object is within frame as well as other information about the ambient environment. Technological innovation offers visually impaired users more ways to interact with the world.

Users with hearing impairments can use the hearing aid-device connection feature to connect their phones to their hearing aids via Bluetooth Low Energy so that they can hear sounds clearly without disturbing others. In addition, when a hearing-impaired user makes a call or when a user is not able to answer a call, Celia Call can convert the speech received by the mobile phone into text and display it for the user to read. The user can type in their reply and Celia Call can convert it into speech and send it to the other party. Flexible switching between speech and text keeps communication smooth. It can also answer incoming calls, so that no important calls are missed, and it can filter out spam calls.

Improving accessibility experiences

Improving information accessibility makes the digital world more inclusive

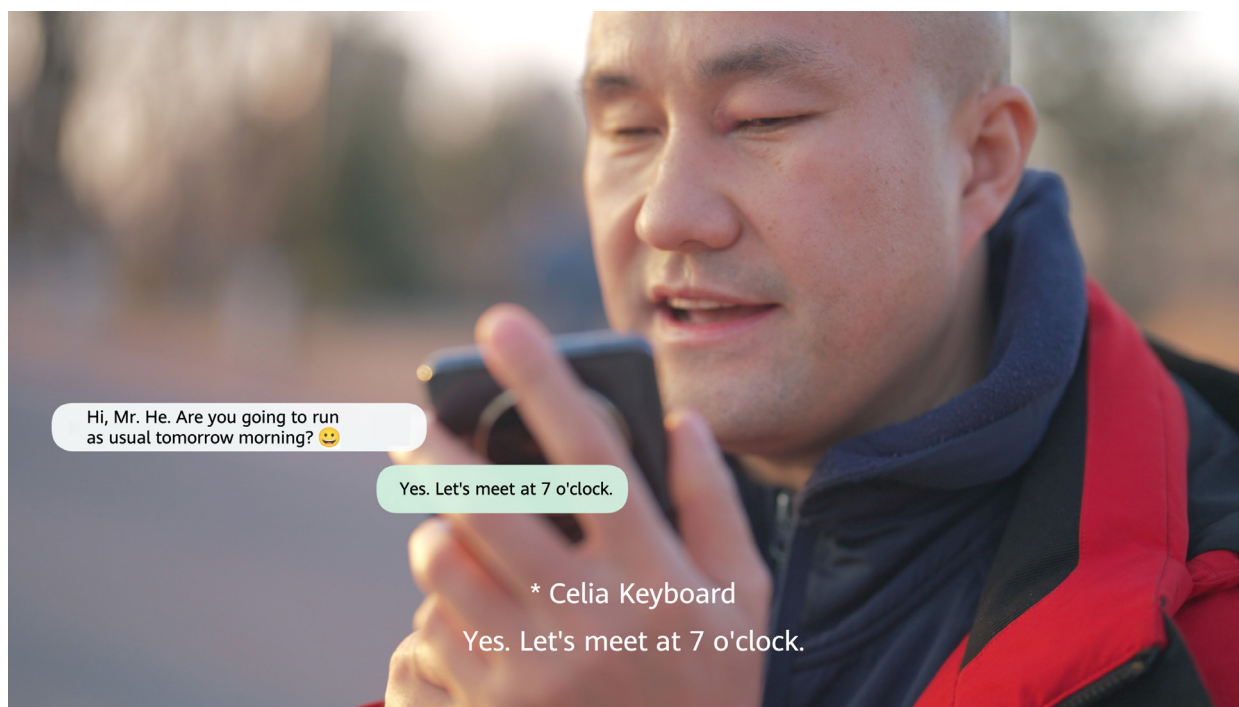
A digital world should not focus only on technology itself. It should be a place where technology empowers people and makes society better for everyone. Huawei is committed to improving accessibility experiences and enabling everyone to enjoy the benefits of technology by continuing to pursue technological innovation. Each HarmonyOS upgrade brings more powerful accessibility features and better user experiences. HarmonyOS leverages AI to benefit everyone, especially those with impairments.

Seeing more possibilities

He Yajun, a visually impaired runner, said, "I think running helps me discover the beauty of life." At first, he could only run 7 km at a time. Gradually, he trained his way to running a half marathon. After that, he started participating in full marathons, and has already completed more than 70 of them. His personal best time is 3 hours and 14 minutes.

Every Wednesday and Saturday, he goes running in the local park with volunteers from the Vision-impaired Running Team. He enjoys running with friends. The ScreenReader feature on his Huawei phone reads all content, including emoticons, in

the invitation messages from his friends aloud. He first started using a Huawei phone because Huawei phones are particularly durable and offer strong and stable signals, making it an ideal companion for hikes to remote places. As the brand grew, it released more accessibility features such as photography assistance, image recognition, and Smart Q&A which have helped He Yajun in countless real-life scenarios. He once asked his phone, "Is there a red jacket available?" It replied, "Yes. It is on your left." He Yajun was able to find a jacket in his favorite color using Smart Q&A.



He Yajun used his Huawei phone to communicate with friends.

Making speech clearer for seamless calls and endless communication

From being unable to answer calls to chatting for more than 500 minutes each month

Zhu Yilin was born with severe hearing impairment. She lost all hearing in her right ear and her average hearing in the left ear is 95 dB. She received a cochlear implant at the age of 32. Without it, she can only hear sound as loud as the roar of plane engines. As a child, Zhu received specialized training on teaching her how to speak to others in a quiet environment. However in noisy places, when the other person is far away, and during conference calls, she still needs to read lips, use a hearing aid, or leverage text to communicate.

Now, she can use a Huawei phone to directly connect to her cochlear via Bluetooth, which means that the

voice of the other person can be transmitted clearly to her cochlear, and this has made calls much easier. In addition, with the help of Celia Call, speech can be quickly and accurately converted to text during calls. This convenient feature has significantly improved call experiences for Zhu. She said, "I never used to make calls. But now, I chat for more than 500 minutes a month. I can't believe that I can communicate complex matters over the phone now." With every call, her confidence grows. Huawei hopes to help more people with hearing impairments feel more comfortable when making calls by providing them with more advanced accessibility features.



Zhu Yilin shared her story at a lakeside talk during HDC 2023.

Making technology inclusive

Huawei continues to leverage technologies to promote accessibility improvements. At HDC 2023, Huawei continued its tradition of setting up an accessibility experience exhibition area for the third year in a row. The Digital Inclusion Experience Center provided various exciting interactive activities such as barrier-free film watching and non-visual photography to showcase the value of accessibility technologies in bringing people together and improving the lives of those with disabilities.

Huawei is leveraging technological innovation to improve accessibility experiences. Each upgrade of HarmonyOS brings more powerful accessibility features. In the past, people receiving a call from a

user with hearing impairments may have hung up because Celia's AI voice made them feel that they were not talking to a real person, but rather that this call was spam. To address this problem, HarmonyOS 4 adds realistic timbres to Celia and allows users to customize Celia's voice so that she speaks more like an ordinary person when reading text during calls. HarmonyOS 4 also offers Smart Q&A for users with visual impairments. This feature helps users further explore image content on the basis of intelligent recognition. A user can double-tap and hold with one finger on the camera preview frame of their phone to ask a question, like whether there is a door in front of them or what color the clothes in front of them are.



The Digital Inclusion Experience Center at HDC 2023

Huawei is committed to listening to those with disabilities and accessibility needs. It offers these users a platform at lakeside talks which have been held during HDC for two years in a row. We invite users with visual, hearing, and physical impairments, as well as elderly users to join us beside Songshan Lake for face-to-face talks with the Chief Operating Officer of Huawei Consumer BG, Huawei engineers, and accessibility product managers to discuss their ideas and achievements in the accessibility field.



Lakeside talk at HDC 2023

The evolution of HarmonyOS accessibility features helps users with disabilities to live fuller lives and pursue their dreams, making Huawei products indispensable aids in their daily lives and work.

As a child, Fan Jiancai from Ningxia suffered an injury which caused his retina to detach, turning his world upside down and leaving him with only level-2 vision based on the Snellen chart. Like some people with visual impairments, he became a masseur after graduating from school. However, his dream was to become a development engineer, so he kept studying independently after work. Fan said that he started to use a Huawei mobile phone in 2016 and the intelligent recognition feature has helped him a lot in his studies. ScreenReader is another useful feature for him because it tells him about the words and images on the screen, allowing him to use search engines just like others. Fan likes going to supermarkets in his spare time. He points his phone camera at different items in front of him to find out

what they are. The phone automatically recognizes the item and reads out the text on the item's label.

Yang Lvyue suffers from severe sensorineural hearing loss in both ears. Although she wears assistive devices, her hearing is still far below average and she cannot clearly hear sounds in noisy environments. In her daily life, Yang often communicates with others by lip reading. However, this became impossible when people started wearing masks and working from home during the COVID-19 pandemic. Huawei's AI subtitle feature helps Yang make records by converting what others say during online meetings and calls into text in real time. It is accurate even in noisy environments.

We regularly invite users with visual and hearing impairments from across China to try out the accessibility features on Huawei products. We also organize several meetings before and after these features go live and invite these users to discuss their thoughts and ideas with Huawei product and R&D personnel so that we can improve products and design new products that are as usable and helpful as possible.

Users with accessibility needs want to be heard and included in decisions regarding products and functions designed for them. We recently invited users with visual impairments in China to try out Huawei's smart glasses. They shared some valuable suggestions, for example, the importance of a strong Bluetooth connection and warnings about obstacles in their paths in addition to having reliable basic phone functions.

Using Technology for the Benefit of All

Huawei Smart Glasses Tryout Experience Sharing



Powered by
HarmonyOS

Non-profit activities for improving accessibility

From 2022 to 2023, Huawei worked with more than 100 local associations which represent people with visual or hearing impairments to carry out more than 150 accessibility feature experience activities in 44 cities across 30 provinces in China. These offline activities have benefited more than 3,000 people with disabilities. During these activities, facilitators explained the accessibility features available on Huawei products, which include Celia Call, AI minutes, AI subtitles, image descriptions, text

recognition, and photo-taking guidance, and how they can be used to overcome some daily challenges. They then showed attendees how to use these features, and guided them as they tried the features out themselves.

These activities empower users with accessibility needs by enabling them to leverage technology to overcome challenges and improve their daily lives.



A Huawei accessibility experience activity in Chongqing, China

Breaking down age barriers in the digital world

Tailoring products to elderly users

According to the WHO, the number of people over the age of 60 was 1 billion in 2020. It will continue to increase and is expected to reach 1.4 billion by 2030, at which point they will account for a sixth of the world's total population. By 2050, there are expected to be more than 2.1 billion people over the age of 60.

As information technologies continue to develop, they are transforming and digitalizing every aspect of our daily lives. However, the elderly who do not

use the Internet or smart devices are being left behind. By designing elderly-friendly smart devices and apps, we can bring the convenience benefits of technology to the elderly and help them assimilate into the digital world. Huawei believes that no one should be left behind. We have optimized our products and leveraged intelligent tools to provide smart experiences for elderly users. We hope that these changes will make technology more inclusive and help our elderly users to overcome digital obstacles.

Back in 2012, we introduced a simple model to simplify mobile phone operations for the elderly. Since then, we have continued to fine-tune our approach and optimize our device UI. We tailor our basic services to suit elderly users based on the *Technical Requirements for Mobile Terminal Suitability for the Elderly* and the *Aging Technology Requirements and Test Methods for Mobile Applications*, and strive to further improve visual clarity and comfort. In addition, we've set the default system volume level to high to help elderly users hear clearly during calls.

In April 2022, HarmonyOS 2 released Senior mode for elderly users with poor vision or hearing and for those who are unable to touch the device screen precisely. This mode became very popular among

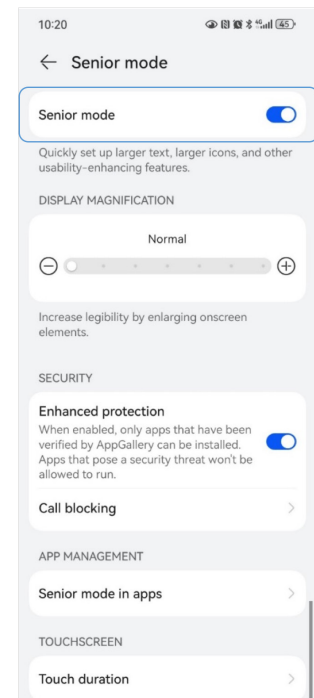
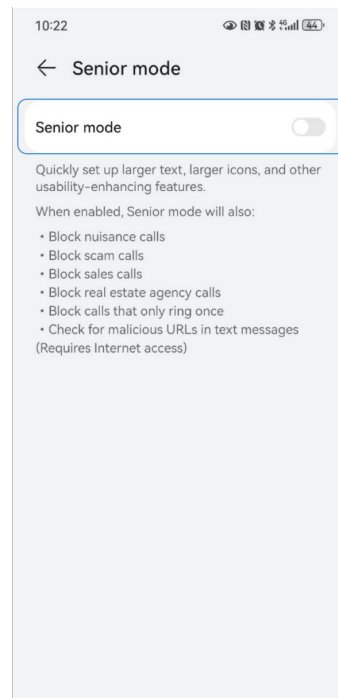
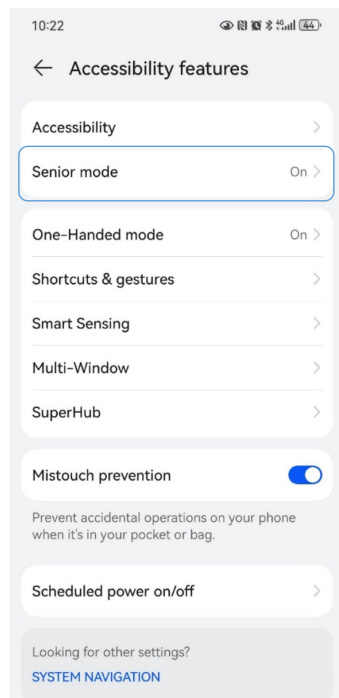
elderly users because it made operations on Huawei smart devices much easier.

Following the release of HarmonyOS 3 in October 2022, we upgraded Senior mode to version 2.0 and optimized its auditory, visual, touch, security, and other experiences in order to better serve elderly users.

In May 2023, Huawei launched the even more advanced Senior mode version 3.0 based on our users' needs. It magnifies the UI display on mobile phones, offers more elderly-friendly app management, and blocks spam. These upgrades significantly improve the user experience and device use security of elderly people.

Senior mode 3.0 also provides a unified settings widget where users can adjust the size and thickness of text as well as icon sizes. In addition, it helps the elderly stay safe when using their devices. These users may not be aware of the potential risks surrounding private information or the signs of a scam, for example, and this leaves them vulnerable

to phishing, malware, and spam. Senior mode offers comprehensive fraud protection for elderly users by blocking unwanted calls, enabling enhanced protection in App Guard mode, preventing the download of malicious apps, and filtering out items which are deemed as harassment.



• Display magnification

Multiple display settings have been integrated to allow the magnification of text and icons with just one tap. There are seven font size options to choose from, so elderly users are bound to find a font size that they find comfortable.

• Upgraded safety

Enabling enhanced protection settings and harassment filters alongside Senior mode can protect elderly users from malware, reduce data disclosure risks, block spam, and identify malicious websites.

• Senior mode in apps

To make it easier for the elderly to use the functions of each app, a batch app management function has been added to Senior mode. It supports more third-party app fonts, enlarges app icons, and simplifies operations, making the UI more elderly-friendly.

In the digital economy era, digital technology should benefit everyone. However, the elderly who do not use the Internet or smart devices are being left behind. It is imperative for the information technology industry to find a way to bridge the digital divide and make devices more accessible to elderly users so that we can share the benefits of technology with them and help them assimilate into the digital world.

On World Telecommunication and Information Society Day 2023, China Telecom Research Institute published a ranking of 10 mainstream smartphone brands in terms of the elderly- friendliness of their OSs/UIs following a multi-dimensional assessment by China Telecom Research Institute. HarmonyOS 3 received a five-star rating for the second year in a row and outperformed the other OSs to earn its place at the top of the list.

Some Huawei mobile phones are equipped with the X button, a physical button on the side of the phone. Elderly users can set a maximum of nine frequently used apps and functions such as payment QR codes, ride code, and QR code scanning, which will appear when they double-tap or tap and hold this button.

In addition to improving the basic user experience, HarmonyOS has also launched new features to cater to the needs of elderly users in a range of different scenarios. For example, family members can use the MeeTime app and its remote doodling feature to share their screens and provide guidance for their elderly relatives anytime and anywhere. The Mobile

Guardian function which is available on Huawei phones makes it easy for users to monitor their elderly relatives' locations in real time. In addition, users can receive notifications if their elderly relatives' phones are idle for an extended period of time. Users can also go to the Health Community page in the Huawei Health app to view their relatives' health and fitness data which is transmitted in real time via bound wearable devices. In short, Huawei helps users stay up-to-date on their elderly relatives' status, location, and needs no matter how far away they are so that they can provide help and support as needed.



Helping the elderly improve their digital skills

To help elderly users overcome challenges when using smart devices and improve their digital skills, Huawei has built a one-stop learning space to provide helpful tips both online and offline.

Liang Chunyan is a retired senior engineer who used to work at China Aerospace Science and Industry Corporation (CASIC). After retiring, she joined the WeChat group for her residential block and made many new friends. While chatting with these friends, Liang found that the elderly people in her neighborhood often had trouble using mobile phones. So, about four years ago, she started to offer free courses on how to use Huawei smartphones and their elderly-friendly features. After taking Liang's courses, many of her neighbors say they feel much more confident using Huawei smartphones to place orders, scan QR codes, and try new apps.

Liang likes to keep busy. Celia has been serving as her personal secretary to help her manage her daily schedule. Liang's eyesight is not as good as it used to be. She finds it hard to see who is calling her. She has enabled voice notifications for incoming calls so that she can know who is calling without needing to read the name on the screen. She has also enabled Senior mode to make it easier to adjust the sizes of text and app icons on her phone. In addition, she values the enhanced protection that Senior mode provides. It protects her from harassment by rogue software and spam, helps keep her data safe, and reduces the risk of telecom fraud.

Huawei has developed the *Parent's Mobile Phone Instructions* which explain how to use the most common features and functions in different scenarios. As we develop and upgrade our products, the instructions are also updated. From 2022 to 2023, 250,000 copies of the tenth edition of these instructions were printed and made available for customers to take from Huawei stores across China, including Huawei customer service centers and authorized experience stores. A digital copy of these instructions is available from the official Huawei

Device WeChat account.

During holidays such as the Double Ninth Festival in September and Mothers' Day, the Tips app and Celia Suggestions will recommend these instructions to elderly users. When reading these instructions, users can touch related content to directly go to the corresponding settings pages. This has been designed to help them get to grips with their devices and make necessary changes to the settings as easily as possible.

Huawei periodically provides the Bring Digital to You course for elderly users. This course covers topics related to basic phone operations, phone security, health, travel, and entertainment. Users can book and take these courses at more than 5,000 Huawei experience stores in China. Over 30,800 training sessions were delivered in 2022.

Huawei stores in China sought support from local communities, public service centers, property management companies, nursing homes, and activity centers in order to run Discover HUAWEI training sessions for the elderly in the most comfortable and

convenient venues available. By 2023, more than 5,000 training sessions had been carried out in residential communities. During the Double Ninth Festival in 2023, Huawei joined forces with the Seniors University of China for the first time to organize mobile phone training sessions for elderly people. Huawei also worked with 10 provincial and municipal universities for seniors in China to deliver similar training sessions. In addition, Huawei recruited passionate volunteers from across China to help elderly users resolve any problems they have when using mobile phones and to explore new ways to help elderly people overcome digital obstacles.



Education and Health

Using technology to empower change

240

HUAWEI EduCenter has worked closely with more than 240 partners to build Huawei Education Platform.

1.2M

More than 100 developer enablement activities have been held on HUAWEI Developer Day, and they have benefited more than 1.2 million HarmonyOS developers.

1.3M

Over the years, the HUAWEI Developer Forum has attracted more than 1.3 million developers and given rise to more than 440,000 interactions with these developers.

10,000

More than 10,000 innovative works have been submitted to the Huawei Global Mobile Innovation & Development Competition since its launch.

13M

HUAWEI Research has engaged over 110 partners and more than 13 million users in its innovative research projects.



Inspiring imagination and creativity through education

An intelligent and accessible education platform

Quality education is one of the 2030 UN SDGs. Education is more widely available now, but inequitable access to education for different socio-economic groups still persists. The *Sustainable Development Goals Report 2022* states that "The COVID-19 pandemic has deepened a crisis in education, with severe disruptions in education systems worldwide. School closures have had worrisome consequences for children's learning and well-being, particularly for girls and those who are disadvantaged, including children with disabilities, rural dwellers, and ethnic minorities."

Meanwhile, as electronic devices such as mobile phones, tablets, and computers become more and more popular around the world, the availability of online education is revolutionizing learning. According to a report released by the China Internet Network Information Center (CNNIC),

as of June 2022, there were 1.051 billion netizens in China, and the Internet coverage rate reached 74.4%. The high Internet coverage rate lays a solid foundation for the development of online education. The digitalization of education has made high-quality educational resources accessible and easily shared across different regions and groups. More premium education services are now available, and many people are exploring online education platforms.

Education and health is one of the four strategic directions for the sustainable development of Huawei Device. To meet the learning needs of users at all ages, we have actively integrated online education resources and built an intelligent education platform, so that anyone can access high-quality learning materials anytime and anywhere.

HUAWEI EduCenter is for learners of all ages

HUAWEI EduCenter maintains the platform that provides high-quality content and intelligent and professional learning services and experiences to users of all ages by gathering insights into different learning scenarios, integrating software and hardware technologies, and leveraging Huawei's innovative all- scenario products.

EduCenter works with more than 240 of the best

education partners in China to create premium education content and services for people of all ages. They create content for school children to help them improve their general knowledge and develop into well-rounded students. There is also content tailored to preschoolers, as well as content designed specifically for adults who want to learn and improve their skills.



Parental Care: Working with parents to create a safe space for their children to grow

Parents expect their children to form good habits when using smart devices to study. EduCenter offers the Parental Care feature which shows parents the devices that their children are using, how much time they are spending on these devices, and the content and services that they are using so that parents can more effectively manage their children's devices and keep an eye on their studies in real time, anytime and anywhere.



Learning Space: Focusing on learning, exercises, and revising to deliver professional learning services for primary and secondary school students

EduCenter Learning Space provides AI learning tools to help children work more efficiently, develop better habits around finishing and checking their homework independently, and stay on top of making revision notes for exams. This feature can also introduce children to the lesson content before class and help them review it after class to improve understanding and retention. Learning Space provides high-quality learning resources and services for primary and secondary school students to build a closed-loop learning experience and help them develop independent learning skills.



Kids Corner: Helping children under 8 explore the world through listening, watching, reading, and playing

Young children are very curious about the world around them and they tend to be keen to explore and interact. This exploratory play is paramount for their development as it develops their minds, senses, and cognition. EduCenter Kids Corner provides high-quality content on a series of expert-selected topics. The content is rich and varied, and includes videos, audio files, painting books, and interactive apps, so that children can safely explore their surroundings and learn about the world.



Vocational education: Providing more advanced content and training courses

For adults, we offer a diverse selection of courses covering everything from general knowledge to very specific and technical fields such as Internet and communications. These courses have been designed for adults in the early stages of their careers who may be interested in developing their skills. They are also suitable for more senior employees who are pursuing certifications, learning languages, or learning to code.

EduCenter now supports synchronized learning experiences across mobile phones, tablets, HUAWEI Vision, and kids watches. In the future, EduCenter will continue to support multi-device collaboration to facilitate home education and provide more convenient and professional services.

Fostering capability growth by building the HarmonyOS ecosystem together

HUAWEI Developers is a one-stop service platform that provides developers and ecosystem partners with connectivity, enablement, and growth services. Its goal is to nurture an open and innovative ecosystem for shared success by offering HarmonyOS enablement, development tools, platform services, incentive policies, and more. It helps HarmonyOS developers build seamless and innovative whole-

lifecycle device experiences that cover development, testing, promotion, and monetization, and better reach their consumers through smart devices.

HUAWEI Developers has been deployed in over 170 countries and regions around the world and has eight large regional centers and 15 data centers to support developer operations.

Offline events



HUAWEI Developer Day

A platform for in-depth exchanges between developers, bringing them the latest industry news, trends, and practices through discussions, analyses of popular technologies, and success stories from industry leaders.

1.2M

August 2023: Held 300+ HUAWEI Developer Day activities and delivered 300+ keynote speeches, covering more than 1.2 million HarmonyOS developers.

Online competitions



Huawei Mobile Innovation & Development Competition platform

A series of competitions where developers can create innovative apps and products using Huawei's cutting-edge open capabilities and services, giving developers access to various promotion channels, bonuses, global platform resources, and more for business success.

10,000

August 2023: Active in more than 170 countries and regions, with 40,000+ participants producing 10,000+ innovative works.

Community operations



HUAWEI Developer Forum

A platform that helps developers explore new development methods, share their experiences, learn about industry trends, solve problems, and get the chance to meet world-class technical experts and participate in a range of activities.

1.3M

August 2023: Attracted more than 1.3 million developers, facilitated 440,000+ interactions with developers, and collected 30,000+ common troubleshooting cases.

Ecosystem support



US\$1 billion Shining Star Program

A program aimed at encouraging global developers to innovate through US\$1 billion in incentives. These innovations help the HarmonyOS ecosystem grow and provide consumers with new all-scenario smart experiences. The incentives are awarded throughout the app development lifecycle, via programs like the Shining Star • Campus Innovation Incentives, the Shining Star • Pioneering Program, and more.

1,000

August 2023: Awarded incentives for 10,000+ innovative mobile services, including those developed by 1,000+ vertical industry partners during the program's five years of operation.

US\$1 billion Shining Star Program — Building a new HarmonyOS ecosystem with partners

The Shining Star Program is a global incentive program that Huawei launched at the end of 2017. It aims to provide incentives and support for the entire app development lifecycle, from development, user growth, promotion, to digital marketing, specifically focusing on app distribution, service distribution, content innovation, ecosystem co-construction, open capability access, and app go-global.

In 2023, the Shining Star Program was expanded,

and it now offers US\$30 million in Shining Star traffic coupons, as well as Petal Ads marketing support for developers who have released apps on AppGallery that leverage HarmonyOS's open capabilities and complete feature ability development and adaptation. In the future, it will continue to drive HarmonyOS innovation with diversified resources in all fields, in order to build a new HarmonyOS ecosystem with partners.

Shining Star • Pioneering Program

The Shining Star • Pioneering Program provides developers with traffic support worth US\$100 million outside China as well as US\$100 million in Shining Star resources in China to help more Chinese Internet innovation partners expand their global presence by promoting their apps outside China. In August 2023,

at HDC's Shining Star • Pioneering Program Go-Global Forum, an open cooperation platform, Huawei shared go-global tactics with partners and discussed disruptive technological innovations in mobile marketing, aiming to build a flourishing go-global ecosystem for shared success.

Huawei's Shining Star Program has provided incentives for 10,000+ innovative mobile services, including those developed by 1,000+ vertical industry partners worldwide.

Huawei Mobile Innovation & Development Competition: Exploring all-scenario smart experiences with developers

The Huawei Mobile Innovation & Development Competition is held by Huawei for developers, aiming at finding excellent HarmonyOS innovation talent and works, and encouraging developers to leverage Huawei's cutting-edge open capabilities and services to create cross-device apps and other works. These apps deliver brand-new experiences and interaction

methods that can be used to help grow the HarmonyOS ecosystem and explore new all-scenario smart experiences. The competition also helps developers achieve business success through various promotion channels, bonuses, global platform resources, and more.

Gathering developers and inspiring innovation for a win-win ecosystem

HUAWEI Developer Groups (HDG)

HDG is a non-profit community that fosters in-depth technological exchange between global developers. The platform has launched more than 130 activities in 68 cities in partnership with 140 organizers.

HUAWEI Developer Experts (HDE)

HDE is a program that recognizes individuals who demonstrate expertise in one or more of Huawei's open capabilities, and are passionate about helping other developers improve their skills. HDE strives to nurture talented developers that work together to build a global developer ecosystem. To date, Huawei has certified 64 HDE evangelists, 32 of whom specialize in HarmonyOS.

HUAWEI Student Developers (HSD)

HSD aims to inspire student developers to learn more about cutting-edge technologies and explore new opportunities through upskilling and real-world practice. By August 2023, HSD had carried out over 350 activities, including multiple technical salons, training courses, coding events, and campus competitions, at more than 400 universities and colleges, involving over 300 campus ambassadors.



HUAWEI Women Developers (HWD)

HWD is a global program that Huawei has launched to support women developers. The program aims to empower women developers, provide them with comprehensive resource support, and help them acquire greater space for career and technology development. HWD is also a platform where women developers can learn, exchange ideas, and shine.

Huawei is committed to supporting women in tech by providing them with more opportunities and

platforms to show off their skills and obtain the recognition they deserve. At the Chinese Programmer's Day on October 24, 2022, Huawei held a technical salon in Shanghai for women working in tech. A number of female Huawei employees with abundant experience in the tech field were invited to share their thoughts with other female employees and science, technology, engineering, and mathematics (STEM) students, in order to nurture the growth of young tech women.

AppGallery Connect

AppGallery Connect is a mobile app service platform that provides HarmonyOS app and feature ability developers with one-stop full-lifecycle services, covering idea conception, development, distribution, operations, and analysis. It helps developers working on any kind of device or scenario reduce development costs, improve operational efficiency, and gain more revenue. In addition, the AppGallery Connect platform can be used to launch, distribute,

and efficiently operate HarmonyOS apps and feature abilities.

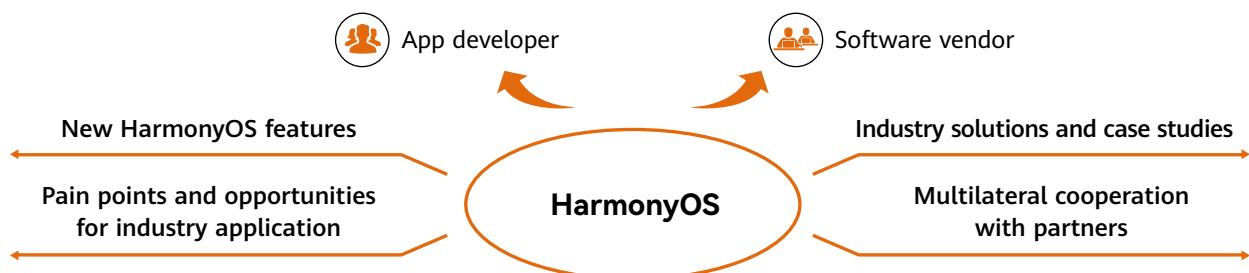
As of August 2023, AppGallery Connect had opened 126 services to developers in the Chinese mainland and 88 services in other regions, connecting developers in more than 170 countries and regions with hundreds of millions of users.

Industry Summit for HarmonyOS Ecosystem Partners

The Industry Summit for HarmonyOS Ecosystem Partners is a communication platform for enterprise developers. The platform helps bring them an in-depth understanding of HarmonyOS's latest capabilities and features to encourage innovation and ecosystem cooperation.

The summit, focusing on the HarmonyOS ecosystem, brings together top app developers and software

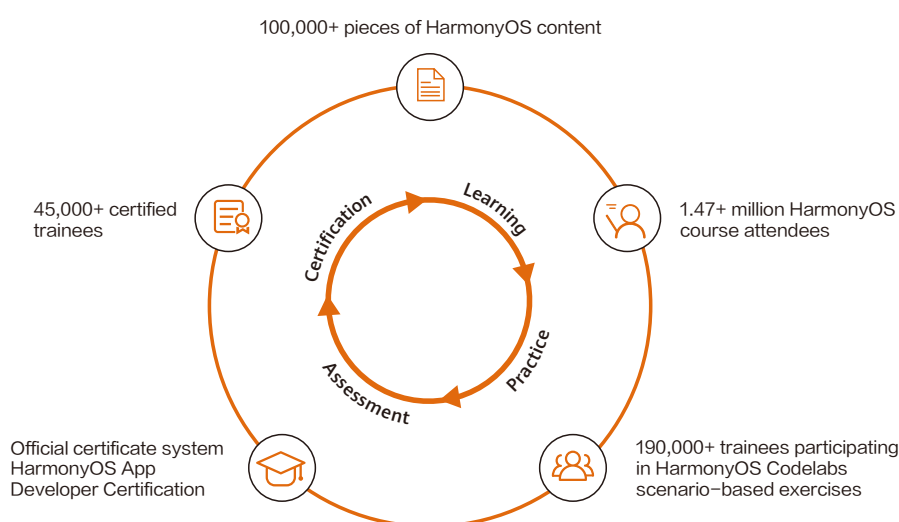
vendors to discuss multiple topics, including industry trends, solutions, product training, and emerging technologies. By August 2023, four offline activities had been held, one each in Nanjing, Beijing, Shanghai, and Jinan. In the future, Huawei plans to carry out two activities in China every month to communicate with developers face to face and ultimately build a new all-scenario HarmonyOS ecosystem with the partners.



HUAWEI Developers Training

HUAWEI Developers Training is the official one-stop center for HarmonyOS ecosystem enablement. It has 100,000+ pieces of HarmonyOS content and an official certificate system, offering MOOC, micro-lectures, and training camps for every level of developers, from entry-level to advanced. It provides systematic and professional learning, practice, assessment, and certification services for developers. The Developers Training platform focuses on building

a certificate system and launches the HarmonyOS App Developer Certification program. This platform helps developers master development knowledge and improve their skills, and facilitates the building of an ecosystem enablement center for HarmonyOS talent. To date, Developers Training has attracted more than 1.47 million users, among whom over 45,000 have applied for and received a certification.



HarmonyOS-related government and enterprise enablement

The HarmonyOS-related government and enterprise enablement team collaborates with ecosystem partners to promote the implementation of HarmonyOS talent criteria and policies in different provinces and cities. This team gives enterprises and universities across China access to rich online and offline activities organized by Huawei and its ecosystem partners, through which the concept of HarmonyOS becomes well-known and more HarmonyOS app ecosystem partners are discovered and developed.

As of August 2023, the Department of Human Resources and Social Security of Jiangsu Province had hosted multiple advanced training sessions on HarmonyOS ecosystem talent enablement, and

multiple provinces and cities had released HarmonyOS talent support policies, accelerating the construction of HarmonyOS talent reserve. For example, the Department of Human Resources and Social Security of Fujian Province added the HarmonyOS app development talent cultivation program to its provincial vocational skill training campaign; the Department of Human Resources and Social Security of Jiangsu Province included HarmonyOS app development in the Catalogue of Technical Resources for Skilled Talent Evaluation; and the Industry and Information Technology Bureau of Shenzhen Municipality, Guangdong Province, released an action plan for Promoting the Innovation and Development of the Open-Source HarmonyOS and EulerOS Industry (2023–2025).

Developers with disabilities empowering others with HarmonyOS

While smart devices are generally used to make life more convenient and easy, non-accessible designs can actually create more challenges and obstacles in everyday life for people with disabilities. Zhou Shuihuan, a wheelchair user, hopes to use her software development skills to help people facing similar difficulties as her.

Remote healthcare at home

Traveling to the hospital is always an arduous task, but it can be doubly so for people with disabilities in China. The complex system of queues for registration, payment, testing, consultation, treatment, report generation, and more can sometimes even be impossible to navigate alone. So, Zhou Shuihuan decided to find a way to give people with physical disabilities better access to online healthcare services. The lightweight HarmonyOS feature abilities caught

her attention, which could help users access information without downloads on "cards". So, she developed a feature ability card that facilitated online consultation for users. The feature ability she finally developed was called Yihuifang. On it, users can share their symptoms with a doctor online either by voice or text and receive a consultation and simple diagnoses within minutes. The doctor will also recommend the time for further consultation.

Remote healthcare at home

During the development of Yihuifang, Zhou Shuihuan was surprised by the HarmonyOS app development tools and capabilities and the HUAWEI Developers platform. She said, "In the past, I had to do a lot of self-study, scouring multiple websites for information and instruction if I wanted to develop an app. But HUAWEI Developers has all the content I need, including training courses, technical documentation, and a whole community of other developers and activities. I got a lot of support and help."

Zhou Shuihuan said HarmonyOS's integrated device-cloud development feature also made the development easier and more efficient. Cloud-based development lets developers use a set of open tools and the same language to develop a project's on-device and on-cloud functions at the same time. It is cheaper and more efficient than traditional

development methods, reducing barriers to entry for new or smaller developers. In addition, HarmonyOS provides unified distributed capabilities which enable data transmission and sharing between different devices, facilitating cross-device collaboration and greatly reducing optimization and multi-device deployment workloads during development.

Ecosystems and developer communities are becoming increasingly important in cutting-edge fields, and are now often the source of scientific and technological innovation. They also help developers satisfy various user needs. Increasing numbers of developers like Zhou Shuihuan are turning to the HarmonyOS ecosystem to build digital life services, bringing the benefits of new technologies for more people.

College student making geometry easier

More than two thousand years ago, the ancient Greek mathematician Euclid said, "There is no royal road to geometry." He meant there is no shortcut to learning geometry, and that students would have to work hard. Nonetheless, mathematicians have dreamed of universal geometric problem-solving methods for years.

Machine Proofs and Applications ("Machine Proofs" for short) is one such mathematical research method

that allows learners to use computers instead of pen, paper, and their own brains. Zhou Wen, a HarmonyOS student developer, developed an app using machine elementary geometry proving to do just this. The app displays geometric forms more intuitively by combining numbers and shapes, giving middle and high school students new interactive learning experiences that make it easier to study geometry.



The interest is the best teacher

When Zhou Wen was in middle school, he used programming knowledge to help his family operate retail business. He had heard of the HUAWEI Developers Training and then started working with HarmonyOS when he began studying software development in college. "I was studying AI and computers through the HUAWEI Developers Training platform, and that was that. I was hooked," Zhou Wen noted.

Looking back to how he developed the geometry app, Zhou Wen said, "The development was quite difficult because graphic drawing of elementary geometry requires a more intelligent platform, and there was no available development case for reference. Huawei provided a lot of technical support for our development team, and we finally managed to apply Machine Proofs using 3D graphics, JavaScript interactivity, and logic-based AI."

The path from weak AI to strong AI

Zhou Wen also noted, "HarmonyOS was developed in China, and so I feel like it represents our innovative spirit, and also Huawei's perseverance. We developers hope to use HarmonyOS capabilities to realize the application of Machine Proofs, which is the only way for us to move from weak AI to strong AI."

Zhou Wen, after taking the college entrance examination, became more aware of the difficulty of

geometry learning. To test the app, his team worked with a school in the mountainous area of Guizhou to see if it helped local geometry teachers and students. The results were clear as students' understanding of geometric structures increased rapidly. Zhou Wen and his team hope to further upgrade the app, after which the app will allow users to input questions that require geometric inference, and then will generate graphics to help students figure out the questions.

Making the app smarter with a feature ability

Zhou Wen and his team also developed the corresponding feature ability when designing the app. The feature ability, a brand-new app form provided by HarmonyOS, can directly display geometric shapes and other information on the home screen of a phone and the notification tray in the form of cards, providing a lightweight interaction experience for out-of-the-box service and instant service access.

"In the future, these feature abilities will likely continue to evolve thanks to technological advancements, market demand, and industry development. I can see feature abilities being applied

in more fields thanks to the accelerated digital transformation and the popularization of technologies such as cloud computing and the Internet of Things (IoT). They will provide more flexible and scalable solutions for enterprises and developers." Zhou Wen, now in his third year of his undergraduate degree, dreams of starting his own business after graduation that will make apps and features he developed work on wearables and Smart Home devices. In addition, Zhou Wen is also researching medical imaging apps that can be used to help diagnose Alzheimer's disease and eye conditions.

Discover HUAWEI: Showcasing technologies during every shopping journey

Discover HUAWEI carried out in HFS is not a traditional lecture-style activity, but more like lifestyle sharing by guests, with close-to-life themes. Discover HUAWEI does more than just show attendees how to use Huawei products, but also provide engaging courses about fitness and health, music, games, and Chinese traditional culture. For example, in the course Chinese Traditional Colors — Poetry, participants explore the use of colors in Chinese poetry; About STEAM helps nurture people's computational thinking; Futuristic Tech in Workouts teaches people

how to effectively improve their workouts; and Wake Up Your Ears lets attendees play fun music games.

Currently, there are 42 professional Discover HUAWEI trainers who are backed up by members of Huawei's R&D team. Nearly 15,000 sessions have been held in China. Consumers can join these activities when they are shopping or select their home city, view the course schedule, and choose the courses they are interested in on the My HUAWEI app or the official Discover HUAWEI website.

HUAWEI Talk, connecting to a greater world

HUAWEI Talk, another form of Discover HUAWEI, is an activity held by HFS where guests can share their own stories. The HFS invite experts in technology, culture, and the arts to speak with attendees in relaxed, open sessions. For example, famous Chinese film director Wang Xiaoshuai shared film shooting stories at the HFS on East Nanjing Road, Shanghai;

Shan Jixiang, the Dean of the Palace Academy, shared his thoughts at a reading club activity held by the HFS in The MixC Shopping Mall in Shenzhen; and during the China Digital Entertainment Expo & Conference (ChinaJoy) held in July 2023, a sharing session themed "Game Art and Culture" was held at the HFS on East Nanjing Road, Shanghai.

Tech Journey: Setting teenagers for a lifetime of science and technology

Information technology has profoundly changed the way we work and live, and has especially impacted education. Scientific exploration and technological innovation drive society forward, and so the future needs young people to get out of the classroom and explore the frontiers of science and technology. Tech Journey activities are held at HFS for teenagers to help them learn about technological innovation through practical education.

Programming practice camps, like the ones jointly organized by the HFS in Zone G, Huawei Industrial Base, Bantian, Shenzhen and the Educational Science

Research Institute in Longgang District, give students direct opportunities for hands-on practice. The programming courses leverage the software and hardware content to encourage students to learn about and engage in groups about fitness and health, letting their creativity shine as they design their own works. The activity helps students get a better grasp of innovative science and technology knowledge through hands-on application and practice. It also nurtures computational thinking and a sense of teamwork, shows them how innovation can give them a sense of achievement, and trains them to use hands-on skills to solve problems.



Health: Technological innovation boosts active health management

Designing competitive wearables

As global digitalization picks up speed, the fitness and healthcare industries are unprecedentedly embracing digital technologies for multiple reasons, including policies, technological upgrades, market changes, and the pandemic. Many are attempting to utilize data from health monitoring to drive the digitalization and visualization of the human body, for greater active health management. However, many challenges still lie ahead in the ongoing exploration of the digital health solutions. In this context, wearables, which are durable, portable, mobile, and ready-to-use, are proving to be more than sufficient for personal health management.

Huawei's fitness and health services are always innovating to deliver customer-centric, health-

conscious experiences to every person, home, and industry.

Advanced software and hardware are also being integrated into healthcare scenarios through Huawei's smart wearables, which can now be used to monitor blood pressure and analyze ECGs. These products aid the early screening of cardiovascular diseases such as atrial fibrillation, premature beats, and high blood pressure, helping users monitor and manage their health in real time. Huawei's ECG app is now supported on the company's smart wearables, giving users expert analysis on their ECG reports and professional health guidance from authoritative medical institutions.

Accelerating innovation in public health

A focal point of the Healthy China 2030 initiative is the shift from treatment to prevention. Economy and health are two trending topics in the world. As economy grows rapidly, standards of living increase worldwide, and people's priorities are shifting from survival to healthier living. There is an increased focus on health factors such as diet, exercise, smoking, mental health, and living environments.

Health is an essential part of well-being. Digital health, a new model that applies computer and information technologies to life and health sciences, is gradually becoming an integral part of people's lives. It provides autonomous, real-time, and interactive health services to ensure efficient, convenient, smart, and warm user experiences, giving people more control over their own health.

In 2018, Huawei launched the HUAWEI Research platform to help partners efficiently conduct innovative research with digital health technologies while protecting consumer privacy. Huawei opens the framework of the Research app and provides the sensor capabilities of its smart devices to help researchers recruit large numbers of participants and obtain valuable real-world data. Researchers are

provided with tools for AI-based big data analysis to develop innovative apps and solutions, significantly improving research efficiency.

HUAWEI Research cooperates with more than 80 research institutes, including 301 Hospital, China International Exchange and Promotive Association for Medical and Health Care, Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology (HUST), Medical Group of Division of Infectious Diseases in Shulan Hospital, and West China Hospital of Sichuan University. These institutions and Huawei work together to drive breakthroughs in fields such as cardiovascular health, sleep health, respiratory health, liver health, and blood sugar health.

In addition, HUAWEI Research jointly launched the blood sugar health research this year with Nanjing Drum Tower Hospital, Peking Union Medical College Hospital, and China International Exchange and Promotive Association for Medical and Health Care. This research is helping to develop more efficient and patient-friendly measurement methods for hyperglycemia risk assessment and make periodic blood sugar management viable.





Heart health

301 Hospital — Heart health research

301 Hospital is conducting heart health research using the HUAWEI Research platform, which works with Huawei smart wearables equipped with high-performance heart rate sensors. Arrhythmia risks are screened, managed, and prevented for large numbers of patients. 301 Hospital has made strides in tackling arrhythmia diagnosis issues such as missed diagnosis of atrial fibrillation and premature beats, as well as other diagnosis dilemmas. Furthermore, AI technologies are used to predict atrial fibrillation risks and reduce the probability of adverse events such as cerebral stroke.



Sleep health

301 Hospital — Sleep apnea research

301 Hospital is using the HUAWEI Research platform to conduct sleep apnea research. The high-performing heart rate sensors and SpO2 sensors of Huawei wearables have simplified at-home screening of sleep apnea risks. Users are provided with personalized guidance based on their sleep apnea risk levels.



Vascular health

China International Exchange and Promotive Association for Medical and Health Care — Vascular health research

The vascular health research conducted using the HUAWEI Research platform leverages Huawei wearables equipped with a high-performing heart rate sensor and ECG sensor. The developed feature provides users with arteriosclerosis risk screening and vascular risk assessment, helping them manage their vascular health at home and lead healthier lives.



Respiratory health

301 Hospital, Peking University First Hospital, and Tongji Hospital Affiliated to Tongji Medical College of HUST — Respiratory health research

Research conducted using the HUAWEI Research platform is enabling active management of respiratory health at home. Huawei wearables are used to record the physiological parameters and cough severity of users in real time, and intelligently test lung functions and screen for chronic obstructive pulmonary disease (COPD) and lung infection using a multi-modal fusion model. Medical experts can then advise high-risk users to see a doctor.



Blood pressure health

China International Exchange and Promotive Association for Medical and Health Care — Blood pressure health research

Research conducted using the HUAWEI Research platform is helping users screen for masked hypertension and manage their blood pressure in daily life. With a HUAWEI WATCH D, users can perform cuffless blood pressure monitoring and ambulatory blood pressure monitoring.



High-altitude health

West China Hospital of Sichuan University — High-altitude health research

Research conducted using the HUAWEI Research platform is helping users manage their health in high- altitude areas. Users can check their risk of altitude sickness with the high-performing heart rate sensor, SpO2 sensor, and barometer of Huawei wearables.



Liver health

Medical Group of Division of Infectious Diseases in Shulan Hospital — Liver fat research

Research conducted using the HUAWEI Research platform is enabling liver fat measurement at home. With Huawei smart scales, users can obtain professional health advice to manage and prevent fatty liver disease at an early stage.



Blood sugar health

Nanjing Drum Tower Hospital, Peking Union Medical College Hospital, and China International Exchange and Promotive Association for Medical and Health Care — Blood sugar health research

Research conducted using the HUAWEI Research platform is enabling active blood sugar health management for users. The high-performing sensor monitoring capability of the HUAWEI WATCH 4 series can be used to assess the risk of hyperglycemia. This feature can provide suggestions to users based on the periodic assessment results, advise at-risk users on health habits, and remind users to see their doctors when necessary.



HUAWEI WATCH 4 series for hyperglycemia risk assessment

HUAWEI Research has passionately nurtured the development of innovative technologies and has worked with more than 110 partners to conduct research covering more than 13 million users. More and more partners are joining HUAWEI Research, with new applications in practical digital health on the horizon. Huawei seeks to integrate industries, schools, research centers, and hospitals to accelerate research and innovation on exercise, circulation, respiration, digestion, the nervous system, the endocrine system, and more. The goal is to promote all-round health and help prevent chronic diseases.

Innovating for everyone's health

Huawei passionately works with industry partners to create healthcare services for all.

TrackAI enables vision screening and improvement for children

Approximately 6% of children under 5 years of age worldwide are affected by visual impairments such as refractive errors, amblyopia, and strabismus. Amblyopia has many possible causes and can be prevented if vision screening is performed at an early stage. The purpose of vision screening is to identify risk factors for amblyopia (such as strabismus, uncorrected refractive errors, and anisometropia) in children during their critical periods of visual development. This can be followed up by treatment for vision improvement.

In cooperation with Huawei, the Spanish company DIVE Medical launched the TrackAI project. Devices use eye-

tracking technology to examine children's gaze data, and Huawei's AI capabilities are used to analyze their vision. In this way, visual problems can be detected as early as possible, ensuring that patients can be treated within the optimal treatment period. By 2023, the project had been in operation for more than four years and helped nearly 6,000 children test their vision.

From 2022 to 2023, the TrackAI project was expanded in Europe and Latin America. A total of 1,216 vision tests for children were completed in Mexico City and the Spanish cities of Madrid, Barcelona, Zaragoza, and Toledo.



Incubating innovative technologies and building a fitness and health ecosystem

For a decade, Huawei's fitness and health business has been incubating innovative technologies and building a fitness and health ecosystem. Huawei has remained committed to providing science-based intelligent fitness and health services to users worldwide, including people with disabilities.

A ski simulation test site has been constructed at the HUAWEI Health Lab in Finland, with a height-adjustable ski slope. Huawei's Finnish research team conducted a large number of experiments indoors to analyze motion posture based on knee flexion. Using the HUAWEI TruSport system, the team conducted research on areas such as ski posture analysis, fall prediction, and skill evaluation, generating a reliable and accurate sports physiology algorithm. This innovative research and development will provide skiers of all levels with accurate science-based guidance and safe professional assistance.

Huawei actively explores custom fitness and health indicators, such as Activity reminders and Activity rings. These science-based features enable fitness and health management for people with disabilities, such as wheelchair users, helping them assess their physical conditions and exercise needs. Huawei is committed to bringing the benefits of scientific and technological innovation to everyone.

In addition, Huawei led iCARE4CVD, one of the most influential cardiovascular research projects in Europe. This project was jointly initiated by the European Society of Cardiology and the European Association for Cardiovascular Prevention and Rehabilitation to explore comprehensive and personalized management solutions for patients



with cardiovascular disease through multidisciplinary collaboration. As the only wearable device vendor in this project, Huawei helped researchers collect and analyze patients' heart rate, blood pressure, and exercise data. This has enabled users worldwide to manage their cardiovascular health better.

Building a quality management system for medical devices

Demand is growing for practical health functions of smart wearables. Huawei Device has been building a medical system since 2020 and has registered and certified medical products to ensure that wearables with medical functions fulfill international and Chinese quality management requirements for medical devices. It also ensures that the full lifecycle of medical products, spanning from design and development, to production, storage, circulation, installation, service, and end of service and disposal, complies with regulatory requirements and standards.

Huawei has established a quality management system for medical devices based on laws and standards such as EU Medical Device Regulation (MDR), ISO 13485, and Good Manufacturing Practice for Medical Devices (GMP). The company has incorporated core requirements of this system into its business processes to ensure product quality, security, and effectiveness. Huawei Device obtained the ISO 13485 certification in September 2022.

By August 2023, Huawei had obtained six registration certificates from China's National Medical Products Administration (NMPA) for its GT 2 Pro ECG model, wrist ECG and blood pressure monitor on WATCH D, GT 3 Pro ECG model, ECG app, PPG app (pulse wave A-fib and premature beat alert software), and OSA app (sleep apnea screening software).

In addition, Huawei's wrist ECG and blood pressure monitor on the WATCH D and the ECG app have obtained the CE certification under the EU MDR. Huawei continues to build and improve healthcare systems in countries and regions outside China, with the aim of achieving medical registration and certification of its products and providing quality, secure, and reliable products and services to consumers.



Environmental Protection

Harnessing technology for a better planet

330M

Huawei devices installed with HarmonyOS had exceeded 330 million by December 2022, opening up old devices to cutting-edge technology.

14

Huawei currently uses 14 different types of renewable materials, including paper, copper, plastic, iron, aluminum, tin, gold, silver, and cobalt, in its products, in a bid to expand material reuse.

16M

Since 2020, we have helped extend the service life of over 16 million devices by sending faulty components, such as motherboards and screens, back to our high-level repair centers for repair.

6M

Since 2022, paper-shopping lists sent with goods have been gradually canceled, cumulating in nearly 6 million pieces of A4 paper being saved.

36,000 metric tons

In 2023, the size of the product manual was reduced by 86% compared with 2019. It is estimated that 1,274 metric tons of paper will be saved and carbon emissions will be reduced by more than 36,000 metric tons.

780,000

Since 2015, nearly 780,000 Huawei devices have been re-sold through Huawei's trade-in program.



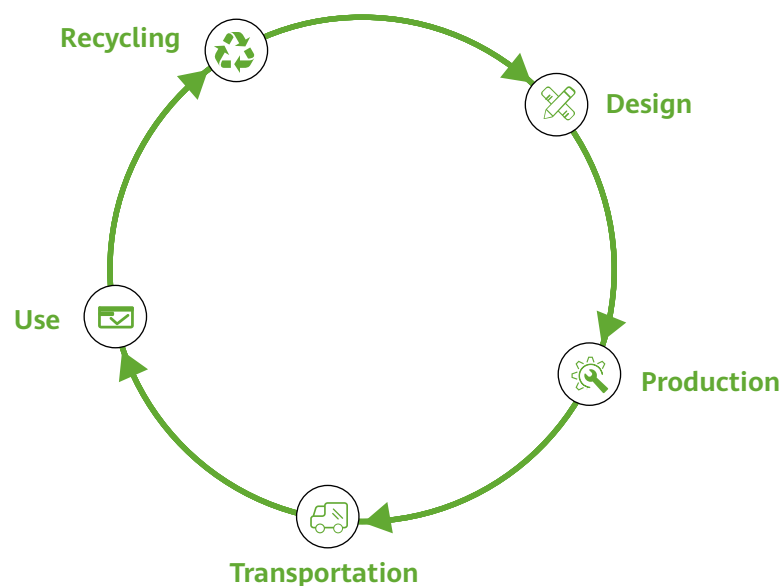
Technology plays a critical role in solving environmental challenges. Huawei has pledged to create "tech for a better planet", underlining its commitment to protecting the environment through technological innovation, with a focus on using safe and environment-friendly materials, reducing carbon emissions, and supporting a circular economy. These strategies aim to enhance its competitiveness in environmental protection.

Huawei Device prioritizes the sustainability of its products, through technological innovation. We perform closed-loop management of product lifecycles, as well as sustainable production, allowing us to minimize our impact on the environment without compromising product experience. We are passionate about helping society in general slash carbon emissions and achieve carbon neutrality goals.

Use of safe and environmental protection materials: In compliance with the laws and regulations on hazardous substances control, actively selecting eco-friendly materials and conducting product lifecycle assessments to continuously reduce the impact of products on environment.

Reducing carbon emissions: Continually innovating our practices in every facet, from management to technology and beyond, to minimize the carbon footprint created by Huawei products; working with upstream and downstream partners to boost energy efficiency, reduce emissions, and create an end-to-end green supply chain.

Contributing to a circular economy: Using eco-friendly materials and reducing our raw material consumption, improving product durability, designing products that can be updated easily, and optimizing the product recycling system, to make sustainable development a reality.



Reducing the impact on environment throughout product lifecycles

Product lifecycle assessment

Huawei has established carbon emission models covering the entire product lifecycles, including raw material selection, clean energy use, product energy efficiency improvement, recycling, and more. It aims to reduce resource consumption and carbon emissions of products.

Huawei has established an internal database for environmental responsibility of products and established a product lifecycle assessment (LCA) methodology based on ISO 14040/ISO 14044 standards. The LCA approach allows us to assess the environmental and climate change impacts at all stages of the lifecycle, from raw materials to product scrapping, helping us identify opportunities for optimizing product designs that are more environmentally friendly, including raw material selection, manufacturing process optimization,

product energy efficiency, packaging optimization, transportation mode, and recycling strategies.

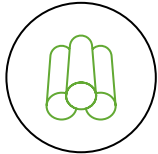
It is widely reported that excessive greenhouse gases are a cause of global warming. Reducing the carbon footprint of products is critical to reducing the overall carbon emissions of Huawei Device.

To this end, Huawei constantly assesses the environment impact of its products to identify carbon emission reduction opportunities, as well as requirements from stakeholders, incorporating environmental protection into all phases of its product lifecycles. Through long-term technological innovation, Huawei continuously improves the resource and energy efficiency of products and provides environmentally friendly products and services for users.



| Use of eco-friendly materials

Huawei is passionate about exploring and advancing the circular economy model — as the initial step of material recycling, prioritizing safe, eco-friendly, and renewable materials during product design, so that closed-loop flow of materials is possible. This approach results in eco-friendly products, and also drives the development of the renewable materials industry on the demand side.



More secure materials

Huawei has established a hazardous substance management system in accordance with QC 080000 and passed third-party certification to ensure the health and safety of products throughout their lifecycles, as well as reduce environmental impact. The certification marks that Huawei's quality management system is more systematic, standardized, and transparent in terms of the end-to-end control of hazardous substances in products.

Since 2016, we have implemented hazardous substance controls for our phones that go beyond those required by laws and regulations. By designing products that use less hazardous substances, we have made great strides to protect our planet. In addition to complying with hazardous substance management laws and regulations in China and around the world, such as the China Restriction of Hazardous Substances (RoHS), as well as the RoHS Directive, and Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) from the EU, we have proactively eliminated substances that are still used in the industry, such as brominated flame retardants (BFRs), chlorinated flame retardants (CFRs), polyvinyl chloride (PVC), phthalate esters (PAEs), antimony trioxide, and beryllium and its compounds. E-waste that contains these dangerous substances is harmful to the environment and people when recycled (as they release dioxins, for example).

In order to improve our environmental health test and analysis capabilities for substances, Huawei has built a state-of-the-art environmental protection lab, spanning 500 square meters, boasting cutting-edge equipment encompassing chromatography, spectrum, and mass spectrometry. This lab has achieved industry-leading environmental protection test and analysis capabilities, and has since been accredited by the China National Accreditation Service for Conformity Assessment (CNAS).



Renewable materials

One important measure that we have taken to protect the environment and promote the circular economy is by using premium eco-friendly renewable materials, which reduce our reliance on direct mineral sources.

Producing electronic products involves dozens of different materials, and given current constraints, it is simply not possible to find high-quality renewable alternatives for each type of material. We pledge to work diligently with our suppliers to gain a deeper understanding of and improve the supply chain for renewable materials, which will allow us to incorporate more high-quality renewable materials into product manufacturing.

In 2022, Huawei Device used 14 different types of renewable materials, including paper, copper, plastic, iron, aluminum, tin, gold, silver, and cobalt, in our products. Huawei is also working closely with its material suppliers to explore how to better implement more high-quality renewable materials.



Eco-friendly plastics

Plastics are the most common single-use materials for electronic products. Therefore, it is essential that we use plastics that have a minimal impact on the environment. Since 2013, we have used bio-based plastics widely during phone production, substantially mitigating the negative environmental impact associated with the manufacturing of petroleum-based plastics. Over 30% of the bio-based plastics that we use come from castor oil, which reduces carbon dioxide emissions by 62.6%, when compared with conventional plastics.

Bio-based plastics

Bio-based plastics refer to plastics produced with natural substances, such as starch, as the main raw materials. The biotic substance used for bio-based plastics can be derived from corn, sugarcane, or cellulose, etc. Bio-based plastics are made from plants, which capture carbon dioxide from the air as they grow.

The use of bio-based plastics reduces the consumption of petrochemicals in the plastic industry, thus slashing the pollution to the environment caused by petrochemical production.

Sustainable product packaging

Eco-friendly packaging design is critical for creating sustainable Huawei products. The use of small, lightweight packaging reduces raw material consumption, such as paper, preserving forests, while curbing energy consumption and carbon emissions during product shipment. The use of eco-friendly packaging materials can effectively reduce pollution and contribute to sustainable development and protection of the ecological environment.

Huawei strives to cut down its packaging in favor of

reusable and eco-friendly materials, without compromising product protection.

In 2022 and 2023, Huawei R&D personnel developed stack tools for small packaging, enabling automatic stack design and simplifying product packaging at one time. In addition, the requirements for package space utilization, as well as restricted use of disposable plastics, are specified in the *Sustainable Device Packaging Specifications*, which are integrated into Huawei product packaging.



Small packaging for fewer carbon emissions

Well-designed packaging using small and lightweight materials is critical to achieving sustainable product packaging. Huawei promotes small packaging from the four aspects below to improve space utilization and reduce the weight of packaging.

Design optimization: We optimize stack designs and reduce bonding structure. By adapting this change, the package space utilization rate of HUAWEI Mate X5 is 7.5% higher than that of HUAWEI Mate Xs 2.

Criteria optimization: We actively improve test criteria while adhering to industry practices and preventing over-packaging. By doing so, the package space utilization rate of HUAWEI Vision SE 75 MEMC is 6.16% higher than its predecessor.

Optimizing the dimensions of products and accessories: We have removed steel straps from watches, defined straps as an accessory, and aligned their length with that of other straps, cutting Huawei watch packaging by 17%.



Reducing the quantity of packed goods: We no longer pack accessories, such as earphones, adapters, and data cables, in the box, thereby reducing the size of packaging.

Less plastic packaging for a better planet

According to the *Global Plastics Outlook* released by the Organization for Economic Co-operation and Development (OECD) in 2022, global plastic waste increased to 353 million metric tons in 2019. 109 million metric tons of such waste accumulated in rivers, and a further 30 million metric tons piled into oceans, leading to serious pollution and environmental damage. Additionally, plastics are a significant pollutant, contributing to 3.4% of global greenhouse gas emissions throughout their lifecycle. This highlights the importance of reducing plastic waste.

Huawei has been committed to using more environmentally friendly packaging materials to minimize environmental pressure. We use more recycled paper, as well as paper materials from responsibly managed forests (FSC certified) that conform to the principles of sustainable management. As printing ink on packaging hinders package degradation, Huawei uses 100% biodegradable soy ink, as opposed to conventional petroleum-based ink. Our latest eco-friendly materials have passed the international compostable certification, which means the materials are biodegradable under industrial composting conditions.

To reduce plastic waste, Huawei opts to use non-plastic materials for its packaging whenever possible. The Mate 50 series, for example, uses special paper to replace the plastic film that protects the phones. We have also developed a kind of high-strength paper to replace plastic sealing labels for boxes. This paper will be used for the first time in the packaging of products customized for carriers. These changes are expected to reduce the use of disposable plastics by approximately 13 metric tons for every 10 million phones.

Huawei has also developed a special kind of aqueous oil — which does not pollute the environment and effectively prevents the use of disposable plastics — to replace the plastic film used for packaging. Such technology has been used in the packaging of the HUAWEI P60 series, and will be used for more products in the future. It is forecasted that by doing so, the use of disposable plastics will be cut by approximately 46.3 metric tons for every 10 million Huawei phones. These measures for reducing plastics use will also be applied to our other phones, earphones, watches, bands, tablets, and PCs, among others, to deliver on our promise of providing consumers with eco-friendly products that promote sustainability.



Lighter user manuals

Our user manuals have been redesigned to save paper while making them more accessible. Designing lighter user manuals not only saves paper and helps protect forests, but also reduces energy consumption and carbon emissions when the product is being shipped.

In 2023, we trimmed down our user manuals for

wearables even further, and we've also gone digital with our on-screen Tips app, which offers consumers a rich array of information and advice. It is estimated that compared with 2019, 1,274 metric tons of paper will be saved and carbon emissions will be reduced by approximately 36,000 metric tons, equivalent to saving more than 21,000 trees.

Dimension	2020	2021	2022	2023 Estimate
Product	Phone, tablet, and PC	Phone, tablet, wearable, PC, router, and CPE	Phone, tablet, wearable, PC, router, CPE, and audio product	Phone, tablet, wearable, PC, router, CPE, and audio product
User manual pages reduced	63%	80%	83%	86%
Paper saved (metric ton)	426	1,226	1,250	1,274
Carbon emissions reduced (metric ton)	12,080	34,765	34,446	36,127

Note: The data in the preceding table indicates improvements compared with 2019.

Eco-friendly product certifications

By obtaining environmental certifications, Huawei demonstrates its implementation of environmental protection measures, and sustainable development philosophy, proving that Huawei provides industry-leading products in terms of use of eco-friendly and safe materials, environmental friendliness, reduction of resource and energy consumption, etc. From 2022 to August 2023, many Huawei products passed domestic and international leading environmental protection tests to obtain certificates.

SGS green product certificate

Huawei products, including HUAWEI P50 series, nova 11 series, and HUAWEI FreedBuds 5 series, have earned the highest level of certificate for rating green products from SGS. This certificate indicates that Huawei products have reached the industry-leading level in the green, health, and safety field.



CQC environmental protection rating certificate

39 models of 21 Huawei phones and tablets, including MatePad Pro, nova Y70, and nova Y90, earned an A classification from the China Quality Certification Center (CQC), which is the center's highest environmental protection rating for electronic and electrical products. This certificate indicates that Huawei products are friendly to the ecosystem and people's health, consume less energy and other resources, and achieve industry-leading environmental protection throughout their lifecycles.



China Environmental Labeling

China Environmental Labeling Certification, commonly known as Ten Rings Certification, demonstrates that the certified product is of high quality, eco-friendly, safe, energy-efficient, and more. Since 2017, MateBook series laptops have earned China Environmental Labeling Certification. By the end of 2022, a series of PC products, including laptops, desktop computers, printers, all-in-one PCs, and monitors, had also been certified.



Green Product Mark from TÜV Rheinland

Obtaining the Green Product Mark from TÜV Rheinland, based in Germany, indicates that a product has reached the world's leading level in hazardous substance management, energy efficiency, use of renewable materials, LCA, and more. HUAWEI 4G Mobile WiFi 3 has obtained the Green Product Mark, which recognizes Huawei's implementation of green technologies and eco-friendly philosophy.



Reducing carbon emissions from production processes

A significant portion of carbon emissions from electronic products occurs during the manufacturing process. To minimize damage to the environment throughout product lifecycles and reduce the carbon footprint of its products, Huawei has applied renewable and clean energy into its operations process. It has improved the energy efficiency of its product manufacturing processes through energy saving means technically and managerially. Moreover, we require our suppliers to set carbon emissions reduction targets and implement them in a bid to reduce carbon emissions during Huawei product manufacturing.

Greenhouse gas inspection

Quantifying greenhouse gas helps us clearly identify carbon emissions across fields and set scientific and reasonable carbon emissions reduction goals. Huawei inspects greenhouse gases in accordance with ISO 14064 every year, has the result reviewed by a third-party organization, and discloses the company's

carbon emission data. We have inspected Huawei Device's greenhouse gas emission data, on the basis of Huawei's carbon emission data, and the emissions of Huawei Device totaled 163,360 metric tons of carbon dioxide equivalent (CO₂e) in 2022.

Greenhouse Gas	Scope 1	Scope 2	Total
Emissions (t-CO ₂ e)	11,770	151,590	163,360
Proportion to total emissions	7.2%	92.8%	100%

Huawei Device's greenhouse gas emission data in 2022 (not verified by third party yet)

Scope 1: Direct emissions from greenhouse gas emission sources owned or controlled by Huawei

Scope 2: Indirect greenhouse gas emissions generated by Huawei-purchased power or heat supply

Carbon emissions reduction in our operations

Carbon neutrality is a major marker of a modern society, and more than 120 countries and regions across the world have each set or will set their own goals to achieve this.

To reduce carbon emissions, countries and enterprises must shift their attention to clean and renewable energy.

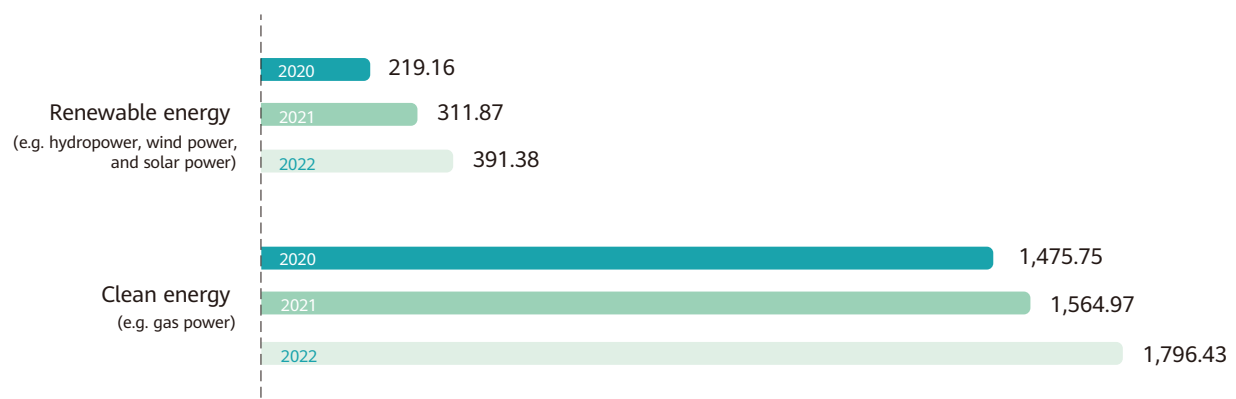
At Huawei, much of our campuses run off renewable energy. We have already built PV plants on our campuses, and proactively use clean energy to slash carbon emissions.



Electrical shuttle train at Huawei Dongguan campus in China

Renewable and clean energy used by Huawei in China in 2020–2022

Unit: million kWh



Carbon emissions reduction across the supply chain

Huawei attaches great importance to the sustainable development of its global supply chain, and works with partners to facilitate the supply chain transformation to green and low-carbon development, reduce the impact of the supply chain on the environment, and mitigate the risks of sustainable development.

Huawei evaluates suppliers' carbon emissions reduction performance in terms of energy

conservation, emissions reduction, renewable energy use, and carbon emissions reduction goals, among others, annually, and increases incentives for excellent suppliers in carbon emissions reduction. Huawei also holds global supplier conferences themed carbon emissions reduction, where industry best practices are learnt and the path and methods for achieving green and low-carbon development are discussed, in a bid to build a green, low-carbon, and sustainable industry chain.

Huawei's third Supplier Carbon Emissions Reduction Conference

On June 30, 2023, Huawei successfully held its third Supplier Carbon Emissions Reduction Conference. Tao Jingwen, Director of the Board and Director of the CSD Committee for Huawei, introduced the company's sustainable development strategy and carbon emissions reduction initiatives for suppliers, and commended excellent suppliers for carbon emissions reduction. Three of Huawei Device's suppliers were awarded.

Huawei clarifies its carbon emissions reduction expectations for suppliers, who are advised to set carbon emissions reduction targets in accordance with the Science Based Targets initiative (SBTi) and for at least five years.



Awarding excellent carbon emissions reduction suppliers

- Energy conservation and emissions reduction requirements: Reduce annual average energy use and carbon intensity by no lower than 2% and 5% respectively. Standardize statistics collection, and report as required.
- Carbon footprint analysis capability: Encourage leading suppliers to carry out product carbon footprint analysis in advance. Require digital power suppliers to develop product carbon footprint analysis capabilities as soon as possible.
- Incorporation of carbon emissions reduction into the supplier selection strategy: Gradually incorporate a carbon emissions reduction indicator into the supplier selection strategy, according to industry, and link them with the sourcing rule.
- Benchmark suppliers: Commend and award excellent suppliers in terms of carbon emissions reduction, and urge suppliers who fail the carbon emissions reduction targets to ramp up their efforts.

The carbon emission data of some suppliers has passed third-party verification and obtained the ISO 14064 certification, with some even acquiring ISO 50001 (energy management system) certification, which is proof of their capability for systematic energy saving and consumption reduction management. This helps suppliers understand their emissions reduction potential and achieve their emissions reduction goals. In addition, suppliers opt to use clean energy when manufacturing Huawei products, such as purchasing green power, building distributed PV plants, and using clean energy including wind and thermal energy.

Thanks to these measures, the carbon emission intensity of Huawei Device's suppliers decreased by 10% in 2022 compared with 2021.

Clean energy used by supplier

A Huawei supplier's PV plant features installed capacity of 49.3 MW, with PV yield of 43,651 MWh, which can reduce greenhouse gas emissions by 38,601 metric tons of CO₂e.



Rooftop PV plant in a supplier's factory

| Longer product lifespans

One of the most effective ways to protect resources is to manufacture premium and durable products. That is why we conduct strict durability tests on our products before they're made available, and provide consumers with

gradual system updates, and affordable repair services, to extend product lifespans, conserve natural resources, maximize resource efficiency, and contribute to a circular economy.

| Product durability

Huawei Device performs a number of reliability tests on devices before officially releasing them.



Bolstering phone durability

Huawei wants its products to last as long as possible, and therefore durability is a key focus throughout the design phase. It selects durable materials to manufacture ultra-reliable hardware, and has built reliability labs around the world. To comply with stringent international standards, we have conducted extensive reliability tests to ensure that each product can withstand and adapt to extreme conditions, including drops, impacts, and changes in temperature and moisture, so that products are more than equipped to handle everyday wear and tear.



Clean energy used by supplier

We subject our phones to dozens of in-lab drops to simulate the typical height of falls onto hard surfaces. To be considered drop resistant, the phone screen must remain intact, and continue to function as normal following a drop. We also conduct hundreds of rolling tests, whereby phones tumble freely in a rotating cylinder, helping us quickly spot and address a phone's weak points.

Splashing

Many of our flagship models have a water and splash resistance rating of IP68, enabling them to withstand a sudden downpour or accidental splashes and spills.

Button life

We test the durability of our phone's buttons by simulating actual phone use and subjecting each model to up to hundreds of thousands of button presses.

Extreme temperatures

Environmental factors cause 52% of operational failures in electronic products. Of those, 40% are caused by dangerous temperatures. Our labs simulate conditions in diverse environments, and test the mechanical and electrical performance of our phones over fluctuating high and low temperatures, which typically occur during shipment and storage.

Scratching

Device surfaces naturally experience wear and tear over time. Through coating hardness, artificial sweat resistance, alcohol resistance, and tape-peeling tests, our phones have become more scratch resistant. This means that users do not need to worry about their phone rubbing against other objects in their bag.

Extrusion and impact

To test the pressure resistance of each phone component, we conduct click, extrusion, and steel ball impact tests. Even in a crowded subway, there's no need for users to worry about the contents of their bag rubbing against their phone and causing damage.

Item	Water Resistance	Dust Resistance	Splash Resistance
Mate 30 Pro	IPX8	IP6X	Water-sprinkling
P40 Pro	IPX8	IP6X	Water-sprinkling
Mate 40 Pro	IPX8	IP6X	Water-sprinkling
P50 Pro	IPX8	IP6X	Water-sprinkling
P50 Pocket	IPX3	IP5X	Water-sprinkling
Mate 50 Pro	IPX8	IP6X	Water-sprinkling
Mate X3	IPX8	/	Water-sprinkling
P60 Pro	IPX8	IP6X	Water-sprinkling
Mate 60 Pro	IPX8	IP6X	Water-sprinkling

Furthermore, multiple Huawei products have obtained durability certification from Switzerland's SGS, such as HUAWEI Mate 50 series, which has become the first smartphone to obtain the five-star glass drop resistance certification from Switzerland's SGS. Thanks to Huawei Kunlun Glass, the drop resistance of Huawei Mate 50 series has increased tenfold compared with ordinary glass. HUAWEI Mate X3 has obtained the first Switzerland's SGS dual five-star certifications. Its durable Kunlun Glass exterior screen has obtained a five-star drop resistance certification, while its inner screen adopts a composite laminated structure with a non-Newtonian fluid material layer and is 4x more impact-resistant, making it the industry's first foldable display to obtain the Switzerland's five-star SGS impact-resistance certification.



For HUAWEI Mate 60 series, the fusion of an ultra-strong basalt body and ultra-durable brocade fiber material alongside their tougher second-generation Kunlun Glass gives the phone an added three-layer of protection and strength, as well as overall reliability.

PC quality assurance

To mimic real life usage, Huawei has designed wide-ranging reliability tests covering all usage scenarios, including laptop lid opening and closing, key pressing, touch controls, scratching, extreme temperatures, and dust. All these tests aim to ensure consistent product reliability and user experience regardless of the environment.



Laptop lid durability

A laptop shaft experiences wear and tear each time the lid is opened or closed. We simulate actual laptop use and conduct a thorough battery of tests, such as lid opening/closing strength and endurance tests, to ensure that our laptops meet user expectations.

Touch controls

A smooth, comfortable touchpad is critical to the laptop user experience. We conduct tests including surface friction coefficient, water drop contact angle, abrasion, and elastic curve tests.

Extreme temperatures

Our labs simulate conditions in diverse global environments, and test mechanical and electrical performance of our laptops over fluctuating high and low temperatures, which typically occur during shipment and storage.

Key pressing

We test the lifetime of laptop keys by simulating actual laptop use and subjecting each model to up to millions of key presses.

Scratching

Consumers these days want their laptops to last for years and years, and that is why we value the wear resistance of the laptop surface. To make our laptops scratch resistant, we conduct tests covering robust coating hardness, artificial sweat resistance, alcohol resistance, and tape-peeling.

Dust

Huawei's laptops have passed professional dust tests, proving that their mechanical and electrical performance does not deteriorate as a result of dust accumulation.

Tablet quality assurance

Huawei has carried out extensive tablet reliability testing that takes into consideration the actual usage of tablets in daily work and life, and the use of tablets with accessories such as keyboards and stylus pens, covering extreme temperatures, dust, line drawing with a stylus pen, and key pressing. This aims to ensure that a tablet is highly durable whether used alone or with accessories in a variety of environments.



Extreme temperatures

Our labs simulate conditions in diverse global environments, and test mechanical and electrical performance of tablets and their accessories over fluctuating high and low temperatures, which typically occur during shipment and storage.

Line drawing with a stylus pen

To evaluate the lifespan of a stylus pen that is used to tap on a tablet surface or draw lines, we simulate scenarios such as tapping the screen, taking notes, and drawing lines, for hundreds of thousands of tests.

Leather surface folding

When a keyboard accessory is used with a tablet, the keyboard is frequently opened or closed. In order to ensure that the leather surface functions well even after being bent for a long time, we have designed tens of thousands of leather surface folding tests to ensure the durability of the material in the bending position of the product.

Key pressing

To evaluate the lifespan of the keys on a keyboard, as an accessory to a tablet, we simulate the key pressing scenario, for millions of tests, in the hope that our product will satisfy user needs for document editing and typing.

Wearable quality assurance

High quality and reliability has always been symbolic of Huawei's smart wearables, and a core competitive strength. To enable normal functioning of our products in varying environments, starting right from the design phase, we design all-around reliability tests for daily use, covering water resistance (during swimming and diving), sweat simulation, strap torsion, surface abrasion, and collision simulation, ensuring that our products are suitable for all scenarios.



HUAWEI WATCH 4 Pro series is equipped with advanced fitness and health functions to cope with multiple scenarios.

Water resistance (swimproof) test

We have gone far beyond simply performing static water resistance tests on our wearables — and even invented an instrument for dynamic water resistance tests, which simulates factors including water temperature and the speed at which a swimmer's arms come into contact with the water. We have also conducted custom underwater button endurance simulation tests, which complement integrated water resistance tests that cover temperature, humidity, drop, and other factors.

Sweat simulation test

Since wearables are in close contact with the user's skin, and often exposed to sweat, we conduct sweat tests on wearable straps and bodies through an artificial sweat solution created in the lab. Such tests, along with high temperature and humidity tests, ensure that consumers can use our wearables worry-free.

Surface abrasion test

To enhance the wear resistance of the surface on wearables, we conduct in-lab alcohol resistance, rubber abrasion, dry and wet abrasion, steel velvet abrasion, and spike abrasion tests to simulate varying levels of wear and tear.

Water resistance (dive-level) test

HUAWEI WATCH Ultimate is the industry's first high-end smartwatch that supports 100-meter water resistance, with audio functionality, while also featuring a 100-meter diving mode. In the R&D phase, we introduced deep-diving pressure-resistance cycle equipment and deep-diving underwater key test equipment, which can simulate the underwater pressure of 160 meters at the maximum. This epoch-making smart watch has passed the ISO 22810 water resistance standard test and the EN 13319 diving equipment standard test.

Strap torsion test

We conduct strap tensile, torsion, tensile durability, and pull and torsion durability tests to ensure that the straps on our wearables are robust across diverse usage environments, including daily wear, removal, and accidental pull and torsion.

Collision simulation test

Wearables will inevitably experience bumps and bangs, which is why we conduct steel ball impact tests in our labs against the whole surface of the product.

Amazing durability

The titanium case for HUAWEI WATCH 4 Pro series fuses with the sapphire glass cover to give users ultimate protection.

Water resistance supports free diving up to 30 meters. 5 ATM water resistance and IP6X dustproof ratings protect the watch against liquid spills and damage underwater.

Product updatability

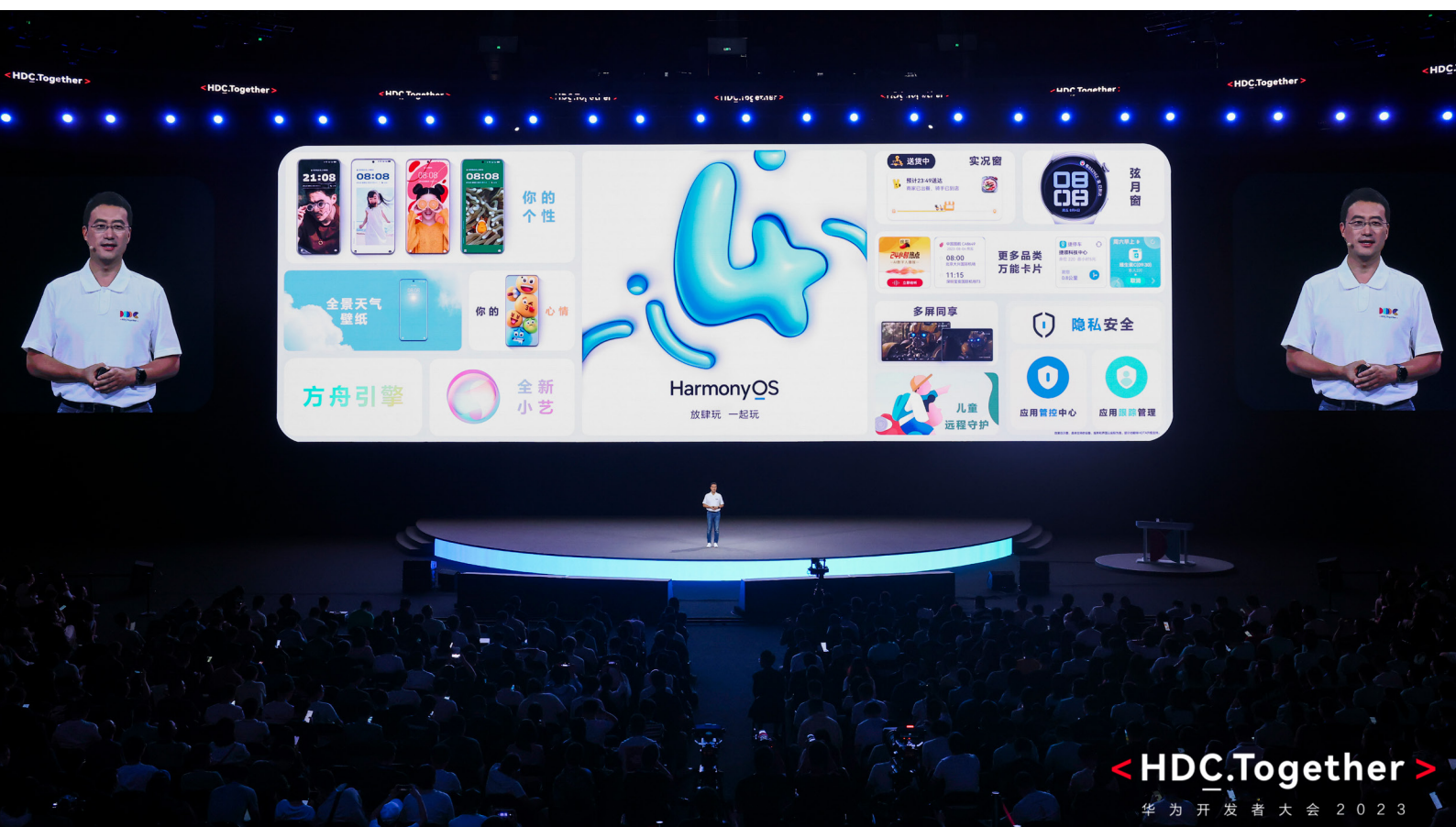
The longer our products last, the more money it saves for our consumers, and the better it is for our planet. We strive to provide an ultra-smooth system experience backed by regular system updates, to ensure that even products from years ago remain in good working order.

On August 4, 2023, Huawei launched its HarmonyOS 4, and HarmonyOS now has more than 700 million devices currently running it. HarmonyOS 4, with the upgraded Ark engine, provides a much smoother user experience in graphics, multimedia, memory management, and more. Compared with the

previous-generation of HarmonyOS, swipes are 20% smoother and the battery life is 30 minutes longer, for smooth task operation. The new HarmonyOS version was available to an array of devices the day it was released, including Mate 50, Mate 40, Mate 30, P60, P50, and P40 series.

The faster and smoother system can extend the service life of many Huawei mobile phones and other mature products, and it also prolongs the replacement cycle for consumers. In this way, the products can be used to maximize their value, reduce the number of discarded electronic products, and promote sustainable development. Huawei devices installed with HarmonyOS had exceeded 330 million by the end of December 2022.

Huawei released HarmonyOS 4 at HDC.



| Product repairability

Access to reliable and affordable repair services increases the lifespan of each phone, and reduces potential waste. Huawei has built a global network for accessible repair services, providing users with more reliable and affordable repair plans, supplemented by high-level repair centers, which offer more specialized repairs.

Since 2020, Huawei's repair services for

motherboards, screens, and other parts have extended the life of more than 16 million devices.

We continue to improve our device repair capabilities that cover not only mobile phones, but also HUAWEI Vision, smart speakers, watches and bands, wireless earphones, smart glasses, routers, etc.



A more convenient repair network

To improve our repair service, Huawei has adopted a three-tier repair system.

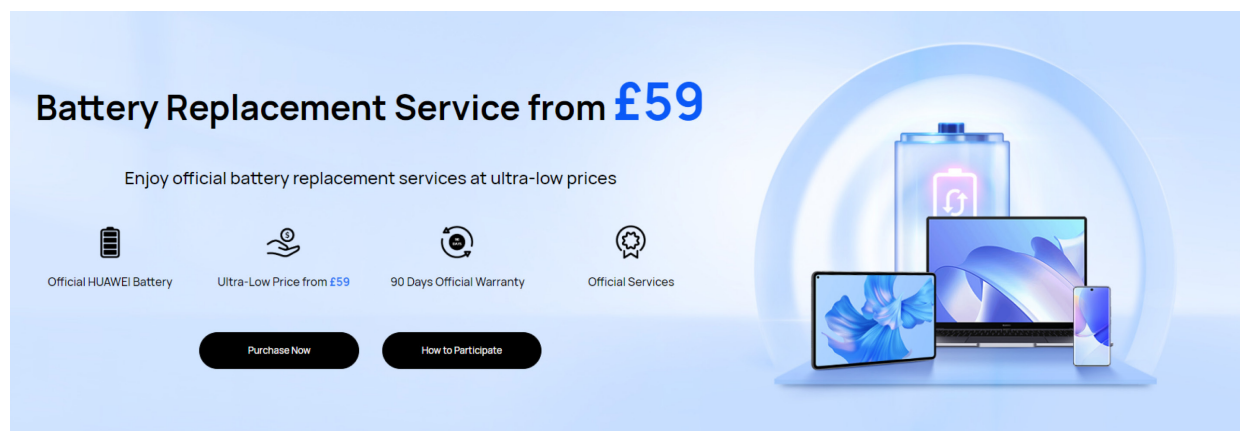
- It provides users with self-service solutions, so that most common software problems can be resolved at home.
- It provides on-site one-hour repair services at customer service centers, for greater convenience. In 2022 and 2023, Huawei customer service centers provided on-site services, including consultation, device replacement, and board replacement, for more than 20 million devices.
- Devices that can't be repaired on-site are sent by customer service centers to Huawei's high-level repair centers.

More affordable repair plans

Affordable repair services increase the chance of consumers repairing their phone rather than purchasing a new one.

Flat rate battery replacement

Huawei continues to offer a flat rate battery replacement program internationally. Every month, this program provides affordable battery replacements to over hundreds of thousands consumers. Through this battery replacement program, many mobile phones have been repaired in the past year and work like new. We also offer a discounted flat rate for repairs, while maximizing component reuse and guaranteeing a top level of service.



Battery Replacement Service from £59

Enjoy official battery replacement services at ultra-low prices

- Official HUAWEI Battery
- Ultra-Low Price from £59
- 90 Days Official Warranty
- Official Services

[Purchase Now](#) [How to Participate](#)

Internal storage upgrade for mobile phones

Over time, we store more and more content on our mobile phones, pushing a phone's storage space to its limit. To alleviate this problem, Huawei has introduced a pilot internal storage upgrade service for mobile phones since 2021. The new storage chips boast larger internal storage that allows users to store more and extend the lifespan of their phones.

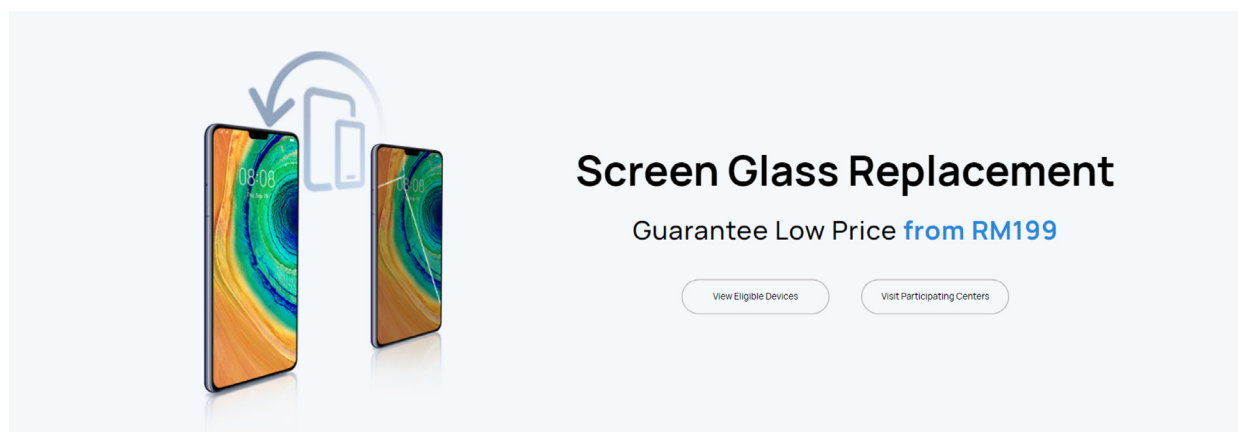
Refurbished motherboards and screens

Huawei has also launched a refurbished motherboard campaign for phone models sold in the Chinese mainland. What this means is that if the motherboard of a device experiences a fault beyond the scope of the warranty, users can enjoy access to a Huawei-manufactured motherboard at a discounted price of up to 70%. We also have a system for circulating screens that are no longer under warranty, which has been broadly promoted across many countries and regions outside China.

External screen repair

The cost of replacing a faulty external screen of a user's mobile phone is high, so to reduce the cost of out-of-warranty repair, Huawei provides the external screen repair service. If a service center detects that the internal screen of a phone with a cracked external screen is intact, only the external screen needs to be replaced.

For screen replacement, some Huawei device models are eligible for Kunlun Glass, which has received the world's first Switzerland SGS five-star glass drop resistance certification. Kunlun Glass is made by growing strong nanocrystals in glass, significantly strengthening glass, protecting the screen, and prolonging the service life of phones.



The advertisement features a light blue background. On the left, there is a graphic showing two smartphones. The one in front has a cracked screen, and a curved arrow points to a second phone behind it with a clear screen, illustrating the replacement process. To the right of the phones, the text 'Screen Glass Replacement' is written in a large, bold, black font. Below this, it says 'Guarantee Low Price from RM199' in a smaller black font, with 'from RM199' in blue. At the bottom, there are two rounded rectangular buttons: 'View Eligible Devices' and 'Visit Participating Centers'.

Screen Glass Replacement

Guarantee Low Price **from RM199**

[View Eligible Devices](#) [Visit Participating Centers](#)

Greener warehousing and transportation, driving down carbon emissions

Eco-friendly warehousing and logistics solution

Huawei embraces green warehousing and logistics solutions to boost resource sustainability, energy conservation, and emissions reduction. In 2022 and 2023, we made big reductions to resources and energy in warehousing and logistics phases and achieved low-carbon transportation through better digital operations monitoring, logistics and packaging, circular sharing and reuse, new logistics technology application, intelligent logistics scheduling, and more.

Modern logistics center

We manage operations status digitally and centrally. Regarding peak/off-peak use and demand of the site, warehousing, and other indicators, we work with suppliers to prepare storage areas and cycle site sharing, thereby improving site utilization efficiency and preventing resource waste.

Recycling and circular sharing

Packaging material (pallets, cartons, etc.) consumption has also been slashed thanks to robust recycling and circular sharing policies, equivalent to saving more than 3,500 trees.

Intelligent logistics scheduling

Intelligent scheduling is applied across order scheduling, warehousing, and distribution, thus enabling end-to-end efficient performance. Demands are combined within appropriate timeframes and on-time manufacturing is performed, reducing the wait time for transit during logistics.

Streamlined logistics packaging

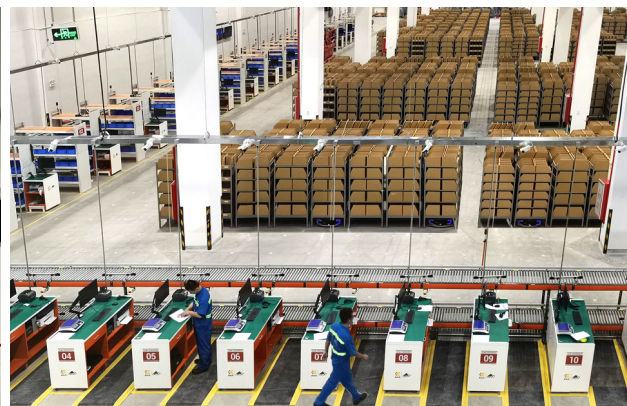
By improving product packaging, we have eliminated excessive packaging and padding. One such example is how we have optimized HUAWEI Vision and PC packaging, which reduces the use of auxiliary packaging materials by 5%.

Logistics technology

Automatic storage methods, such as densely tiered automated warehouses and vertical lifting cabinets, are used, increasing the storage efficiency of warehouses by 50%.



Densely tiered automated warehouse



AGV intelligent scheduling algorithm used in spare parts central warehouse, improving efficiency by 100%

Protecting the environment by optimizing packaging

To reduce unnecessary packaging during express delivery, Huawei has taken the measures including but not limited to the following to optimize e-commerce logistics since 2022: cancelling paper-shopping lists, phasing out outer waterproof bags for express service, improving package space utilization, and reducing carton and tape use.

Cancelling paper-shopping lists

This initiative has been piloted in Huawei's e-commerce business since 2022, and has saved nearly 6 million pieces of A4 paper, which is the equivalent of cutting down 400 trees.

Maximizing package space utilization

We have analyzed the e-commerce order composition based on big data and redesigned express cartons. As a result, we have reduced the average carton size by 10% and increased the space utilization rate by 12%, effectively reducing overpacking and excess void fillers.

Phasing out outer waterproof packing bags for express service

Waterproof parcel bags have been gradually eliminated since June 2023. It is estimated that by the end of 2023, 3 million parcels will have been delivered without using outer waterproof bags, reducing the use of plastic by more than 600,000 square meters.

Reducing carton and tape use

While protecting products during shipment, we have used simple bubble bags instead of cartons for outer packaging. This helps save more than 5.5 million cartons and cut adhesive tape use by over 3.3 million meters a year.

Green and speedy logistics

Huawei continuously optimizes green logistics and transportation solutions to reduce carbon footprint from transport. In 2022 and 2023, we improved transportation efficiency and cut carbon emissions during transportation by shifting to new energy vehicles, low-carbon transportation modes, intelligent transportation scheduling, and better transportation solutions.



New energy vehicles

Huawei has been gradually replacing vehicles with new energy vehicles, which cater to different transportation demands, improving Huawei's transportation efficiency and competitiveness. The use of new energy vehicles reduces dependence on fossil fuels and lowers carbon emissions in transportation, and offers numerous other benefits.



Transportation mode selection

We meticulously track and compare the carbon emissions from air, sea, and rail transport, and apply a thorough framework for managing the transportation of different categories of products. For non-urgent deliveries, we always prioritize sea and rail transport, both of which produces substantially fewer carbon emissions. In 2022 and 2023, over 50% of Huawei's goods were transported internationally via low-carbon methods, such as by ship or rail.

Intelligent transportation scheduling

We have built an intelligent transportation scheduling platform and unified logistics instruction channels. The intelligent scheduling system, as a logistics operations center, automatically identifies item sizes and distributes items and instructions. It optimizes the configuration of warehousing and transportation demands, improves warehousing and transportation efficiency, and maximizes resource efficiency.

Better transportation solution

We have innovated fulfillment models and reduced carbon emissions during transportation through business integration, transportation mode optimization, loading improvement, etc. We have taken measures such as cabinet sharing during sea and rail transportation, vehicle sharing during land transportation, and reduced the number of small orders, helping maximize the use of container and vehicle space without compromising timely delivery. By 2023, the container utilization rate for sea and rail transportation has risen to over 60%, while the proportion of small orders fulfilled through air transportation has been reduced to less than 8%, maximizing the use of air transportation resources.

Transportation fulfillment management

Through our green partner program, we select partners that have a strong sense of social responsibility and support their use of clean energy vehicles, with emissions that meet industry standards. An increasing number of our logistics service providers are shifting to clean energy delivery vehicles.

Green and eco-friendly shopping experiences

Huawei has opened more than 5,000 brick-and-mortar experience stores worldwide, including HFS, HUAWEI SmartHome, and authorized experience stores. It has also opened 24 HUAWEI stores on mainstream e-commerce platforms around the world, such as Amazon, MercadoLibre, Shopee, Lazada, Tmall, and JD.

For our brick-and-mortar stores, we not only combine technology with stylish store design, but also ensure our stores are as eco-friendly and sustainable as possible. We have carried out environment, health, and safety (EHS) self-assessments and ad hoc inspections at all our stores, covering end-to-end store management, including EHS design, decoration, power consumption, fire safety, and store security. We are proud of our fast problem rectification rate, delivering a secure

environment for consumers to shop. In 2023, all the problems spotted during EHS inspections of our stores were resolved.

At our online HUAWEI stores, we enhance our users' product experiences by providing user guides across multiple channels, and constantly promote new categories of products. The trade-in and student-targeted promotion programs provide online shoppers with favorable prices, while reducing waste of resources. On top of that, we adopt more eco-friendly packages for e-commerce business. What's more, our centralized and efficient e-commerce delivery network reduces energy consumption and increases efficiency, providing consumers globally with a modern, sustainable online shopping experience.



Green retail stores

We value the sustainable development of the environment and incorporate eco-friendly practices into every material and decoration where possible, to work together with consumers to build an eco-friendly shopping environment. Every time we design a store, it must be environmentally sustainable and smart. Not only do our stores conserve energy on lighting and air conditioners, we also consider how to monitor the air quality, temperature, and humidity, among others, in real time. Human body sensors are installed in areas where there is minimal human traffic (aisle, warehouse, etc.) to prevent energy from being needlessly used.

Our global flagship store on Nanjing East Road in Shanghai features big windows in the product experience area to allow more natural light into the building, which in turn cuts energy consumption and

merges indoor and outdoor environments. Copper-colored metal plates used in the atrium area can be disassembled and recycled, which complies with the cyclic design principles for sustainable development.

In our flagship stores at MixC in Qingdao, MixC in Wuhan, and Zone G at Huawei Industrial Base Bantian in Shenzhen, China, we adjust indoor light in line with available outdoor natural light, to showcase our products while saving as much energy as possible.

In our flagship store in Riyadh, Saudi Arabia, we have integrated local art into our sunshade system, which leverages the beauty of natural light while reducing the strength of direct sunlight, and thereby cutting down the burden on air conditioners.

Green store construction

Huawei actively explores and implements green store construction to facilitate sustainable resource utilization, energy conservation, and emissions reduction. HUAWEI Flagship Stores built in 2023 are all equipped with an efficient energy management system. The intelligent control equipment and monitoring systems accurately measure and manage energy, helping the stores operate more efficiently, intelligently, and eco-friendly.

Efficient energy management system

- **Energy monitoring system:** The sensors and monitoring equipment accurately measure and analyze data on utility use in stores, assisting store management with real-time energy usage and helping them quickly prevent against energy waste.
- **Intelligent lighting control system:** Thanks to cutting-edge technology and the intelligent management system, lighting can be adjusted to provide a comfortable environment within a building, while minimizing energy consumption.
- **Intelligent air conditioning control system:** The intelligent temperature control system uses temperature, humidity, and other sensors and controllers to intelligently control the air conditioning system. This aims to achieve optimal comfort and energy efficiency.
- **Architectural design optimization:** Early in the design stage, we plan large glass curtain walls that allow more natural light into the building, which in turn reduces the burden on lighting equipment. Appropriate building orientation and structure maximize the use of natural wind and light, thus reducing the use of air conditioning and increasing energy efficiency.

Green store sustainability evaluation system

Based on our experience in building and maintaining HFS, we will develop a sustainability evaluation system for the retail store industry. We hope that this evaluation system (which covers location selection, design and construction, O&M management, and continuous operations performance) will help stores improve their sustainability and environmental friendliness throughout their lifecycles.

The evaluation system includes the following:

- Energy use: Evaluate energy consumption in stores, including power supply, lighting, heating, and air conditioning, in a bid to boost energy efficiency.
- Water use: Evaluate water use in stores, including water consumption, recycling, and management, in a bid to ensure proper water use and reduce waste.
- Materials and resources: Evaluate the sustainability of materials and resources used during store construction and decoration, including the use of eco-friendly materials, and resource conservation and recycling.
- Healthy environment: Evaluate indoor air quality and lighting, noise control, and other factors that affect store experience, in order to create a healthy and comfortable shopping environment.
- Carbon emissions and climate change: Evaluate the impact of stores on carbon emissions, including transportation and energy consumption, so as to reduce greenhouse gas emissions and address climate change challenges.

We will use this system to help retail stores achieve sustainable development goals, improve the environmental friendliness of retail stores, and provide consumers with more sustainable and healthy shopping experiences.

HFS in Dream Plaza, Wuhan, China



Eco-friendly and sustainable online shopping experiences

Huawei values the product experiences of its users, online and offline, around the world, and provides an abundance of user guides and tips online to help users enjoy all the features of our products. We have also formed a range of user communities, which operate as channels that help users gain greater access to Huawei products. By participating in our offline events, such as lectures, Discover HUAWEI sessions, and residential community-targeted services, users gain a deeper understanding of Huawei products and even get to try them out first hand.

In recent years, Huawei has rolled out more 3C products (computer, communication and consumer electronics) in its online stores, particularly PCs and wearables, enriching consumers' purchase channels and methods.

We run a trade-in program in Middle East and Africa, covering mobile phones, laptops, tablets, and wearables, of which 42% * of online consumers enjoyed special offers during the program, which also reduced waste and improved resource reuse efficiency. We have also launched a function in our online store in Latin America, which allows college students to purchase a

wide range of products, such as laptops and tablets, at preferential prices.

Huawei has also upgraded the packages for its worldwide e-commerce business. To conform with the world's leading environmental protection standards, the new packaging materials use no mineral oils in its printing inks and they comply with relevant EU regulations. We have also redesigned the carton specifications based on the order composition and product sizes, increasing the space utilization rate by 12%, highlighting our efforts to reduce overpacking and achieve sustainable development.

We have built unified product delivery capabilities across online HUAWEI stores worldwide and made ongoing efforts in deploying an agile and efficient e-commerce delivery network. For example, we have built e-commerce hubs in Europe, which cover multiple major European countries and centrally process orders from consumers. While reducing energy consumption and increasing efficiency, we are committed to providing sustainable online shopping experiences for worldwide consumers.

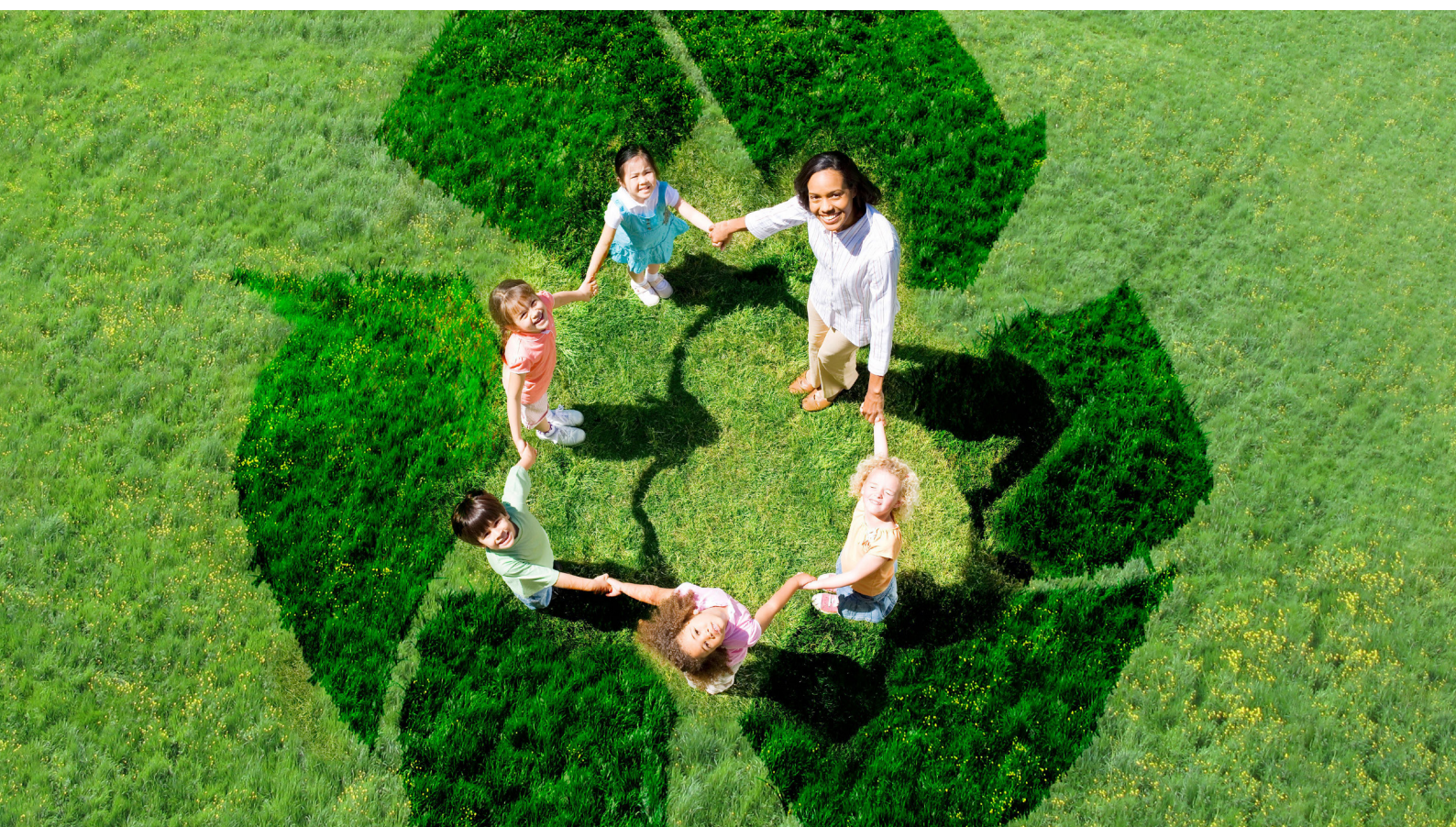
* Note: It's the data on P60 sales from online HUAWEI store in Saudi Arabia, ranging from September 1, 2023 to October 31, 2023.



Recycling and reuse

Huawei is committed to recycling resources. We actively build a circular economy business model to improve resource utilization and reduce waste.

We have tirelessly improved our global recycling system by certifying second-hand phones, device refurbishment, trade-in, recycling, and many other programs. By doing so, we aim to extend the life of our products, protect the Earth's resources, and drive sustainable development.

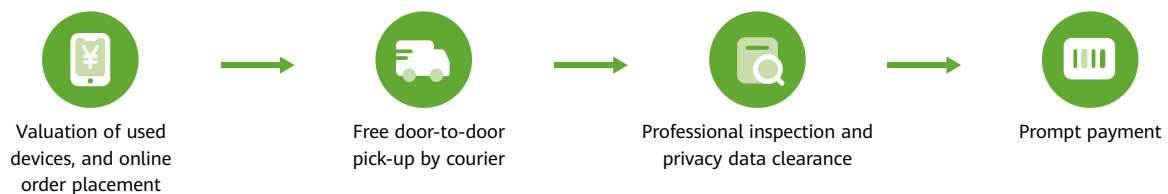


| Recycling and trade-in

Trade-in, giving new life to nearly 780,000 used devices

Reusing e-waste extracts additional value from it, and reduces its impact on the environment. Huawei's partners sell used devices through official channels in the second-hand market after they have been repaired. Regarding old and unusable devices, we hand them over to professional environmental protection enterprises to be disassembled and recycled, in an effort to cut down environmental pollution. Since 2021, Huawei has introduced a

one-stop trade-in program in China, allowing consumers to trade in their old device for a new one, boosting recycling and accelerating data migration. We also distribute cash coupons to the consumers who bring in old devices to be recycled, which can be used towards purchasing new Huawei products. Since 2015, Huawei has leveraged its trade-in program to get nearly 780,000 used devices to work like new.



Global recycling system, turning trash into treasure

To facilitate the recycling of e-waste, Huawei has ramped up efforts by strengthening its global recycling system for devices. By the end of 2022, Huawei's global recycling system had covered 2,000 recycling centers across nearly 50 countries and regions. This system recycles discarded devices in a

compliant way, including phones, tablets, laptops, watches and bands, and speakers, and then processes them in an eco-friendly manner. Our Huawei customer service centers newly opened in 2022 and 2023 feature redesigned recycling bins, which are more standardized and professional.

Official refurbished products, another option for consumers concerned with the protection of the environment

Huawei unveiled its refurbished Mate 40 Pro series and Mate X2 phones, which were both classic models, at its product launch event on September 6, 2022. Each of the official refurbished phones has been certified by Huawei, which follows a stringent refurbishment process that stretches from phone sourcing to product release. All of the official refurbished phones are newly packaged and come with original Huawei accessories. We adhere to our

quality commitment and provide a one-year warranty for each official refurbished phone.

On August 24, 2023, Huawei further launched its official refurbished MateBook 14 series laptops. We will expand our refurbishment business to more categories and provide consumers with high-quality refurbished products, to give new life to old devices.



Official refurbished nova 10 on online HUAWEI store

Resource reuse: Prolonging material life

Huawei reuses resources during device repair to drive down resource demand and support the circular economy. For example, used screens can be resold after they have been refurbished and passed strict tests, allowing users to purchase them at half the price of a new one. We have managed to extract screens that meet quality standards from returned mobile phones, watches, and other products and used them as spare parts for services, adding another element of recycling. Consumers can now choose to replace their broken phone screens with refurbished ones at a discounted price. These initiatives provide financial incentives to consumers while cutting down waste.

We also explore how to derive further value from discarded devices and parts. All of Huawei's scrapped

materials are processed and recycled using modern technologies. This involves used phones being processed in a total of 23 steps, including deforming, scanning codes, sorting, magnetizing, unsoldering, stripping away tin, shredding, and extracting heavy metals, after which the negative impact that they may have on the environment can be eliminated and the involved metals (e.g. gold, aluminum, copper, and steel) and plastics can be extracted and reused. The separator films in spent lithium-ion batteries are converted into solid carbon, reducing carbon dioxide emissions while increasing the recycling of metals such as lithium, nickel, and cobalt. The extracted precious metals can be reused as positive electrode materials of batteries, allowing green recycling of batteries.

In 2022, Huawei handed over a total of more than 2,700 metric tons of scrapped materials to its partners for compliant scrapping, which in turn slashed raw resource demand and waste discharge and contributed to sustainable development of the ecological environment.

A partner disassembles a scrapped phone.



Corporate Responsibility

Repaying trust with responsibility, through technology

500

As a company, we have earned more than 500 reputable certifications in the cyber security field, such as CC, FIPS, ISO 19790, PCI DSS, and CSA STAR certifications.

300,000

More than 300,000 of our users participated in the "I'm an Experience Officer" activity.

100

All of our new suppliers have earned the QC 080000 HSPM certification, and this helps us manage the environmental risks associated with our supply chain.

217

We've conducted 217 CSR audits on suppliers to maintain high standards and create a responsible industry chain.

2M

More than 2 million hours of training was delivered to employees over the past year.

75,000

So far, Huawei has created more than 75,000 jobs around the world.



Consumer-centricity

Prioritizing quality to improve consumer experiences

Huawei Device puts consumers at the heart of everything that the company does. Our goals are to ensure customer satisfaction and build trustworthiness. We measure these using the net promoter score (NPS) and field failure rate (FFR). The company aims to enhance the quality of Huawei products and services, deliver an exceptional consumer experience, and build a comprehensive quality management system based on ISO 9001, in order to increase brand competitiveness and support business success.

Milestones in the quality management system development process

We are continuing to build and improve the quality management system based on our users' needs to drive comprehensive quality management. Huawei first earned the ISO 9001 certification in 1996. Since then, the company has continued to upgrade its management system, and has earned the TL 9000, ISO 14001, ISO 45001, and ISO 27001 certifications. In addition, Huawei Device has passed the IATF

16949 certification related to quality management systems for the automotive industry, the QC 080000 HSPM certification, and the ISO 13485 certification related to quality management systems for medical devices. These achievements show that Huawei can continue to provide smart devices that consumers love and trust.



Huawei Device holding the 520 Quality Month activity in 2023

Building high-quality products which offer premium experiences

Huawei Device has established hierarchical quality management organizations to drive the implementation of corporate quality strategies and policies. We incorporate strict quality requirements into the E2E process covering product planning, design and development, supplier management, incoming material quality control, production, sales, and after-sales services, in a bid to build a comprehensive quality management system that is based on user experience and which includes all employees, every process, and the full value chain.

Product quality (FFR) is the most basic requirement. Strict quality standards must be developed and complied with in each phase to implement E2E

quality management. In terms of user experience (NPS), we actively collect consumer feedback through platforms such as VOC, always strive to meet if not exceed user expectations, and continue to provide premium products and services to consumers.

Quality leadership and culture form the foundation on which Huawei stands as it builds high-quality products which deliver premium experiences. We carry out various activities each year, such as the "520 Quality Month" activity and granting "Quality Star" awards, to emphasize the importance of quality to every employee and create a culture of consumer-centricity, zero defects, and ongoing improvement.

Everyone serves as a product experience officer

Huawei Device is consumer-centric. We aim to understand consumers' needs and attach great importance to consumer experiences. Huawei Device needs to continue to improve product quality and provide premium experiences for consumers at all touch points throughout their purchase journey, Huawei's service provision, and others.

The Huawei Handsets Product Line has run more than 400 "I'm an Experience Officer" activities to connect device experts and users. More than 300,000 people have participated so far. The product line surveys and interviews members of the public who use Huawei devices to collect feedback and

suggestions and identify product issues so that we can continue to improve our products and provide an even better user experience.

In 2023, more than 20 "I'm an Experience Officer" activities were organized at Huawei research centers across China. Device experts and Huawei employees who use Huawei devices were invited to discuss the products and share their ideas and suggestions. By running these activities, users feel more involved in the development of products. Anyone can serve as a product experience officer and a customer service agent at Huawei.



"I'm an Experience Officer" activity in 2023 (Shanghai)

Innovative technologies for cyber security and privacy protection

Cyber security and privacy protection are Huawei's top priorities. Huawei continues to upgrade privacy security assurance capabilities with state-of-the-art innovative technologies. Huawei has launched a series of related features, such as App Guard, App security center, Privacy Center, Security Center, and AI-based image privacy protection.

Privacy and security features were upgraded for the launch of HarmonyOS 4. The App security center can now be displayed based on cards, which makes risk notifications harder to miss. If an app prompts a user to download other apps, the system will proactively assess the risks and encourage the user to cancel the

installation. The upgraded app tracking management feature enables users to choose which apps can track their activity in other apps and online. The Parental Control feature allows parents to remotely view and manage their children's device use so that they can help their children to develop healthy habits when using electronic devices. In addition, HarmonyOS provides a secure and convenient digital asset inheritance feature which transfers a user's precious memories and other information stored on their device, including photos, videos, recordings, Huawei Drive files, contacts, memos, personal information, and app information, to their next of kin.



An OS's kernel is key to ensuring its privacy and security. In August 2023, Huawei's HarmonyOS kernel earned the CC EAL6+ certificate and became the first to earn this certificate in the general OS kernel field. This made Huawei the world's first smart device provider to earn the highest-level certification in the industry.

The CC EAL6+ certificate is a prominent addition to Huawei's already-impressive list of certifications in the cyber security field. To date, Huawei has earned more than 500 reputable and prestigious certifications, including the CC, FIPS, ISO 19790, PCI DSS, and CSA STAR certifications.

All-round protection to ensure app security

The installation and authorization of unknown or unofficial apps may lead to data leaks which may put you and your property at risk. HarmonyOS 4's brand-new App security center ensures user privacy and security by strictly controlling app permissions. It covers everything from blocking the installation of high-risk apps and controlling their operations to minimizing the risks associated with granting app permissions to keep users and their devices safe.

- **Blocking risky app installations:** If a user accidentally touches a dialog box which automatically starts installing a new app, the system will block the installation and encourage the user to cancel the installation.
- **Managing risky apps:** When a user voluntarily installs a high-risk app, the system will automatically add the app to the App security center for monitoring. If any irregularities are detected while the app is running, for example if the app opens another app without the user's knowledge, both the

action and the app will be blocked.

- **Limiting the permissions granted to high-risk apps:** For apps controlled by the App security center, data isolation and behavioral isolation are implemented to prevent these apps from obtaining sensitive user data (such as contacts, SMS messages, call records, and calendar events), and to prohibit them from displaying background pop-up windows or obtaining permissions for Floating window, Location, and Media and files.

Digital asset inheritance: Keeping your loved ones and their cherished memories within reach

Digital asset inheritance is a personal information right launched by Huawei in accordance with the Personal Information Protection Law of the People's Republic of China, to show respect to the will of the deceased and protect the legitimate rights and interests of their next of kin. By doing this, Huawei shows that it understands and cares, and this helps build trust with our users, increases brand loyalty, and presents us as a responsible company.

Your data, your choice

Users can choose which of their digital assets will be transferred and to whom when they pass away. The digital assets that they can transfer include data in Cloud Gallery, Contacts, Notepad, Calendar, and Huawei Drive. Users can add family and friends as their digital asset inheritors. An access key is then generated for the HUAWEI ID. This is used for subsequent system authentication and is managed and transferred by the user.



Ensuring data security with multi-level authentication

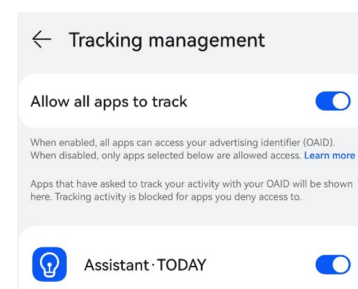
The inheritor has to pass a multi-level verification process to gain access to the digital assets. Their identity and access key have to be verified, and the supporting materials must pass a manual review.



This feature demonstrates Huawei's efforts to incorporate a human touch into its technologies and its commitment to users' and their data rights. Every user has the right to leave their data on the cloud for their next of kin to cherish.

App tracking management

Mobile apps now play a significant role in people's everyday lives. For example, they have become the main way that people obtain information and shop online. However, apps may collect, use, and share users' sensitive data, such as location, contacts, and call records, without users' consent or knowledge. The data may be used for targeted advertising or other forms of marketing, or be disclosed to third parties, and this may put users at risk. Therefore, it is important to monitor apps that track user activity to keep users safe and to protect their data.



People are more aware of personal data and privacy protection and attach greater importance to it these days. They prefer to be informed about how and why apps use their personal data and like to be able to manage app tracking permissions.

HarmonyOS 4 offers more advanced app tracking management. Tracking management is a one-stop platform that allows fine-grained management of app tracking permissions. Users can choose whether to allow an app to track their activities in other apps and online, which determines whether their personal information is shared. In this way, users maintain control over their data.

HarmonyOS 4 also prevents developers from obtaining Open Anonymous Device Identifiers (OAIDs) without authorization. If a user allows an app to track their activities, the app can obtain the OAID and integrate the data collected by the app with the data collected by a third party, or data collected by a third-party app, website, or service through the OAID. After integration, the information may be used for personalized advertising, and personalized recommendations or content tracking. The app developer can also share the information with data agents, which may enable the integration of the user's data with public data from other users and devices. If a user does not allow an app to track their activities, the app cannot access the OAID information.

App tracking management allows users to choose whether apps can track their activities and whether their personal information is collected and used by the app. This protects users' privacy because it gives users more control over their data and it prevents personal information from being leaked or disclosed.

Responsible supply chain

Sustainable development is far more than a strategic goal of a single enterprise itself — the involvement of supply chain partners is crucial in achieving this goal. This is a point that enterprises should not overlook.

Huawei incorporates sustainability into its procurement strategies and processes, and sets sustainability as a criterion during supplier qualification and selection. It requires its suppliers to comply with applicable laws, regulations, and sustainable development agreements.

In procurement activities, it guides its suppliers towards continuous improvement and effective risk monitoring and control, maintaining the overall health of the supply ecosystem.

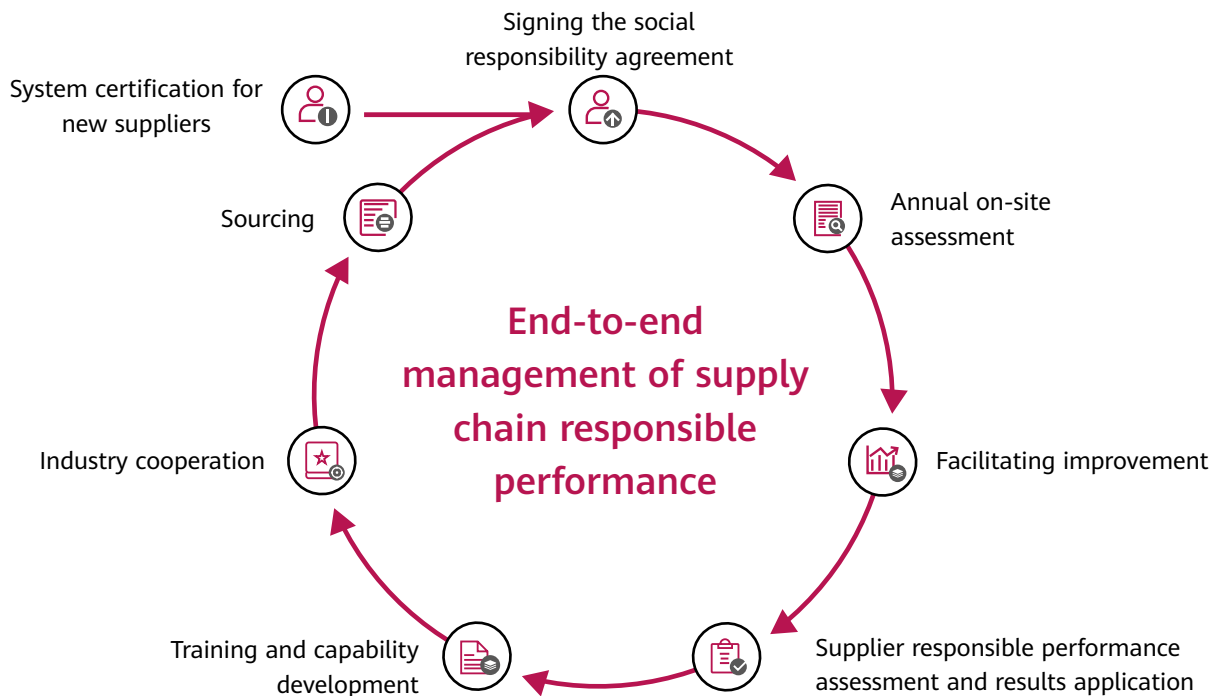
From September 2022 to August 2023, Huawei Device conducted a total of 217 sustainability reviews on its suppliers to ensure that its industry chain is responsible and achieves certain standards.

Responsible supply chain

In accordance with multiple international standards and rules (e.g. ISO 26000, ISO 14001, ISO 45001, SA8000, ISO 14064), industry standards (e.g. RBA and JAC), and international principles (e.g. UNGP), we developed the *Huawei Supplier Social Responsibility Code of Conduct*, which raises the standards of our suppliers' CSR. This document intends to encourage cross-party cooperation with our suppliers regarding mutual environmental, social, and labor responsibilities.

Labor, and human rights		Occupational health and safety		Environmental protection		Business ethics		Management systems	
Freely chosen employment	✓	Fire safety	✓	Environment permission report	✓	Honesty and integrity	✓	Corporate commitments and management responsibilities	✓
No child labor	✓	Hazardous chemical management	✓	Environmental requirements for products	✓	Intellectual property rights	✓	Risk assessment and management	✓
Protection of minors	✓	Occupational health management	✓	Pollution prevention	✓	Fair transaction/ advertising and competition	✓	Upstream suppliers management	✓
Working hours	✓	Security defense for devices	✓	Energy saving and emission reduction	✓	Identity protection and non-retaliation policy	✓	Internal audit and management review	✓
Compensation and benefits	✓	Hazardous operation surveillance	✓	Carbon emission reduction	✓	Responsible mineral procurement	✓		
Humane treatment	✓	Occupational injury management	✓			Privacy protection	✓		
Non-discrimination	✓	Emergency planning	✓						
Free association	✓	Dormitories and canteens	✓						
		Absolute rules	✓						

Huawei has established a complete responsible supply chain management process and mechanism from sourcing to officially welcoming suppliers into cooperation and even the cooperation phase.



Huawei Supplier Social Responsibility Code of Conduct

<https://www.huawei.com/en/sustainability/sustainability-report/huawei-supplier-social-responsibility-code-of-conduct>

Huawei's CSR red lines in procurement

1. Use of child labor.
2. Use of prison labor (including using prisons as suppliers or subcontractors) or forced labor (including restricting personal freedom or detaining personal identity documents).
3. Violence, physical punishment, sexual harassment, illegal body searches, cross-gender body searches, and other similar behaviors.
4. Salary payments below the local minimum wage.
5. Negligence that leads to major fires or explosions.
6. Working conditions that seriously endanger personal health and safety or lead to fatal incidents.
7. Illegal emissions of any hazardous or toxic waste, including waste water, gas, and residue.
8. Negligence that leads to media crises or serious mass disturbances, such as collective labor disputes, mass brawls, mass poisoning, unnatural deaths, or other incidents causing casualties.
9. Unsafe and unhealthy working environments that lack effective measures to prevent potential health and safety accidents, or diseases that may be caused due to exposure in the workplace (e.g. collective infections).
10. Corruption or dishonest acts that violate the requirements of "no bribery, no gifts, no conflicts of interest, no falsification, no cutting corners, no fraud, and keeping promises".

| Environmental requirements on every supplier

Hazardous substance control

In adherence with different laws and regulations, Huawei has formulated requirements on restricted substances in purchased products, packaging materials, and batteries, which suppliers must meet.

We also require our suppliers to improve their management of hazardous substances. In 2020, Huawei Device successfully pushed suppliers to completely prohibit the use of nine hazardous substances (such as benzene, toluene, and xylene) in the cleaning, degreasing, and demoulding agents during the manufacturing of devices (including

mobile phone, PC, tablet, audio product, and wearable), and provided guidance for suppliers to cut and even stop the application of five substance types, such as hydrofluoric acid and nickel acetate. In 2021, Huawei upgraded its standards for managing allergens to a level far higher than the common standards in the industry, in a bid to strengthen user health safety without compromising user experiences. In 2022 and 2023, Huawei provided enablement training in hazardous substance management for suppliers, covering more than 2,000 trainees.

- Huawei has incorporated its requirements for hazardous substance management into the procurement process and managed hazardous substances throughout the supplier lifecycle.

Threshold	>	System certification	>	Agreement signing	>	Risk assessment	>
Only cooperating with QC 080000 certified enterprises		Reviewing new suppliers' environmental protection systems for products		Signing environmental protection agreements with all suppliers		Annually assessing environmental protection risks caused by suppliers' products and identifying high- and moderate-risk suppliers	
Annual review	>	Capability improvement	>	Performance result use			
Conducting annual reviews of environmental protection performance of high-risk suppliers' products Following up on problem solving		Providing training for suppliers Organizing environmental protection-related TQC training		Leveraging performance management to push suppliers to invest and improve themselves			

Huawei Device regards the QC 080000 certification as the entry threshold for new suppliers. All of our suppliers, with whom we started cooperating in 2022 and 2023, have passed the QC 080000 certification. We have also reviewed all of our new suppliers' environmental protection systems for products, ensuring that environmental protection risks concerning materials are identified in the sourcing phase.

- Huawei has incorporated environmental protection into its requirements for products and managed it during product development and mass production.

Requirement setting	>	Material selection	>	Sample approval	>	Mass production control
Specifying a project's environmental protection requirements and passing the RFI/requirements to suppliers		Having suppliers select materials that are eco-friendly, and assessing the selection resultst		Having R&D personnel review suppliers' MCD Conducting diagnostic tests on high-risk materials/products		Conducting environmental protection certification of products Inspecting the materials provided by suppliers Managing changes

Zero waste to landfill

Since 2020, Huawei has worked with TÜV Rheinland to help Huawei's suppliers obtain the Zero Waste to Landfill Management System Certificate. By implementing risk control into each phase of the waste lifecycle, enterprises that employ the system can find the best possible solution for turning waste into resources, thereby reducing waste and landfills. This helps eliminate waste and take further steps towards green development.

Zero waste to landfill is merely the first step. A reliable waste management mechanism is critical for effectively reducing waste landfills and achieving long-term resource efficiency. In 2023, a new assembly supplier of Huawei obtained the Zero Waste to Landfill Management System Certificate, with a 97.23% diversion rate (A 90% diversion rate is the generally accepted metric for zero waste to landfill).

| Responsible management of raw materials

Huawei is committed to the responsible procurement of mineral raw materials used in our products, including tin, tantalum, tungsten, gold, and cobalt. The responsible management of minerals is an integral part of our procurement CSR management system, and is checked by us during our supplier qualification, supervision, and auditing processes.

As a downstream company in the mineral supply chain, Huawei does not directly purchase any minerals, and there are at least seven tiers between Huawei and mining companies. Huawei requires that our suppliers do not purchase conflict minerals to ensure that their products never directly or indirectly fund armed conflicts or, similarly, any other inhumane acts. Huawei also actively works with global industry peers through industry initiatives like the Responsible Minerals Initiative (RMI) and the Responsible Cobalt Initiative (RCI). Together with partners both up and down the supply chain, we conduct supply chain surveys, create a complete list of all related smelters, and push these smelters to apply for or maintain the Responsible Minerals Assurance Process (RMAP) certification.

Huawei has established a risk-based system for the responsible management of minerals in accordance with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals. Every year, through this system, we identify suppliers of five conflict minerals: tin, tantalum, tungsten, gold, and

cobalt. Using the Conflict Minerals Reporting Template (CMRT) and the Cobalt Reporting Template (CRT), we urge suppliers to identify and investigate all smelters within their supply chain. We also require that all identified smelters do not purchase minerals from conflict-affected and high-risk areas (CAHRAs), and urge smelters that have not obtained the RMAP certification to get the certification within a specified timeframe when necessary.

In 2022, Huawei conducted due diligence on the mica supply chain, in addition to that on tungsten, tin, tantalum, gold, and cobalt supply chains. In 2023, Huawei developed and rolled out its IT system for managing the responsible mineral supply chain, which enables more efficient and responsible management of minerals in the upstream supply chain.

Huawei, together with industry organizations, local governments, and a diverse range of stakeholders, will continue to take reasonable and effective measures to improve supply chains and practice responsible supply chain management, thereby developing stable, orderly, diversified, responsible, and sustainable supply chains.

Huawei Statement on Responsible Mineral Supply Chain Due Diligence Management
<https://www.huawei.com/en/declarations/huawei-statement-on-responsible-mineral-supply-chain>

Working with and contributing to communities

Creating jobs and cultivating talent

Huawei needs global talent to create well-run, diverse teams. Huawei Device has created over 75,000 jobs, and more than 80% of the jobs outside China are filled by local employees. Our employees from across the globe have helped us understand and absorb a rich mixture of global culture, broadened Huawei's international vision, and

promoted local employment and economic development.

Huawei is committed to treating employees equally regardless of their gender, race, ethnicity, or religious beliefs, and promises to ensure that all employees have equal opportunities for jobs, learning, and career growth.



Diversified and inclusive workforce development

Remarkable talent underpins sustainable development, and therefore creating a diverse team is key to helping us remain competitive and build products that consumers trust and enjoy. Huawei gathers global talent and provides multiple career paths for employees to unleash their potential and create engaging and innovative experiences to consumers.

In 2022, we invited managers and business experts to share their hands-on experience, along with

industry experts, to share their knowledge with our employees, and help our employees get a clearer picture of the industry's landscape and hone in on personal development. We also provided over 15,000 online courses and more than 2,000 systematic, in-person, premium courses. These courses attracted a total of more than 250,000 individual enrollments, and the training from last year exceeded 2 million hours, a year-on-year growth of more than 33%.



25 or under: 9%

26-35: 55%

36-45: 34%

46 or above: 2%



Doctor's degree: 4%

Master's degree: 58%

Bachelor's degree: 37%

Other: 1%

Valuing employees' physical and mental health

We want our staff to strike a healthy balance between work and life, and create an environment that promotes employee well-being.

Societies

Some employees have taken the initiative to set up 13 cultural and sports interest groups. Wow Week, a program held in Shenzhen, Wuhan, Shanghai, and some other regions, was a great opportunity for employees to show off their ideas and communicate with like-minded people. In addition to this joyful program, which consisted of cross-discipline speeches, idea fairs, carnivals, and online interaction, employees were also invited to many other team activities, such as 3+1, Family Day, jogging, and Cultural Festival for the Programmers' Day. All of these have helped enhance mutual understanding and trust among employees from different cultural backgrounds, creating a favorable organizational atmosphere.

Care for employees' physical and mental health

Employees are reminded to watch their own health, and managers are encouraged to care about the well-being of their employees. We have continuously pooled internal and external health assurance resources to provide employees with various physical and mental health knowledge and services. We also purchase competitive commercial insurance, including accidental injury insurance, major illness insurance, life insurance, and overseas business travel insurance, for employees. To further help employees manage risks, we provide a variety of insurance resources and assist employees with planning family insurance. Our all-around emergency response mechanism is another line of defense for employees' health. In addition to publicizing emergency response knowledge, we have arranged first aid training and drills, as well as first aid volunteer certification, to ensure quick responses to emergencies.

Office environment

Huawei respects the lifestyles, customs, beliefs, and habits of its employees and strives to ensure all employees work in a comfortable environment. To this end, we have built gymnasiums, coffee shops, libraries, nursing rooms, and other facilities on our campuses and provided diversified personalized services for employees.



Huawei campus in Xiliubeipo Village in Dongguan, China



Consumer BG Wow Week 2023

Community activities for public good

As a responsible corporation, Huawei abides by local laws and regulations. We maintain extensive communication with local consumers, employees, suppliers, and other stakeholders, actively engage with local communities, carry out various activities in residential communities, and fulfill our responsibilities and work with local community organizers to contribute to community development. We value local communities and strive to give back as much as we can.



Community activities conducted by HFS

Serving residential communities: Regularly providing Discover HUAWEI sessions for the elderly to enrich their life

HFS takes the initiative to bond with residential communities. We regularly invite community residents to HFS or to the local activities organized by HFS, for public good.

related product experience events through Huawei's Smart Wearable and Health Product Line, and have delivered special photography courses to the elderly, fulfilling our commitment to creating technology that benefits all.

In 2022 and 2023, HFS invited the elderly to health



Health and fitness activities targeted at residential communities, caring for everyone's health

HFS regularly invites product line experts to talk directly to consumers. By doing so, consumers are able to learn how to leverage the latest technologies to help them with their health and day-to-day life. HFS also organizes a number of popular activities, such as urban cycling, indoor surfing, concerts, and urban photography, on a monthly basis.



HFS summer camp: Creating a memorable vacation for children through technology-focused activities

In 2023, eight HUAWEI Flagship Stores across Shenzhen, Shanghai, Wuhan, Qingdao, and Nanchang, organized a summer camp, which featured three series of activities: animation creation, product design, and scientific experiment. Participants were left impressed by the stories behind the products told by Huawei experts, and found the other activities very engaging.



Appendix

| About This Report

Time scope

This report covers the period from September 1, 2022 to August 31, 2023. Some content in this report may cover the time before or after this period.

Scope of this report

The subject of this report is Huawei Device Co., Ltd., which includes all of its global branches, subsidiaries, and directly affiliated institutions.

Concerning titles

For easier readability, "Huawei consumer business", "Huawei Device", "Consumer Business Group", "Consumer BG", or "we/our/us" in this report refers to Huawei Device Co., Ltd., unless otherwise specified.

Data sources and reliability statement

The data and stories in this report mainly come from Huawei's official documents, statistical reports, and publicly available information. Huawei promises that this report does not contain any false or misleading description and Huawei is responsible for the authenticity, accuracy, and integrity of the content thereof.

Obtaining and responding to this report

This report was published in December 2023 in both Chinese and English as an independent enterprise sustainable development report. If you would like to view or download this report online, please visit:

<https://consumer.huawei.com/en/sustainability/sustainability-report/?toCampaign>

Huawei Device Co., Ltd.

Huawei Industrial Base

Shenzhen 518129, P. R. China

Tel: +86-755-28780808

<https://consumer.huawei.com/en/>

Download link: <https://consumer.huawei.com/en/sustainability/sustainability-report/?toCampaign>

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