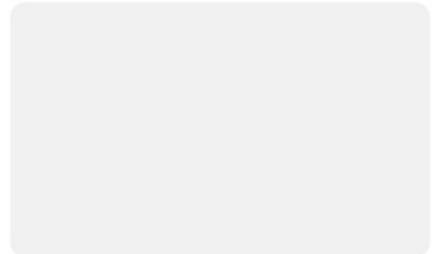
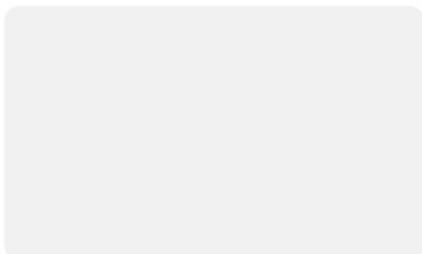


2021

HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD.

Environmental, Social and Governance Report







About Hikvision

■ **Leading the Future of AIoT**

Hikvision is committed to serving various industries through its cutting-edge technologies of machine perception, artificial intelligence, and big data, leading the future of AIoT: through comprehensive machine perception technologies, we aim to help people better connect with the world around them; with a wealth of intelligent products, we strive to identify and satisfy diverse demands by delivering intelligence at your fingertips; through innovative AIoT applications, we are dedicated to empowering every individual to enjoy a better future by building an intelligent world that is more convenient, efficient and secure.

Message



Chief Compliance Officer
(CCO), Hikvision

Huang Fanghong

In the blink of an eye, it's the 4th year Hikvision took the initiative to release ESG (Environmental, Social and Governance) report. The past four years have been a time fraught with sudden and perplexing changes in the international environment. Reverse globalization, trade wars, tech wars, COVID-19, geopolitical conflicts and economic recessions and other unexpected clashes seem to have shattered many of the expectations that we have taken for granted for peaceful co-existence, win-win cooperation, sustainable development, and etc. Uncertainty becomes the only certainty.

Amid such uncertainty and complexity, we reflect on the meaning of ESG as our work progresses each year. "E" (Environmental) should address the relation between the company and the environment, "S" (Social) explores the relation between the company and society, and "G" (Governance) probes into the relation between various interest groups within the company, so as to straighten out all relations, foster a common understanding and measure the company's business objectives from a broader perspective. Through every bit of effort, we continue to improve, creating value for customers and thereby for society, while building a better platform for employees and rewarding our shareholders.

Technology companies have expanded beyond their countries of origin to become global enterprises, armed with globalized talent, supply chain expertise, marketing networks and global partners and customers. But now, the idea of a country of origin as a label attached to global enterprises is fading. Contradictory to this trend, national politics remains country-centric in nature and features national interests prominently. When the cross-national enterprises encounter geopolitics and when the business needs for globalization encounter national political demands, how can enterprises navigate this challenge successfully? Hikvision is not the only company that is experiencing growing pains from these issues and I think all global enterprises around the world may confront the same problem now or in the future.

As the world changes drastically, assumptions made today may no longer apply tomorrow. Every company is in the process of adapting, changing and iterating. Things are difficult today and might be even harder tomorrow. But we are confident that the day after tomorrow will be a better day.

April 2022

Message

Hikvision established the Carbon Neutrality Commission in December 2021, aiming to improve the top-level design and drive the company's carbon neutrality management through a top-down approach. We will implement new schemes and modes of energy conservation, carbon reduction and green development primarily from such aspects as empowerment with technology, intelligent manufacturing, green operation and low-carbon products, thereby facilitating the green and low-carbon development of the company, empowering the upstream and downstream of the industrial chain, and making our own contribution to enable the entire society to work toward and realize China's "3060 dual carbon" target in an orderly manner.

Hikvision pushes green and low-carbon development primarily through technological innovation, which empowers industries and boosts transformation and upgrading thanks to innovative technologies, products and solutions. Through empowerment with technology, the company helps refine urban governance, improve services concerning the people's wellbeing, boost the development of green energy and strengthen ecological improvement and environmental protection. Technological innovation and empowerment with technology are the two major approaches through which Hikvision facilitates low-carbon development across the industrial chain and contributes to China's "3060 dual carbon" target.

Meanwhile, the company actively pursues green and low-carbon development some aspects such as green supply chain, low-carbon product design, future factory and near-zero carbon park operation. So far, Hikvision has applied environmental management system standards to comprehensive suppliers screening, vigorously implemented China's energy conservation certification in product design and manufacturing, and extensively adopted such initiatives as power generation using clean energy resources and transformation of energy-saving technology in the operation and management of parks to control the growth of the total annual energy consumption of the company. While ensuring high-quality development, the company strives to increase energy efficiency and implement emission control and reduction.

Looking to the future, the Carbon Neutrality Commission will integrate the company's business departments, supply chain, R&D, compliance and other relevant departments to establish a sound corporate carbon neutrality management and assessment system from the top down, work on the company's green development action plan, identify the carbon neutrality targets and implementation paths of its own and part of the value chain, and work with the whole value chain to facilitate achieving carbon neutrality target, thereby contributing to the green and low-carbon transformation of the whole society.

Carbon Neutrality Commission of Hikvision
April 2022

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ESG Management

- ESG Management Philosophy and Framework
- ESG Core Contents and Progress
- ESG Honors and Awards
- Stakeholder Engagement

■ ESG Management Philosophy and Framework

By integrating corporate social responsibility and sustainable development philosophy into our business, and driven by technological innovation, Hikvision is committed to becoming a well-respected global technology company. Based on the aforementioned ESG management philosophy, combining with the company's core competencies and the demands and expectations of different stakeholders, we have identified four important aspects as the company's core ESG development contents and focuses: Technology for Goodwill, Integrity and Compliance, Green and Low-Carbon Development, and Harmonious Co-existence. With the support of Hikvision's various processes, a closed loop from information and report disclosure to upgrading and continuously improving ESG management has been formed based on the "Plan, Do, Check and Action" (PDCA) cycle.



ESG Core Contents and Progress

• Create Goodwill with AIoT Technology

Based on innovative and intelligent products and technologies, we will serve and give back to the society with kindness in mind. We are dedicated to empowering every individual to enjoy a better future by building an intelligent world that is more convenient, efficient and secure.

• Green and Low-Carbon Development

Adhering to the idea of green, sustainable development, we will continue to enhance environmental management, optimize the resource usage, reduce pollutant emissions and explore low-carbon technologies in the process of business operation and technological innovation.

Technology for Goodwill

By integrating corporate social responsibility and sustainable development philosophy into our business, and driven by technological innovation, Hikvision is committed to becoming a well-respected global technology company.

Green and Low-Carbon Development

Harmonious Co-existence

• Do the Right Thing and Go Further with Compliance

We will conduct our business in a manner consistent with higher standards of business ethics and pursue a business philosophy of honesty, integrity and legal compliance as the cornerstone of our sound, long-term global growth.

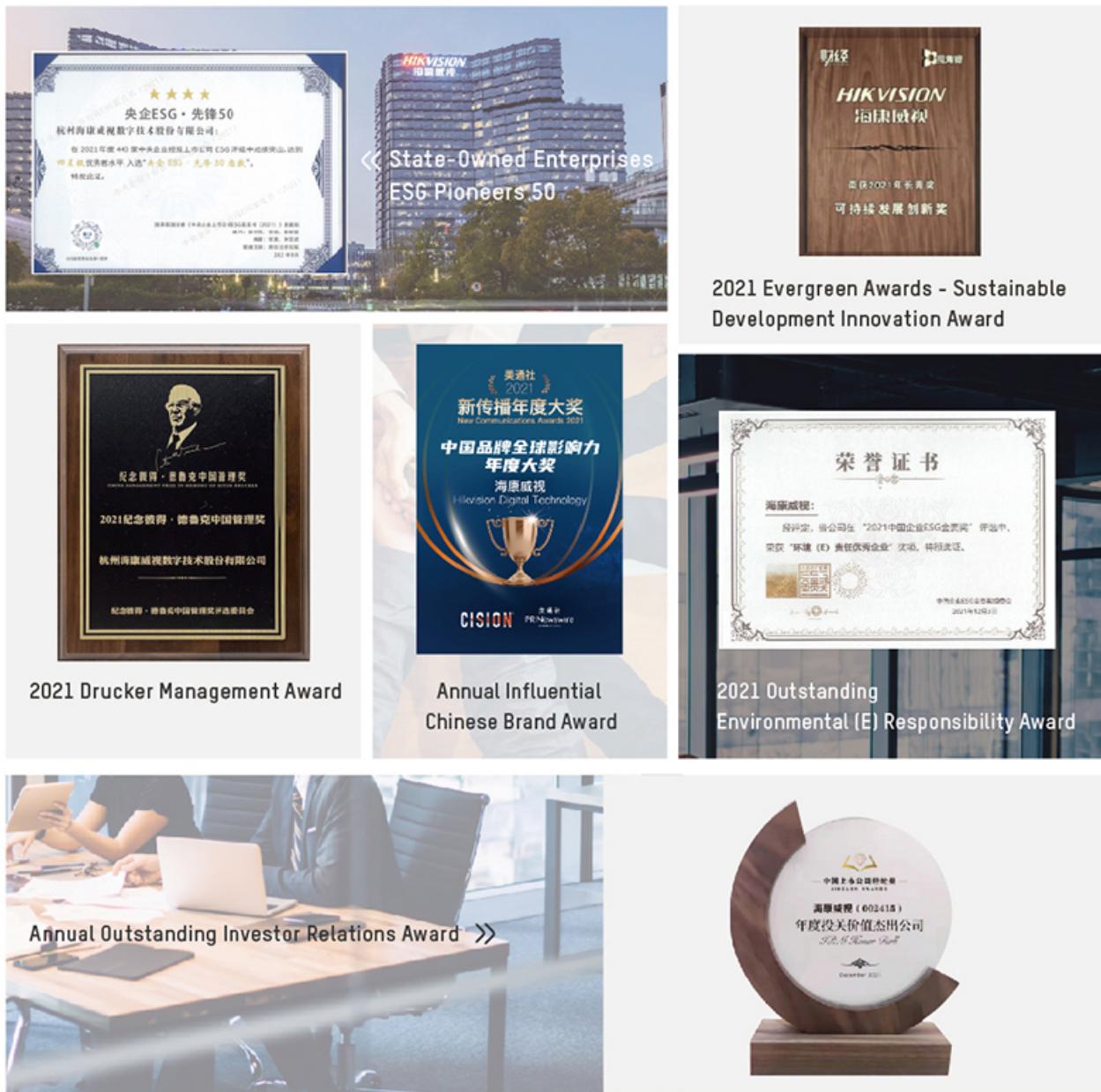
• Partnership and Harmonious Co-existence

We are committed to creating value for customers, improving social well-being, providing a solid platform for employees and working together with partners to build a technological ecology defined by harmonious co-existence and sustainable development.

*Note: For detailed ESG progress of the company, please refer to Appendix 1: KPI Tables for the key ESG performance data of 2021.

ESG Honors and Awards

During the reporting period, Hikvision has won multiple awards, including the *State-Owned Enterprises ESG Pioneers 50*, the *2021 Evergreen Awards - Sustainable Development Innovation Award* hosted by *Caijing Magazine*, the *China ESG Golden Awards - 2021 Outstanding Environmental (E) Responsibility Award*, the *2021 Drucker Management Award*, the *Annual Influential Chinese Brand Award* hosted by *PR Newswire*, the *Annual Outstanding Investor Relations Award* hosted by *China Fund News*, the *2021 Outstanding Enterprises on ESG* hosted by *Sina Finance*, the *Top 100 Most Valuable Chinese Main Board Listed Companies* in the 15th *China's Most valuable Listed Company Selection* hosted by *Securities Times*, the *Top 100 Companies with High Quality Development* award in the 2021 *China's Listed Company with High Quality Development Selection* hosted by *Yinshi Finance and Economics*.



Stakeholder Engagement

We are well aware that the trust and support of stakeholders is fundamental to our existence and development, Hikvision has long been committed to building open, transparent, candid, convenient and two-way channels to communicate with stakeholders, acting proactively to understand their opinions, demands and expectations, and respond in a timely manner, striving for win-win cooperation and harmonious development.

In preparing for the 2021 ESG report, we investigated the six types of stakeholders, updated their focuses, sorted through and optimized their communication and participation mechanism, so as to better respond to the demands and expectations of stakeholders and achieve comprehensive value creation that takes into account multiple parties.

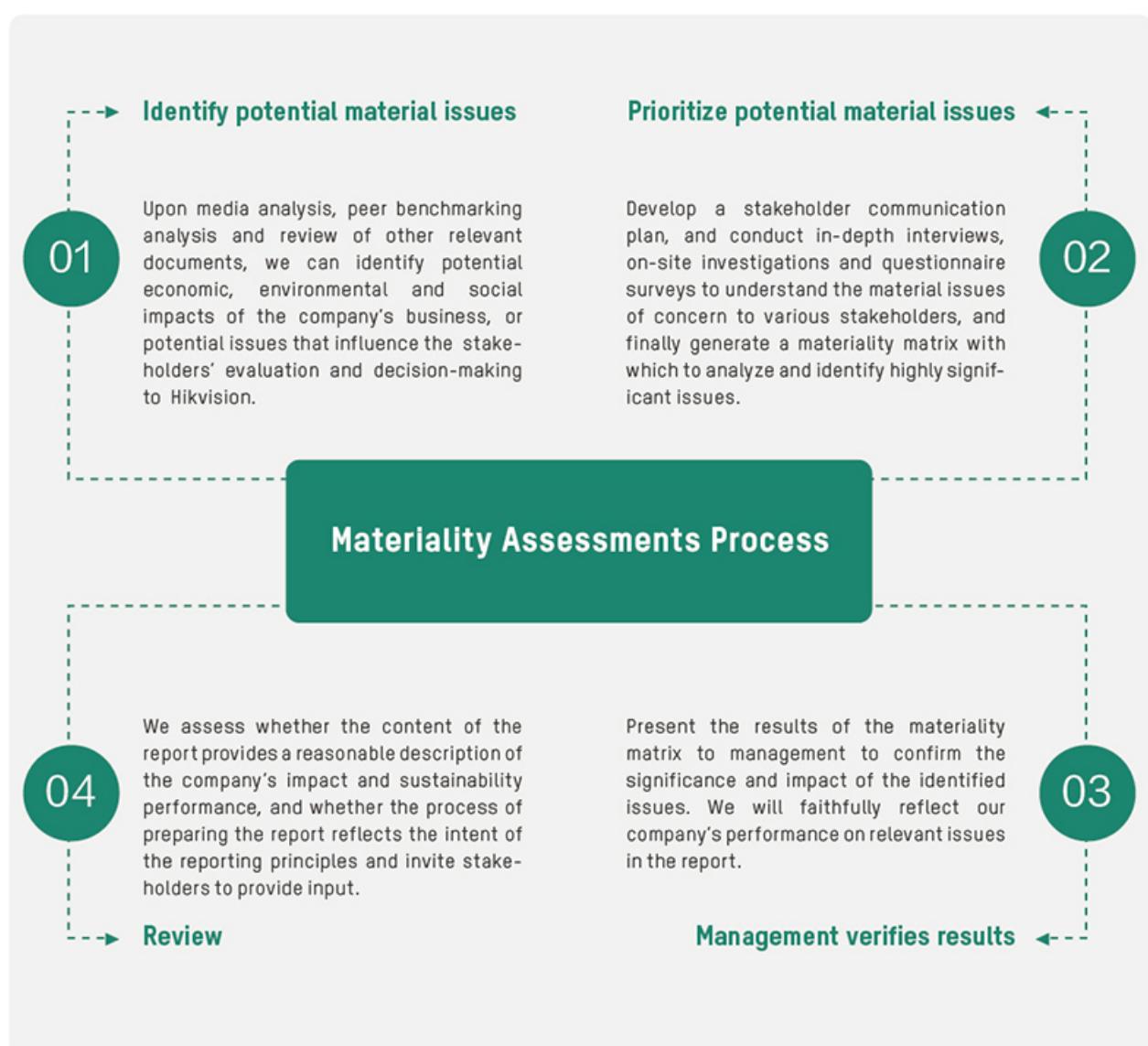


Stakeholder	Issue of concern	Way of communication & response	Frequency
Shareholders/investors	Economic growth	Regular report/interim announcement	Regular/irregular
	Sustainable operation	Site inspection	Regular/irregular
	R&D innovation	Telephone communication	Irregular
		Email correspondence	Irregular
		Performance briefing/roadshow	Regular/irregular
Government & regulators	Tax payment	Regular report/interim announcement	Regular/irregular
	Addressing social issues	Letter	Irregular
	R&D innovation	Site inspection	Regular/irregular
	Environmental protection		
Customers	R&D innovation	Hotline	Irregular
	Product safety and quality	Information feedback	Irregular
	Privacy and information security	Satisfaction survey	Regular/irregular
Employees	Compensation and benefits	Health check-up	Regular
	Professional development	Professional training	Regular/irregular
	Occupational health and safety	Activities	Regular/irregular
	Employee care		
Partners	Honesty and trustworthiness	Public tendering	Irregular
	Supply chain management	Site inspection	Regular/irregular
	Data security	Suppliers' meeting	Regular/irregular
Communities		Activity	Irregular
	Community communication	Media coverage	Regular/irregular
	Environmental protection	Interview and investigation	Irregular

■ Identification of Material Issues

During the reporting period, we organized interviews or surveys with nearly 180 internal and external stakeholders to learn about and analyze our material ESG issues. Through this process, we have gained a thorough understanding of the expectations, suggestions and development needs of stakeholders for Hikvision and we have analyzed the material issues. All these efforts are expected to lay a foundation for us to improve the company's ESG management and information disclosure.

Materiality Assessments Process



Stakeholder assessments of material issues in 2021 were as follows:

In the category of "corporate operation", "business ethics" and "sustainable operation" were raised to high importance, while "economic growth" and "factory automation" were reduced to moderate importance; the issue of "R&D innovation" was added under "operation practices"; in the category of "environment", "biodiversity" was added, and the "packaging materials use and management" was raised to a moderate importance; "addressing social issues" was added to the "community" category.

Finally, 10 issues of high importance, 14 issues of moderate importance and 3 issues of low importance were identified. Among them, we will focus on the disclosure of highly important issues in the subsequent chapters of the report.

10

Issues of high importance

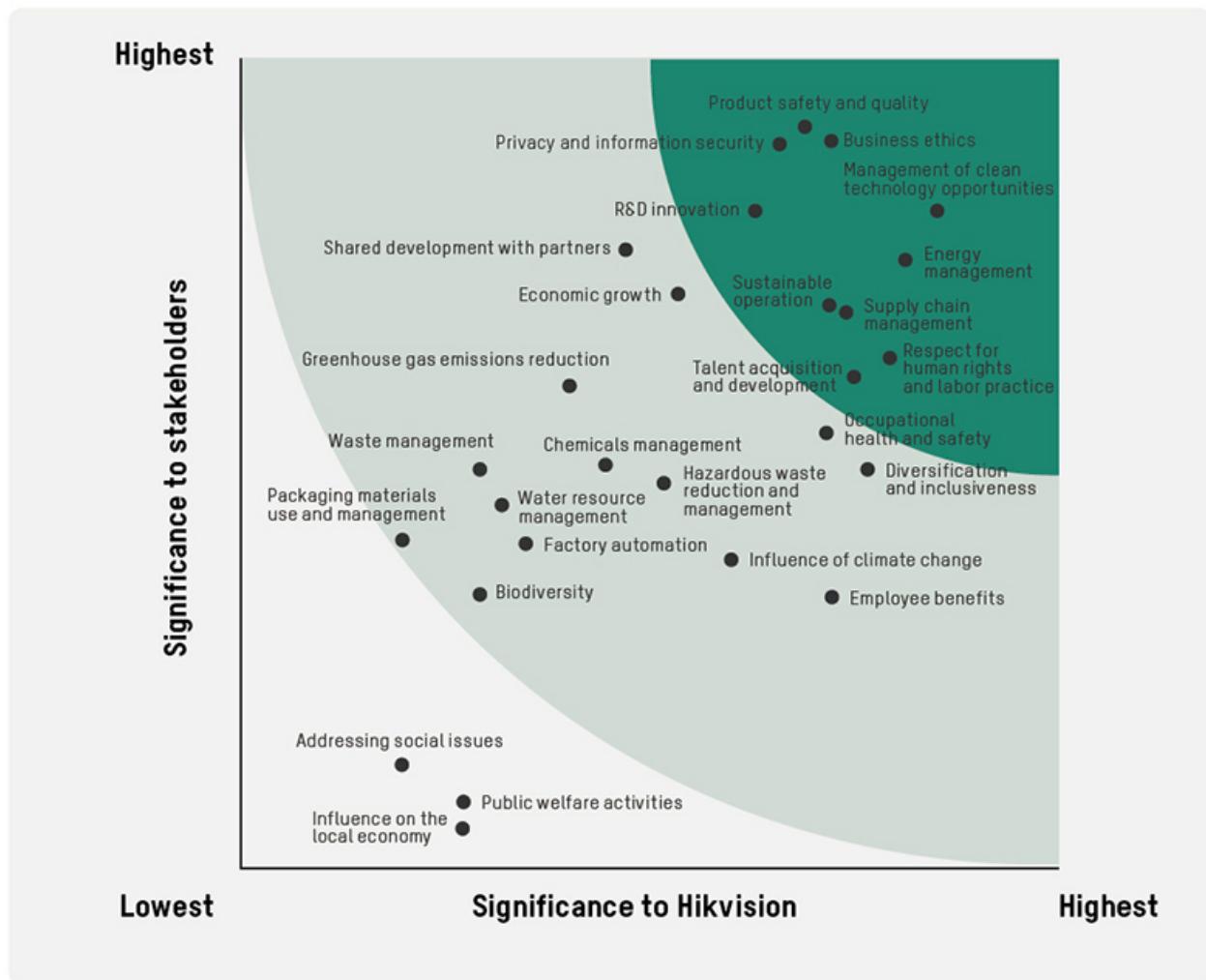
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Issues of moderate importance

3

Issues of low importance





Level of importance	Category	Issue	
High importance	Corporate operation	01	Sustainable operation
		02	Business ethics
	Employment	03	Talent acquisition and development
		04	Respect for human rights and labor practice
	Environment	05	Energy management
		06	Product safety and quality
	Operation practices	07	Management of clean technology opportunities
		08	Privacy and information security
		09	Supply chain management
		10	R&D innovation

Level of importance	Category	Issue	
Moderate importance	Corporate operation	11	Economic growth
		12	Factory automation
	Employment	13	Occupational health and safety
		14	Diversification and inclusiveness
	Environment	15	Employee benefits
		16	Greenhouse gas emissions reduction
		17	Hazardous waste reduction and management
		18	Chemicals management
		19	Packaging materials use and management
		20	Water resource management
		21	Waste management
		22	Influence of climate change
		23	Biodiversity
	Operation practices	24	Shared development with partners

Level of importance	Category	Issue	
Low importance	Community	25	Public welfare activities
		26	Influence on the local economy
		27	Addressing social issues



Technology for Goodwill

From chip revolution to face recognition, artificial intelligence to the Internet of Everything, the digital economy to genetic breakthroughs... Technological innovation has become a revolutionary force for advancement in all fields of the society. While bringing convenience to the general public, technology is also causing unprecedented ethical dilemmas and moral impacts. How to use technology to do good and benefit mankind has emerged as an inevitable question that the scientific and technological community has to answer.

Humans are the ones who can decide to use technology for good or evil. Gunpowder can be made into both spectacular fireworks and lethal weapons; AI can be used to locate missing children or to create algorithms that could possibly harm the interests of a specific group. Technology is used for a better world once people hold goodwill.

How to define "goodwill"? Socrates believed that "goodwill" is about following natural order and rules. It promotes individual liberty, self-control and autonomy, and benefits the society. How to build a better world from enterprise side? On the one hand, it should harness the power of science and technology to make people stronger, the society more progressive, and life better. On the other hand, it should ensure that technology serves a positive purpose without jeopardizing social ethics, so that technology can do good.

Hikvision adheres to the philosophy of "Technology for Goodwill". Dedicated to AIoT, based on our innovative and intelligent products and technologies, we incorporate CSR and sustainability into our operations. Hikvision shoulders the responsibility for common development and progress with the society, and helps make our natural and social environment more harmonious and sustainable. Active efforts are spared to develop intelligent technology, intelligent equipment, intelligent application, and intelligent ecosystem, as well as promoting the deep integration of digital technology with the real economy, green and low-carbon development. By building smart cities and digital businesses powered by Cloud-Edge Fusion, Intelligent IoT-Information Network Fusion and Big Data-AI Fusion, we do good for the society and people's livelihood.

- **Urban Management**
- **Industry Empowerment**
- **Low-Carbon Transformation**
- **Innovation Management**

■ Urban Management

Cities are an essential support for the survival and development of the modern society. An efficient and harmonious city is decisive to the wellbeing of all of us. The evolution of technologies such as AI and big data has given birth to new combinations of information technology and urban governance. Hikvision has created a Big Data-AI Fusion Base for Smart City. It provides platforms, algorithms, models and services for smart city application developers, allowing them to rapidly build smart city applications. We aim to speed up the construction of smart cities by empowering urban application scenarios such as public transport, ecosystem construction, livelihood services, and pollution and carbon reduction based on Hikvision's perception platforms, data platforms, application platforms and standards, O&M, security systems etc.



■ Improving Public Transport

Working under the tenet of "benefiting the country with cloud mapping and data", the company applies a digital multidimensional perception and collection system and a deep learning intelligent application system to provide a series of industrial solutions such as road network operation monitoring and driving safety. They are designed for more digital and intelligent urban traffic management and urban smart transport construction, improving people's travel efficiency.

Transportation - Case No.1 Intelligent Management Helps Ease Traffic Congestion in Deyang

Sichuan's Deyang is a typical small and medium-sized city in China, characterized by traffic congestion during peak hours every day. With the increase in the number and activity of motor vehicles in recent years, the conflicts between people, vehicles and roads become outstanding. Urban traffic congestion control is a systematic project that needs to use scientific and technological means to accurately and comprehensively excavate traffic operation patterns in the city, and to provide scientific control strategies and optimization methods adapted to road network conditions, thereby tackling conflicts in a targeted manner.

Through its intelligent traffic signal control system, Hikvision provided advanced means and closed-loop control strategies for congestion control in Deyang. On the one hand, an intelligent analysis and decision-making system is implemented in combination with the basic data on Deyang's traffic flow and related theoretical systems to discover and analyze the traffic operation patterns in the city. And through starting/ending point analysis covering the whole city, we've identified the sources of traffic that caused congestion from both macro and micro perspectives. On the other hand, the data from traffic flow detectors, integrated radar-video machines, electronic police and other equipment is connected to intelligent signal machines, and adaptive algorithms are used to respond to traffic control needs in real time, so as to eliminate major points of traffic congestion. At the same time, through big data analysis and processing of massive traffic data, and the use of regional adaptive control technology, regional coordinated control is enabled from one section to the whole area, effectively alleviating traffic congestion during peak hours, and improving the overall efficiency of urban traffic circulation.

According to the *Report on Sustainable Transport in China* released by the Ministry of Transport in October 2021: "Transport is one of the key areas of energy consumption and greenhouse gas emissions. Thus strengthening energy conservation, advocating green travel, reducing emissions, energy and resource consumption, and limiting the environmental impact of transport are important contributors to environmental sustainability." The *Digital Carbon Neutrality White Paper* published by the China Academy of Information and Communications Technology in December 2021 also proposes that "by analyzing and quantifying the carbon emission structure of each section of transportation, and using digital technologies such as intelligent tools, public transport, and road network operation, we are able to help the transport industry to reduce emissions by 10%-33%".

Harnessing Hikvision's intelligent traffic signal control system, we will assist and empower traffic administrations across China to optimize the road network, reduce vehicles' on-road time, boost traffic operation efficiency so as to help reduce emissions from public transport.



* Refer to the GB/T 33171-2016 *Specification for Urban Traffic Performance Evaluation* for the calculation methodology.

Since its launch in 2019, the system has addressed a total of

560 problems

such as frequent traffic accidents and disorderly traffic in some road sections and intersections

Eliminated congestion and disorder

32 points

The traffic efficiency of the city's trunk roads is increased by

18%

The traffic efficiency of emergency rescue vehicles is up by

40%

The average vehicle speed on main roads reaches

35km/h

in the morning and evening peak period

The average congestion index of the road network in peak hours on weekdays is

1.45*

The lowest in Sichuan Province

Transportation - Case No.2 Intelligent Vehicle Temperature Measurement Ensures Driving Safety in Tunnels

Vehicles running in the scorching sun for a long time are prone to spontaneous combustion of the wheels due to high temperature. If these vehicles then drive through tunnels, great safety hazards may arise. As a result, road authorities must act as soon as possible to prevent vehicles with high-temperature wheels from entering tunnels, thereby avoiding open flames and spontaneous combustion.

Hikvision assisted the Quzhou Management Center of Zhejiang Communications Investment Expressway Operation Management Co., Ltd. to build a "driving safety in tunnels" management system to enable vehicle over-temperature pre-warning. Through smart cameras and thermal imaging sensors, the system collects the temperature of the wheel of each vehicle about to enter the tunnel without stopping it, automatically obtains its plate number, and synthesizes an image with thermal sensing information, to tackle the frequent spontaneous combustion accidents of large trucks. Once any irregular temperature trend is found, the platform will display a warning/alarm pop-up window to remind the tunnel monitor, who will then remind the vehicle drivers to stop and cool the wheels through information screens and roadside broadcast along the tunnel. Vehicles with a temperature higher than 250 degrees, which means high risk of spontaneous combustion, will be stopped by a barrier gate controlled by the system from entering the tunnel.

The tunnel driving safety management system has enabled whole-process monitoring that supports "pre-warning", "ongoing tracking" and "post-review", and overcome the difficulty in manually identifying over-temperature vehicles. While detecting and handling tunnel fire accidents in advance, the system can also help tunnel operation and management authorities to accurately follow up on the overall traffic situations in tunnels and improve their ability to prevent, alleviate and control the accidents.

Addressed 8 Safety Hazards

"Since the system went live, we have addressed 8 safety hazards. Compared with the past, when accidents could only be dealt with afterwards, now we are able to warn and handle in advance, which greatly reduces the probability of accidents in tunnels." The tunnel monitor said.



Supporting Ecology Construction

Hikvision provides solutions for air, water, soil and other sectors following the principle of "protecting blue sky and clear waters with smart eyes". Our independently-developed hyperspectral inversion, spatial analysis and other technologies are applied to water environment quality detection, analysis and evaluation, allowing the company to work with partners on green ecology, and improve the environment we live in.

Ecology Construction - Case No.1

Hyperspectral + AI Combination Helps Detect Water Quality

Water pollution is increasingly severe in rivers, lakes, and reservoirs. What's worse, conventional water quality monitoring technologies are limited by high construction and O&M costs, low timeliness, and secondary pollution.

Hikvision's Hyperspectral Multi-Parameter Water Quality Monitor, powered by hyperspectral, AI, radar liquid level sensor, video perception and other technologies, is used to monitor optical irradiance characteristics and eutrophication trends of natural water bodies, and timely alarm irregularities. It serves as a crucial decision-making basis for the precise management of water pollution incidents, including emergency early warning, source traceability, targeted enforcement, and compliance with water quality standards. With it, Hikvision is expected to help the society protect clear waters and accomplish comprehensive ecological civilization.

A large lake in Jiangsu Province has applied our integrated solution of Hyperspectral Multi-Parameter Water Quality Monitor and water quality monitoring application software to enable minute-level monitoring of water quality parameters such as chlorophyll, total nitrogen, total phosphorus, ammonia nitrogen, and suspended solids. Functions like water quality monitoring, water quality comparison and analysis, and threshold pre-warning help users have real-time data on water quality, and detect water pollution incidents in time. By providing data support and scientific control basis for alarming and tracing water pollution, as well as identifying shoreline violations, the solution can improve users' comprehensiveness ability to protect drinking water sources and guarantee the quality and safety of water sources. Furthermore, the devices are not necessary to be mounted in a certain station or enter water bodies – thus free from biofouling. This greatly reduces the difficulty of monitoring and O&M, eliminates secondary pollution, and supports users to efficiently monitor water quality in the field.

In-situ monitoring, more truthful

- Using hyperspectral inversion technology for non-contact monitoring

Construction and management, more economical

- Second-level collecting 11 water quality parameters
- Mounted on poles, no station construction required

No reagents required, more **THREE** environmentally friendly

- Using hyperspectral inversion technology, no reagents required, no secondary pollution
- Real-time monitoring of water quality and trend



Anji, Zhejiang

Ongoing online trend monitoring of water quality and water level in local reservoirs to ensure water safety at sources and prevent emergencies.



Taihu Lake, Jiangsu

Ongoing online monitoring of chlorophyll in water bodies around Taihu Lake, to support the prediction and early warning and mechanism research of algal blooms.



Ganzhou, Jiangxi

Ongoing and stable online monitoring of water quality free from water quality sampling, chemical analysis, address data shortage, and eliminate secondary pollution.

► **FOUR** Big data-vision fusion, more intuitive

- Integrated with radar liquid level sensors, video perception and other capabilities for data visualization and intelligent detection

► **FIVE** Open ecology, more flexible

- Using automatic spectrum perception technology, adaptive to complex environment with varied lighting and weather
- Using AI hyperspectral algorithms, fit for differentiated water features in different regions
- Based on Hikvision's Embedded Open Platform (HEOP) and open hardware capabilities to support third-party algorithms access

Optimizing Livelihood Services

Honoring the concept of "serving people's livelihood and making life more harmonious with data and intelligence", we make comprehensive use of technologies such as IoT perception, big data, and AI to develop industry-specific solutions such as smart communities, digital villages, and smart elderly care. Aiming to innovate grassroots governance models and improve livelihood services, we help the government to refine its services, so as to better serve its people and make urban residents happier and safer.

People's Livelihood - Case No.1 Intelligent Detection of High-rise Littering Prevents "Overhead Dangers"

Frequent high-rise littering has a huge impact on the life and property safety of residents walking beside high-rise buildings, while difficulty in tracing and obtaining evidence hinders the effective cure of this "pain hanging over the city". High-rise littering was made a crime in March 2021, necessitating the accurate positioning of such incidents and suspects.

Hikvision's intelligent detection solution is designed for high-rise littering:

Our specialized camera is free from disturbance by backlight, reflected light, and lens contamination, and is able to generate high-definition images. For example, the camera we provide comes with a rainfall sensor, which automatically turns on/off the wiper and adjusts the wiper speed according to the rainfall, together with automatic adjustment of the heating power of the lens glass, which ensures high resolution imaging in varied weather conditions such as rain, frost and snow.

Intelligent analysis technology is applied to intelligently monitor illegal high-rise littering, by filtering out interferences such as winged insects, birds, leaves, and clothes on drying racks. Pop-up window reminders, as well as footage preview, trimming, storage and playback are also available to support the fast search and traceability of littering incidents.

During the reporting period, Hikvision's intelligent high-rise littering detection solution had been applied to 287 cities across the country, helping thousands of grassroots management users in Guiyang Economic & Technological Development Zone, Zhangjiagang of Suzhou and other locations to build intelligent systems against "overhead dangers". The solution also allowed competent departments to quickly verify and deal with the individuals liability for high-rise littering, effectively preventing uncivilized acts.

Intelligent Detection Solution for High-rise Littering



Self-cleaning Smart Camera



Special-purpose NVR for High-rise littering



Community Networking Platform



Self-cleaning System

Keeping the lens clean
Free from rainwater, ash,
foreign matters
Saving maintenance manpower



Night Vision

360 ° blocking of stray
light interference
Ultra HD images
All-weather Full-color



High-rise Littering Algorithm

Precise event detection
Efficient post-event search
Littering trajectory restoration



Specialized Camera for High-rise Littering

Our specialized camera is free from disturbance by backlight, reflected light, and lens contamination, and is able to generate high-definition images.



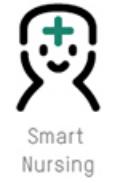
287 cities

During the reporting period, Hikvision's intelligent high-rise littering detection solution had been applied to 287 cities across the country.

People's Livelihood - Case No.2 Smart Elderly Care Services Ensure the Health and Safety of the Elderly

Rapid aging society introduces new challenges to social development. In February 2022, the State Council released the *14th Five-Year Plan for National Old-age Wellbeing Industry Development and Elderly Care Services System*, which calls for efforts to promote "Internet + medical care", "Internet + nursing service", and "Internet + rehabilitation service", and develop integrated medical care services oriented for homes, communities and institutions.

Using technologies such as IoT and AI, as well as systems for elderly care security, smart nursing, emergency rescue, and smart fire protection, Hikvision has developed systematic solutions to home-based elderly care, community-based elderly care, institution-based elderly care and other scenarios. We seek to provide scientific and technological support for elderly nursing services, convenient approaches for the safe operation of elderly care institutions, and decision-making reference for the supervision and management of civil administrations.



During the reporting period, Hikvision, together with an elderly home in a city, participated in the project "Deep Application and Demonstration of AI-based Video Image Analysis Technology for Elderly Care". Based on the historical activity data of the elderly, we studied their various irregular behaviors with safety concerns and gestures for help, and developed early warning and intelligent nursing applications accordingly. Thus, caregivers are allowed to detect irregularities in time, and take rescue measures as soon as possible to properly protect the elderly and improve service efficiency. In addition, more than 1,300 cameras are expected to be deployed in the second-phase of information technology project for one of the Nursing Home in the city. Together with back-end intelligent analysis equipment, these cameras are able to alarm the elderly's irregular behaviors in advance. In the meantime, intrusion alarm, staff passage management, vehicle access management and other systems will be deployed to detect occupation of fire engine access roads, illegal parking of electric mopeds and other potential safety hazards. All these efforts are expected to ensure the "all-round" safety of the elderly and staff, improve elderly care services, and contribute to a smart elderly care service system in the city.

Joining Hands with Asian Games Hangzhou

On January 18, 2022, Hikvision became the official AIoT and big data services sponsor of the 2022 Asian Games and Asian Para Games in Hangzhou. The company uses its Big Data-AI Fusion Base for Smart City to design applications for the event, including intelligent conducting, intelligent security and inspection, intelligent traffic scheduling and other intelligent services. We hope to help Hangzhou hold a "smart Asian Games" with multi-scenario innovative applications featuring "panoramic visibility, risk prediction, efficient conduct, and agile response".



■ Industry Empowerment

As the digital trend radically impacts all aspects of life, the digital transformation of enterprises has become an important way to raise the overall efficiency of the society. Hikvision leverages its own technological advantages to support the digital process of numerous industries and help businesses in both public and private sectors to complete digital transformation. Based on its unified software technology architecture and AI Open Platform, the company has developed a series of low code engines and software components and tools for industry application. We provide digital enterprise solutions combining conventional information technology, IoT-powered equipment and facilities, and AIoT-powered scenarios for public and private businesses, allowing them to shorten the management distance, improve productivity, regulate manufacturing practices, and prevent potential safety hazards.

In 2021, Hikvision comprehensively upgraded its AI Open Platform 2.0 from three perspectives – comprehensive perception, autonomous evolution and cognitive computing, helping users in various industries such as industry and commerce, energy and metallurgy, financial services, culture, education and health to embrace intelligent upgrading and digital transformation.

■ Industry and Commerce

Aiming for "supporting digital transformation with intelligent IoT-information network fusion", Hikvision is dedicated to whole-process management of logistics, channels, etc. in combination with software and hardware products and IoT technology, helping businesses reduce costs and increase efficiency, and generate new impetus for industrial development.

Industry and Commerce Case

Intelligent Tracking Keeps Home Delivery Safe and Fast

The surge in online shopping fuels the rapid expansion of China's express delivery industry. According to data posted on the State Post Bureau's website, the national express delivery industry's business volume recorded over 100 billion in 2021, placing it first in the world. The entire industry is on the rise. As the market keeps expanding, the efficiency and safety of goods transport has become a critical factor for the industry's healthy development.

Concerning goods transport management, Hikvision worked with an online shopping community to launch a visual tracking solution. The video system was linked together with user business operation system to acquire order number, operation station, operation time, operator and other data. Then, with one single click, users are allowed to view operation videos in different scenarios, such as sorting, binding, quality inspection and sales return. The time used for tracking delivery issues has been cut from 30-60 minutes to 5 minutes, significantly improving the efficiency and experience of tracking problematic parcels.

With regard to goods safety, Hikvision and the Hebei Express Delivery Industry Association worked together on the intelligent upgrade of cargo inspection equipment by introducing the Intelligent Security Inspection System. An intelligent X-ray identification system was also applied to store inspection pictures of parcels in real time and mark prohibited goods, together with playback and tracking functions, which has greatly improved the efficiency of security inspection. As of October 2021, leading express delivery operators in Hebei had completed the upgrading and transformation of a total of more than 200 traditional security inspection systems. While saving the cost on transformation and ensuring the safety of goods, the project has promoted the healthy development of the express logistics industry.

Through visual goods tracking and intelligent security inspection and analysis, Hikvision has improved the information-based management of express logistics, and enabled the intelligent identification and efficient detection of express parcels. By doing so, we seek to keep sending and delivery channels safe and smooth, regulate operations, and enforce efficient whole-process express delivery management.

The time used for tracking delivery issues from

30-60min



5min

Significantly improving the efficiency and experience of tracking problematic parcels



Energy and Metallurgy

With the goal of "empowering safe production through IoT in multi-dimensional scenarios and intelligence", we deeply integrate all operation stages of energy and metallurgy by means of AI, IoT and other technologies, so as to fulfill the management goals of safe production, improved quality and efficiency, and lean services. With such efforts, we hope to aid in the digital transformation and Internet construction of energy companies.

Energy and Metallurgy Case Smart Electric Substation, Protects the "Heart" of Power Grid

Building a new power system has become a decisive move to promote clean energy transformation in recent years, as part of China's strategy for carbon peak and carbon neutrality. New energy development promotes the transmission of green power across provinces, thereby driving the high-quality development of the Ultra High Voltage (UHV) grid. This raises higher requirements for the status control and safe operation of UHV power transmission and transformation equipment and facilities. The secure operation of UHV converter stations/substations, as well as higher inspection efficiency and quality, have emerged as major areas of focus in engineering design and construction.

As an active player in power grid companies' major UHV projects, Hikvision assists the digital upgrade of UHV converter stations/substations.

In a UHV converter station and substation project of the State Grid, technologies such as intelligent image recognition, infrared precise temperature measurement, and AR* were applied to Hikvision's online intelligent inspection platform to enable intelligent equipment inspection, online equipment temperature measurement, AR panoramic view, big data Kanban and other functions. After being put into operation, the system can offer 24H uninterrupted intelligent inspection of on-site equipment, to timely discover hidden dangers in equipment. Inspection results will be automatically generated during the inspection process, together with an inspection report afterwards.

In another UHV substation project of the State Grid, high-definition video + robotic inspection, online infrared temperature measurement, voiceprint monitoring and other systems were used for the purpose of "self-perception, autonomous monitoring, and automatic early warning", which resolves the conflict between the intensive and lean monitoring of substation equipment. This has comprehensively improved the efficiency of O&M inspections and safe operation in the station. The solution is employed in scenarios such as equipment inspection and monitoring, equipment status review, on-site environment management, and incoming personnel management to realize comprehensive element perception, intelligent equipment inspection, and intelligent inspection of hidden dangers. This set of one-stop substation O&M services is designed to facilitate "safe production, better quality and higher efficiency".



**Increased by
about
2.7 times**



In a UHV converter station and substation project of the State Grid, compared with traditional manual inspection, the comprehensive efficiency of on-line intelligent inspection platform is increased by about 2.7 times, which reduces the risk of manned operation and improves productivity and power supply reliability.

*AR: Augmented Reality.

¥ Financial Services

Starting with "AIoT and data enablement", we seek to meet enterprises' demand for financial technology by providing intelligent applications such as risk control and information security through scenario-based management. The purpose is to help tackle the uncertainties brought about by the rapid development of the industry and enhance the security of financial services.

Financial Services Case

Big Data Supports Anti - Telecom Fraud and Ensures Bank Account Security

Information technology crimes represented by telecom and cyber frauds continue to occur at a high rate. It is becoming increasingly difficult to prosecute these crimes as they become more specialized and concealed. In recent years, the government has placed a high priority on combating and managing telecom and cyber frauds, by launching a campaign to eliminate illegal bankcards/SIM cards and releasing the National Anti-Fraud Center APP.

Hikvision has developed a financial knowledge graph using accounts and transaction data – the core elements of telecom frauds, and discovers suspicious transaction clues through Deepwalk and other technologies. Meanwhile, deep learning is employed on the attributes of accounts, operation-related time series data, and relationship mapping characteristics, and the results output from the network and the results generated by machine learning models are combined and supplemented to each other, to identify fraudulent accounts and transfer transactions.

With a wide range of big data and information technologies, Hikvision has increased risk control methods, effectively improving bank customers' risk control capabilities. At the same time, by combating telecom and cyber frauds in a precise and effective manner, we contribute to a long-term anti-fraud mechanism powered by big data.

After going live in a commercial bank, our solution helped raise the identification rate of telecom frauds by

18 times 

Prevented more than
100 frauds  every month



Culture, Education and Health

Driven by "intelligent information education, and co-created smart healthcare", Hikvision continues to strengthen the application of cutting-edge technologies in the culture, education and health industries. We provide "Three Classrooms", smart campus and other multi-dimensional education application scenarios, and participates in hospital safety and information technology upgrading projects, supporting the digital transformation and development of culture, education and health sectors.

Culture, Education and Health - Case No.1

Smart Education Powers High-quality and Balanced Teaching

Under the *China's Education Modernization 2035* and other policies, and to promote the high-quality and balanced development of education, Sucheng District of Suqian City has launched the strategy of "Smart City Led by Education", as the first county-level region to construct a smart education platform. Driven by advanced technologies such as AI, IoT, big data and cloud computing, Sucheng intends to promote digital transformation, intelligent upgrading and integrated innovation in education, and boost the high-quality development of education.

Hikvision teamed up with Sucheng District Education Bureau to expand the application of smart education:

- Educational innovation: to enable smart teaching, smart security, home-school interaction, resources sharing and other multi-dimensional information technology upgrades through a five-in-one smart education cloud platform integrating "resources + data + application + teaching and research + management", big data education platform and hardware equipment for smart campus.
- Fair education: to build three classrooms – "urban-rural simultaneous classrooms", "prominent teachers' classrooms", and "online top schools' classrooms", promote the extensive application of the three classrooms using AI classrooms, and continue to expand the coverage of high-quality education; share quality education with students in remote areas by audio-visual means, build a new ecosystem of "Internet + education", and promote fair and good education.



As of the end of the reporting period, 6 education sub-platform modules and 26 teaching application systems had been interconnected in Sucheng District, covering nearly 20,000 teachers and students. Also, the three classrooms were built, over 600 sets of recording and broadcasting devices were deployed, and more than a hundred smart education training sessions were organized and delivered. By doing so, Hikvision aims to promote digital transformation, smart upgrading, and integrated innovation in education, for the high-quality and balanced development of urban and rural education.



Culture, Education and Health - Case No.2

Digital Ward Backs up for Smart Healthcare

The First People's Hospital of Fuyang District, Hangzhou is a general hospital. In its daily operation before, patient data was recorded in writing and stored in separate systems, making it hard for medical staff to have a comprehensive understanding of their patients. And the lack of a medical intercom system hampered the communication between patients and medical workers.

On the basis of the hospital's smart management system, Hikvision continued to work with it on the construction of digital wards. With technologies such as IoT and big data, the smart nursing and interaction system is connected to third-party systems like hospital information systems, electronic medical records, image archiving and communication systems through intelligent interactive screens. Meanwhile, with connection to smart nursing screens, smart nursing watches and other devices, the hospital is able to gather comprehensive information on patients' admission, medical treatment, calling, and disease course, and update patient information in real time, so that medical staff can provide timely and refined medical services. Compared with the original approach of searching information by switching between different Web applications, the new solution has increased the office efficiency by at least 80%, with an accuracy of 100%. In addition, smart nursing screens allow patients to make nurse calls with one single touch, and then medical workers can quickly arrive at the scene for timely diagnosis and treatment. The rate of responses over 3 minutes after calling has dropped by 70%.

The system is applicable to scenarios such as smart security inspection, caregiver/visitor management, and hospital patrols, providing hospitals with full-scenario refined management. While optimizing patients' medical care experience, it is also expected to improve operation efficiency, and promote intelligent medical care.

The new solution has increased the office efficiency by at least

80%

With an accuracy of

100%

The rate of responses over 3 minutes after calling has dropped by

70%



■ Low-Carbon Transformation

Digitalization is rising as a key pathway for China to achieve carbon neutrality, and make significant contributions to addressing the global climate change. Hikvision is committed to the integrated development of intelligent and green industries. We infuse digital technology into various sectors, to boost the use efficiency and management of energy and resources, promote digital and efficient carbon management, and drive energy conservation, pollution and carbon reduction, as a way to reach peak carbon emissions and carbon neutrality.

Supporting Pollution and Carbon Reduction in Cities

Focusing on "pollution prevention and low-carbon recycling", the company strives for the real-time monitoring of pollutant discharge, as well as the whole-process dynamic management of environmental impacts such as solid waste, through online equipment and technologies such as AIoT. We assist in prevent pollution, support green industry and circular economy, and help cities achieve the goal of reducing pollution and carbon emissions.

Pollution and Carbon Reduction - Case No.1 Intelligent Identification of Smoky Vehicles Helps Pollution Prevention and Control

As motor vehicles continue to increase, exhaust emission has become a major source of air pollution. Fighting against pollution is identified as a priority during the 14th Five-Year Plan period, requesting government departments to take active measures to regulate and restrict motor vehicle emissions. "Smoky vehicles" that run on diesel and are subject to lower emission standards have become a focus in pollution prevention and control. At present, motor vehicles are usually required to undergo a combination of regular inspection and irregular sampling inspection, which leads to potential issues such as lack of real-time data and low monitoring efficiency.

Hikvision has provided Jining Municipal Traffic Police Division and traffic police brigades in Jiaxiang and Wenshang counties with an intelligent detection system for "smoky vehicles". A reverse capturing unit is used to identify the exterior features and license plate information of a target vehicle, coupled with a black smoke recognition and capturing unit to capture the black smoke generated by the target vehicle. The system measures the Ringelmann scale of the black smoke in the video, outputs the measurement values in real time, and generates a conclusion with reference to the evaluation criteria of the local environmental protection authority on "smoky vehicles".

Built on deep learning algorithms and intelligent analysis, this solution enables "off-site law enforcement" and greatly improves the efficiency and accuracy of monitoring, while warning "smoky vehicles" discovered in real time to return or detour. Moreover, it is expected to eliminate "smoky vehicles" from the source by counting and analyzing the vehicles and their affiliated enterprises that fail to comply with local emission standards.



Pollution and Carbon Reduction - Case No.2 Big Data-vision Fusion Gives Birth to New Model of Solid Waste Supervision

There are a variety of solid waste that involves a wide range of industries and poses great potential risks in China. In recent years, policies such as garbage classification, zero-waste cities, and goals on peak carbon emissions and carbon neutrality have put forward higher requirements for the supervision and disposal of solid waste. The *14th Five-Year Plan for Circular Economy Development* has underlined the necessity to vigorously develop circular economy, build a recycling system for waste and used materials at a high pace, and improve the comprehensive utilization rate of solid waste, for the efficient use and recycling of resources.

In 2021 Hikvision released an intelligent whole-process supervision platform for solid waste. Relying on technologies such as big data, GIS* and visualization, an early warning center for the whole-process management of solid waste has been built. Powered by more than 30 intelligent early warning and detection models, the platform visualizes the latest information on solid waste after comprehensive analysis in the form of big data-vision fusion. This is expected to help ecology and environment authorities have refined management over waste-related businesses.

We've built a dynamic and intelligent monitoring network for a city in Shandong Province, in accordance with the new *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Wastes*. The network features high-definition cameras, intelligent electronic scales, and AI technology, and covers all the producers of high-risk waste, producers of general waste, as well as companies engaged in comprehensive waste collection, disposal and comprehensive utilization across the city. It enables the intelligent supervision and informationalized traceability of the generation, collection, storage, transfer, utilization and disposal of hazardous waste, and sends warning messages if any violation is automatically detected. The application of technologies such as intelligent weighing and intelligent code scanning for warehouse access also makes internal solid waste management more convenient, reduces staff's workload and boosts productivity.

The intelligent whole-process supervision platform for solid waste helps the intuitive view, search and management of solid waste from its generation to disposal, to improve resource allocation efficiency, minimize solid waste from the source and maximize resource utilization. By reducing both pollution and carbon emissions, the platform is hoped to support the establishment of a green and low-carbon circular economy system, and reach peak carbon emissions and carbon neutrality.



*GIS: Geographic Information System.

-Assisting Energy Saving and Consumption Reduction in Businesses

Depending on “smart energy saving and consumption reduction in line with National Carbon Peaking and Carbon Neutrality Goals”, Hikvision offers scientific and effective management of energy saving performance through intelligent energy consumption management and application services. By enhancing enterprises’ energy consumption management, we aspire to raise energy efficiency and support environmental protection.

Energy Saving and Consumption Reduction - Case No.1 Intelligent Energy Consumption Management Helps Save Energy and Reduce Consumption

Energy conservation and consumption reduction have become top priorities for businesses that embrace sustainable development, with the state implementing a slew of policies to speed up the construction of a national trading market for energy use rights and carbon emission rights, and to reinforce the control over energy consumption intensity and volume. However, most enterprises are now facing problems such as incomplete energy consumption measurement structure, low energy consumption management efficiency, poor digitalization of energy consumption control, and ineffective supervision over energy waste, resulting in unnecessary energy waste.

Hikvision has thus come up with an Enterprise Campus Energy Consumption Management Solution, which includes a set of digital energy consumption management tools developed together with Hanyu Group. Mature energy usage monitoring and measuring tools are used to connect manufacturing and execution systems with production data, analyze the energy efficiency of high energy-consumption equipment and production lines, identify the variables that affect energy efficiency, and explore energy-saving opportunities in the production process. Meanwhile, a campus energy-saving management plan is prepared, which includes quota management of energy consumption in the production area. And AIoT* is applied to the quantitative assessment on energy waste behaviors and energy-saving plan implementation, in order to regulate energy consumption.

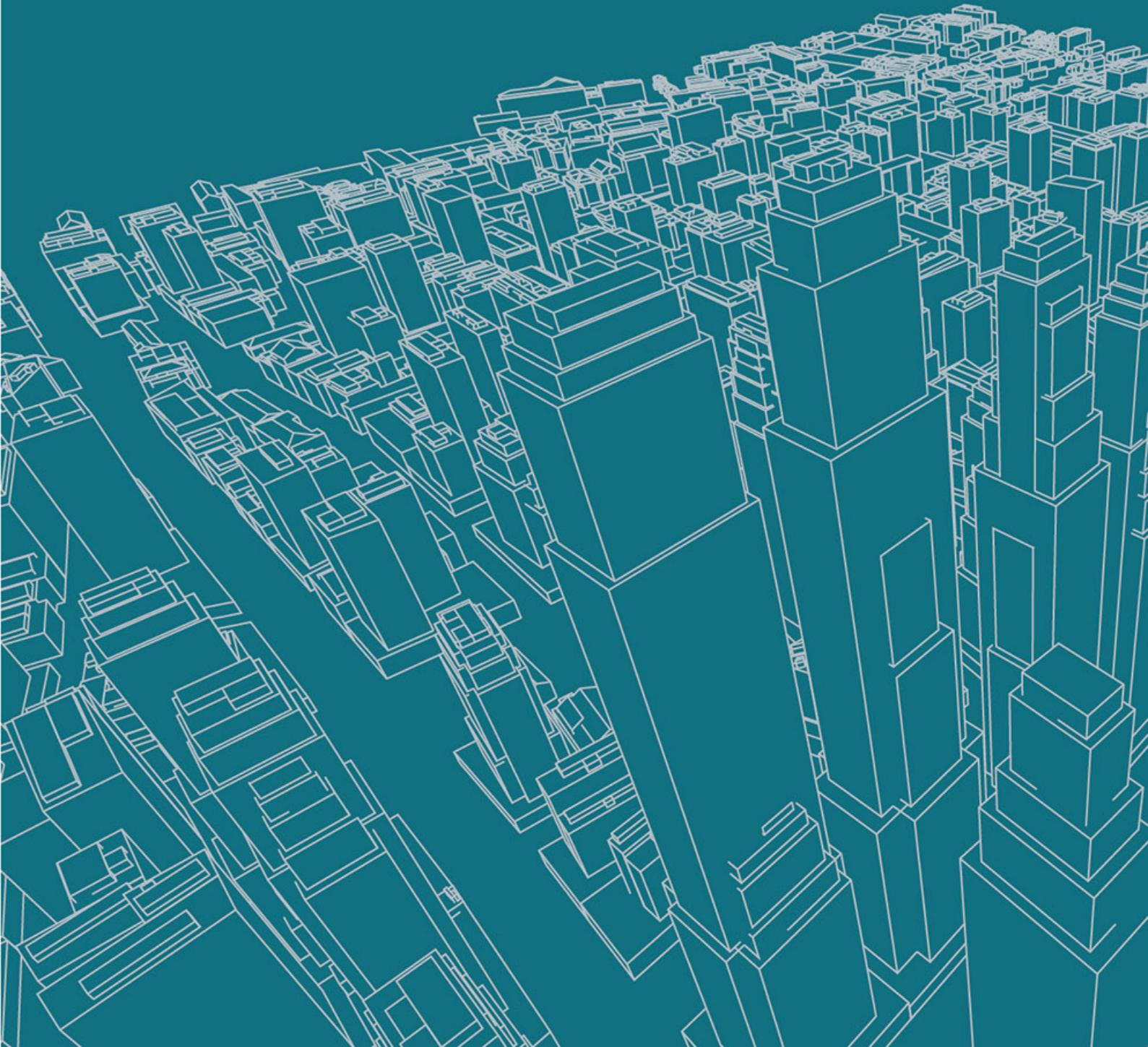
Since the launch of the system one year ago, Hanyu Group has saved more than 400,000 kWh of power, thanks to energy conservation through management and technological transformation. The energy consumption management system is expected to keep raising energy operation efficiency and optimizing energy performance, thus contributing to the national goals on peak carbon emissions and carbon neutrality by means of energy conservation and efficiency improvement.



*AIoT: Artificial Intelligence & Internet of Things.

From the two perspectives – urban management and industry empowerment, Hikvision applies its products of technological innovation to all corners of social development and livelihood improvement, putting the concept of technology for goodwill into practice.

Look ahead, we will make unremitting efforts to contribute to the sustainable development and progression of the society, motivated by our belief in the power of technology for goodwill.



Innovation Management

Technological innovation is a driving force for Hikvision's growth. We persist in expanding our technical reserves and business scope to provide fertile soil for new businesses. At the same time, the company is deeply engaged in industrial scenarios to improve technologies and products, and is devoted to innovation management centered on product quality, cybersecurity and other topics, consistently creating values for customers.

R&D Innovation

Hikvision has been steadily expanding its presence in the field of video technology since its inception 20 years ago. With our efforts, video technologies have evolved from "being able to see clearly" all the way to "being able to understand". Today, Hikvision boasts a complete value chain centered on video technologies, spanning from R&D, manufacturing to marketing.

Focusing on AIoT, big data services and smart business, the company provides AIoT products and services featuring Software-Hardware Fusion and Cloud-Edge Fusion, as well as big data platform products and services powered by Intelligent IoT-Information Network Fusion and Big Data-AI Fusion. We're also expanding innovative segments such as smart home, mobile robots and machine vision, automotive electronics, smart storage, infrared thermal imaging, smart fire protection, smart security inspection, and smart medical care. With growing expertise in perception platforms, data platforms and application platforms, the development of multidimensional perception methods, the acquisition of more perception data, and the application of scenario-based perception happen naturally. And the introduction of millimeter-wave, far infrared, X-ray, sound wave and other perception technologies is expected to help Hikvision expand more business, build an ecosystem for open cooperation, and continue to create value for cities, enterprises, individuals and families.

During the reporting period, the company continued to increase its R&D investment, expand its R&D team and transform its R&D outcomes. In 2021, our R&D investment increased by 29.36% compared with 2020 to RMB 8.252 billion, accounting for 10.13% of the annual operating income; and there were 25,352 R&D engineers, accounting for 48.06% of the company's total.

Hikvision's Innovation Recognitions in 2021



Enterprise with Innovation Influence of the Year



World Leading Internet Scientific and Technological Achievement

Multidimensional Fusion Perception-Intelligence Terminal



Recognized Scientific and Technological Achievement in Zhejiang Province 2021

Key Technology of High-precision Control and Clustered Collaboration of Logistics Robots and its Industrialization

Excellent Industrial Products of Zhejiang Province



Radar-assisted Multidimensional Intelligent Monitoring



Anti-shake Enforcement Body Camera



Guardian All-in-one Terminal

● Protecting Innovation Achievements

We are well aware of the close relationship between intellectual property and technological innovation: they coexist and promote each other. Therefore, protecting intellectual property equals protecting innovation. The company follows the principle of "protecting our own intellectual property rights and respecting others' intellectual property rights". To this end, it keeps improving its intellectual property protection system, strengthening the protection of intellectual property rights, and raising employees' awareness of protecting intellectual property rights. We have never stopped inspiring innovation and building up an innovative brand.

 <p>Invention patent</p> <p>934 Number of patents granted in 2021</p> <p>2,234 Total number of patents granted</p> <p>5,100+ Number of patents under application</p>	 <p>Utility model patent</p> <p>169 Number of patents granted in 2021</p> <p>1,267 Total number of patents granted</p> <p>70+ Number of patents under application</p>	 <p>Design patent</p> <p>404 Number of patents granted in 2021</p> <p>2,289 Total number of patents granted</p> <p>270+ Number of patents under application</p>
 <p>Software copyright</p> <p>256 Number of software copyrights granted in 2021</p> <p>1,528 Total number of software copyrights granted</p> <p>10+ Number of software copyrights under application</p>	 <p>Trademark</p> <p>419 Number of trademarks granted in 2021</p> <p>2,390 Total number of trademarks granted</p> <p>2,040+ Number of trademarks under application</p>	

* Data as of December 31, 2021.

* Standards of the statistics of patent:

- 1) Number of patents granted in 2021: statistics are based on the number of official authorization notices received as of December 31, 2021.
- 2) Number of patents under application: statistics are based on the number of official acceptance notices received as of December 31, 2021.
- 3) Total number of patents granted: statistics are based on the total number of patent granted that remaining valid as of December 31, 2021.

* Standards of the statistics of software copyright:

- 1) Number of software copyrights granted in 2021: statistics are based on the number of software copyright certificates received as of December 31, 2021.
- 2) Number of software copyrights under application: statistics are based on the number of application that has been submitted to copyright center as of December 31, 2021.
- 3) Total number of software copyrights granted: statistics are based on the total number of software copyright that remaining valid as of December 31, 2021.

There are several channels such as hotline, email, and website available to report intellectual property infringement, so that all parties could work together to safeguard a healthy intellectual property protection environment.

Channels to Report Intellectual Property Infringement to Hikvision

Hotline 400 800 5998

Email weiquan315@hikvision.com

Website www.hikvision.com/weiquan315

Mailing address Legal and Compliance Department, No. 518 WuLianWang Street, Binjiang District, Hangzhou 0571-88075998-63844

● Promote Innovative Development

China has seen a number of breakthroughs made in AI, big data, audio and video decoding, among other fields. However, there remain problems such as lack of underlying technology, few applications with commercial value, and barriers to integration with the real economy. In view of this, Hikvision is actively engaged in the construction of an industrial innovation ecosystem, contributing its wisdom to the development of innovative businesses.

Promote standardized industrial development

Hikvision Research Institute: During the reporting period, it participated in the projects organized by the China National Information Technology Standardization Technical Committee (SAC/TC28)/AI Subcommittee (SC42), the working group on big data standards, the Artificial Intelligence Industry Technology Innovation Strategy Alliance (the working group on AITISA standards), the China Electronics Standardization Association/Information Technology Application Innovation Working Committee and the China Academy of Information and Communications Technology and other standard organizations. It served as chief editor and editor in the compilation of 13 national standards, 7 group standards, and 2 white papers.

HikRobot: During the reporting period, it participated in the preparation of the *White Paper on Machine Vision Development* organized by the China Electronics Standardization Institute. It thoroughly investigated the existing standards at home and abroad, and combined with extensive experience in practical application to jointly develop a standard framework for machine vision.

Participate in academic competitions

In 2021, Hikvision Research Institute kept abreast of frontier and widely-concerned technologies and won the championship in 5 international academic competitions, including automatic model search, unsupervised target detection and other technical fields. These technologies demonstrate Hikvision's innovation competitiveness, and are gradually applied to products and industrial vertical solutions.

Open innovation ecosystem

Hikvision released the *Open IoT Access Protocol* (OTAP) in 2021 in order to help business partners connect with equipment and IoT subsystems, develop applications at low cost, launch more standard products, and obtain more fast reproducible solutions. The protocol includes service specifications for general technology, remote control, and information disclosure. At the same time, the company has built an online IoT standard platform to support various roles in the IoT to formulate, apply and manage open IoT protocol standards.

13

National Standards

7

Group Standards

2

White Papers

5

International Academic Competitions

National Standards and Group Standards Contributed by Hikvision's Innovative Businesses – HikRobot and EZVIZ in 2021 (Published)

Code/Tentative Code	Title
T/SSITS 501—2021	Technical Specifications for Mobile Robots Used in Automobile Production Lines
T/CMVU 001—2021	CFL, CFL-II, CFL-III Industrial Large Format Lens Mount
T/CAS 499—2021	Network Security Requirements and Test Methods for Intelligent Household Appliances
T/ZSPH 03—2021	Technical Requirements of Smart Lock NFC Application
T/ZSA 87—2021	Technical Specification for Smart Camera of Home
T/SETEA 00004—2021	Safety Requirement for Smart Household Appliance Safety Requirement for Intelligent Camera

❖ Quality Management

Quality is the cornerstone of an enterprise's life. Imprinted with the quality policy of "leading technology, quality first, customer satisfaction, continuous innovation", Hikvision is wholeheartedly devoted to the quality assurance of products and services.

• Improving Quality Management System

The company has established the Quality Management Committee, which is responsible for coordinating and supervising quality management level by level. Also, a quality management model of "one concept, two goals, three dimensions, and four measures" has been developed in line with the company's actual operations, extending quality management to the entire operation processes. We stay committed to raising the quality awareness of all employees, promoting efficient quality control, and delivering reliable and premium products and services to customers.

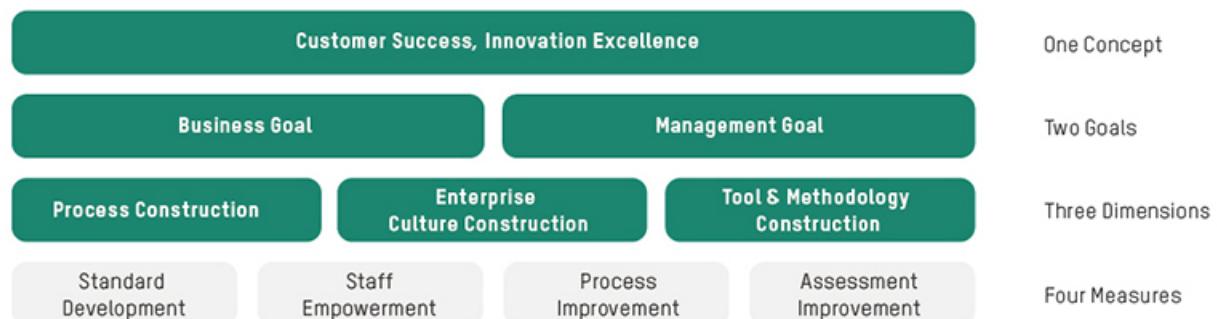


GB/T 19001-2016 / ISO 9001:2015
Quality Management Certificate

Quality Management Structure



Quality Management Model



During the reporting period, the company developed or revised a total of 64 quality management system documents surrounding quality target management, quality problem handling, improvement management, quality cost management, and quality culture development. To improve the efficiency of handling quality issues, we have optimized the problem handling procedure and problem-oriented data operation mechanism. Besides the original external rapid response mechanism, an internal risk reporting process is added, which focuses on the early identification of problems to avoid poor market performance.

Hikvision's Quality Recognitions in 2021

Award/Honor	Awarded by
China Quality Award 2021 – Award Nomination	Selection and Award Committee for China Quality Award
National Trustworthy Product in Quality Inspection	China Association for Quality Inspection
National Product for Reliable Quality	China Association for Quality Inspection
Quality Leading Brand in China's Smart Home Industry	China Association for Quality Inspection

• Upgrading Quality Culture

Surrounding the work policy of "raising employees' awareness of quality responsibility and consolidating employees' quality-compliant habits", Hikvision seeks to enhance employees' awareness and capabilities of assuring zero quality issues. Serial quality training and cultural activities are organized at three levels: managers, leaders/supervisors, front-line employees/engineers, so that they can have a better and unified understanding of quality work.



During the reporting period, we updated and upgraded our core values of quality culture, alongside with a revision and interpretation of the *Quality Culture Manual*. The company's annual quality culture theme has also been upgraded.

Quality Culture Development Action

Competence Training

- A training course themed on zero quality problems was delivered both online and offline, covering 4,700 person-time participants, and 700 employees have obtained the yellow belt and green belt certification.
- The TRIZ (Theory of Inventive Problem Solving) course was developed, and 20 TRIZ training sessions were delivered, covering about 1,000 person-time R&D staff.
- 3 courses on TRIZ tools and methods, 6 special editions covering TRIZ tools and methods, and 11 case stories of innovative invention principles were released.

Innovation Campaign

- Quality improvement activities were launched, including over 1,600 QCC (Quality Control Circle) projects throughout the year, engaging 13,000 person-time participants. In particular, innovation projects were newly set up, with more than 300 related projects completed during the reporting period.
- The 5th Quality Knowledge Quiz included a special assessment on innovation knowledge, which attracted a total of 10,000+ person-time participants.
- The 1st TRIZ Innovation and Creativity Competition was held, with a total of 40 teams participating.

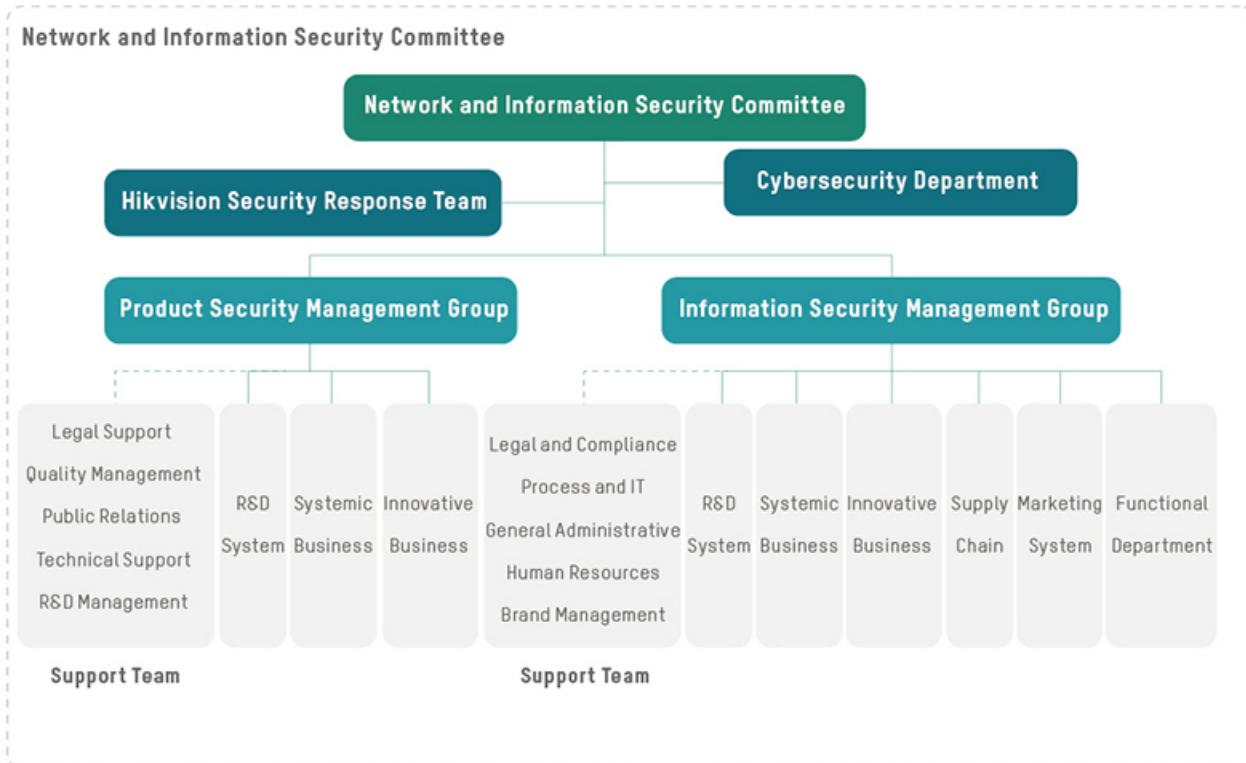
Cybersecurity

Cybersecurity is dependent on the collaborative efforts of all interested parties, as well as our bounden duty. Hikvision has been continuously focusing on product security and cybersecurity, carrying out a number of explorations and practical projects in the field of cybersecurity, and continuing to promote cybersecurity construction with an open and transparent manner.



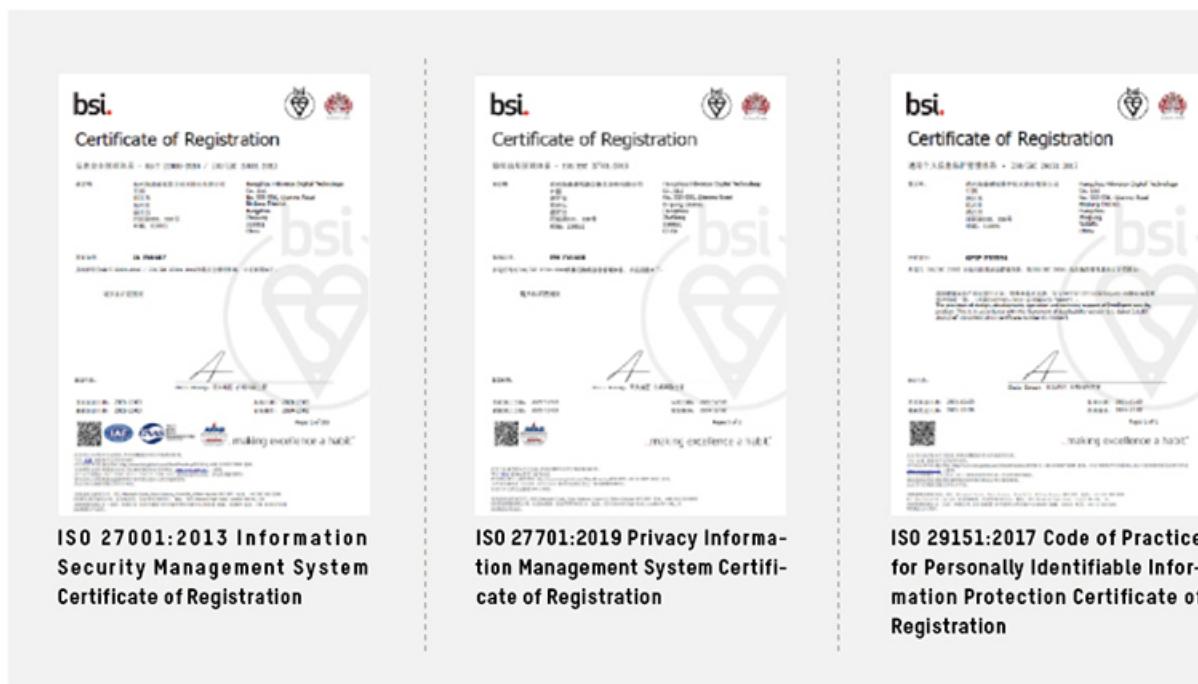
• Improving Cybersecurity Management

Since its establishment, the company has set up specialized organizations such as the Security Response Center, the Network and Information Security Laboratory, the Product Security Committee, and the Cybersecurity Department to establish and improve a cybersecurity system centering on organization and process to comprehensively enhance the cybersecurity level of the company's products and systems. Our Network and Information Security Committee, founded in March 2015, is responsible for integrating product security activities into R&D, supply chain, marketing and sales, engineering delivery and technical services, and delegating clearly-defined responsibilities to relevant organizations.



We benchmark against cutting-edge cybersecurity norms, and develop security management systems and procedures based on domestic and foreign laws and regulations, industry standards, customers' security demands, third-party analysis, industry activities, peer experience and business-specific security requirements. During the reporting period, the Hikvision Information Security Management System (HISMS) 3.0 was officially released. Compared with the previous edition, the new system has added 5 new privacy regulations, revised 27 data security and privacy compliance requirements, and completed alignment with the *Data Security Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China*, ISO 38505, ISO 31000 and other safety standards. Also, the HISMS 3.0 has been certified by ISO 27001:2013, ISO 27701:2019, ISO 29151:2017 and CSA-Star program.

To verify its integrity and maturity, the company has invited the British Standards Institution (BSI), an internationally authoritative standard R&D, certification and audit organization to review the Hikvision Information Security Management System. Upon document review, onsite interview, record traceability, and technical survey, Hikvision passed the first-stage review with 0 non-conformance items, and then passed the second-stage review with a highly positive evaluation by the auditing agency.



We have identified key positions to cybersecurity in each business segments, and clearly defined key positions for product security. We stress the standard cybersecurity code of conduct for employees in key positions, and regularly promote the signing of the *Hikvision Terms of Information Security Management at Customer Site* (also known as the *Hikvision's Commitment to Information Security Responsibility at Customer Site*) part of our business routine in a planned way. At the same time, we pay attention to the improvement of cybersecurity knowledge and skills of employees in key positions, and motivate employees for active learning. In terms of professional team building, now we have more than 40 employees who have been qualified as the Certified Information Security Professional (CISP) or the Certified Information Systems Security Professional (CISSP).

• Fostering Cybersecurity Culture

In terms of cybersecurity awareness education for all employees, Hikvision aims to create a company-wide educational and cultural atmosphere of cybersecurity awareness. To this end, we deliver cybersecurity training to all new staff, and organize cybersecurity knowledge, skills and other awareness enhancement activities according to their respective needs at work.

In October 2021, the company launched a series of online and offline activities themed on "Enhancing IoT Security, Perceiving Multidimensional Vision" in the Cybersecurity Publicity Week to create a dynamic cybersecurity atmosphere, allowing all employees to be well-versed in cybersecurity and keep it in mind. The online activities featured in Publicity Week include cybersecurity competence competition, cybersecurity lecture, and cybersecurity encyclopedia, covering all employees; offline activities were held in our East Headquarters, West Headquarters, Dongliu R&D Center, Tonglu manufacturing base, and Chongqing Technology Company, involving around 3,000 employees.

The online activities featured in Publicity Week
Covered All Employees

Offline activities
Involved around 3,000 Employees

1st "Qiangwang Cup" Cybersecurity Competence Competition

As a warm-up event for the Cybersecurity Publicity Week, the competition attracted around 1,000 participants.

Offline Cybersecurity Lecture

Well-known security experts were invited to introduce personal information protection laws, data security governance, and other topics, with around 1,000 online viewers.

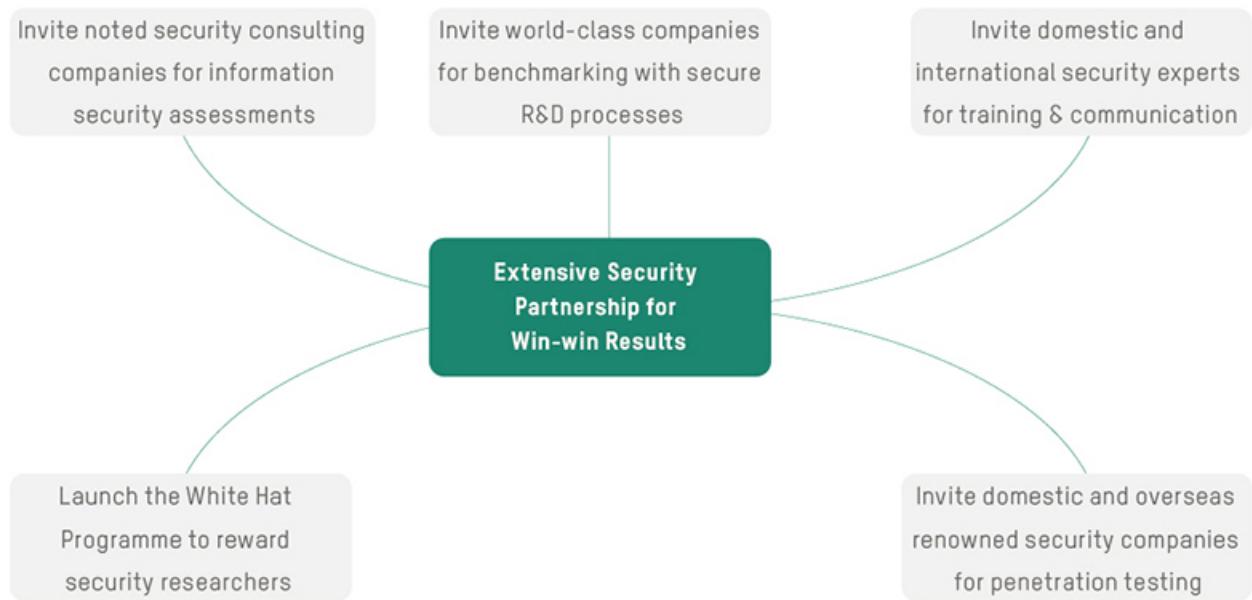
Offline Cybersecurity Activities

The cybersecurity encyclopedia featured three sections on film & TV, dialogue and gaming, respectively, under two themes – daily work information security and personal information privacy protection. Interactions with employees were enhanced by a combination of knowledge, fun and experience.

- **Building Cybersecurity Ecosystem**

While ensuring the availability, reliability and security of its own network and information systems, Hikvision actively links all forces to build a harmonious cybersecurity ecosystem with openness and interconnected attitude and jointly defend against cybersecurity threats.

Hikvision's Cybersecurity Partnerships





Integrity and Compliance

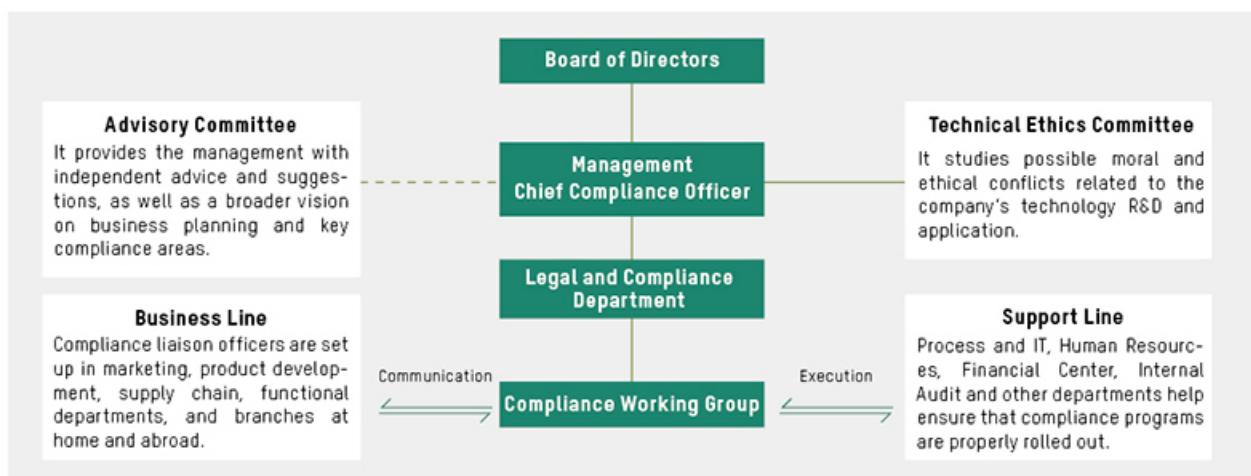
Integrity and compliance are the values that drive Hikvision's business development and serve as the foundation for our operations and decisions. While making compliance concepts and compliance policies an integral part of our global presence, we continue to expand our influence in our industrial chain's compliance ecosystem. By doing so, we hope that every employee puts the value of "pursuit of rightness and compliance" into practice on a daily basis.

- Compliance System
- Compliance Programs
- Industrial Compliance Ecosystem
- Compliance Culture

Compliance System

Hikvision pursues honest, trustworthy, and compliant operation. Continued efforts are put to the establishment and improvement of our compliance system, including a multi-level framework that covers compliance policies/statements, industry-specific compliance governance rules/codes, and compliance guidelines for all business units and segmented scenarios. Meanwhile, we have established and are constantly improving the compliance organization structure and operating mechanism across management and business divisions.

Hikvision's Compliance Organization Structure



In 2021, the *Hikvision Code of Ethics and Business Conduct* was drafted and published, which has specified the value propositions and code of conduct in practicing compliance operations, business ethics and social responsibility.



Treat others equally and respect others

- Maintain a good working environment
- Respect others without discrimination and harassment
- Respect and protect human rights
- Respect personal privacy and protect personal information

Conduct business with integrity and compliance

- Be honest and trustworthy, prohibit corruption and advocate integrity
- Avoid monopoly or other behaviors that restrict and hinder fair market competition
- Follow compliance requirements such as export controls and sanctions, data protection, and anti-money laundering

Protect company assets and safeguard company interests

- Protect company assets and confidential information
- Respect and protect intellectual property rights and trade secrets
- Avoid conflicts of interest and prohibit insider trading

Take social responsibility and protect the environment

- Integrate CSR and sustainability into our business, and continue to maintain ecological health and environmental protection with innovative and intelligent products and services

■ Compliance Programs

• Optimizing Trade Compliance System

Hikvision is committed to establish a global trade compliance system. We identify and comply with applicable laws and regulations on export control and economic sanctions in major countries, organizations and economies around the world, such as the UN, the EU, China, and the US. We perform responsibilities for export control and sanctions compliance, and continue to improve the management regulations and control measures for the purpose of global trade compliance.

During the reporting period, the company continued optimizing its management system for export controls in the US and the EU, interpreted and analyzed the new export control regulations introduced by the EU in September 2021, took necessary control measures as required, and further improved the management of EU export license applications to ensure that shipments to the EU comply with the law. At the same time, we performed due diligence on export controls and dual-use items in more than ten member states of the Wassenaar Arrangement, including the UK, Australia, and Canada. During the reporting period, the *Hikvision Canada Export Controls Policy* was drafted and released.

During the reporting period, we were active in addressing the further sanctions and market access pressure from the US, by maintaining communication and dialogue with competent government departments, mainstream media and all stakeholders to clear misunderstandings and eliminate doubts. Regarding the Federal Communications Commission's (FCC) ban on new product authorizations, we actively submit complaints and legislative opinions, and are pursuing legal action to protect our interests. Meanwhile, we pass on accurate message to customers and partners, while providing products and services in a consistent and steady manner. Furthermore, we have strengthened our capabilities of preventing supply chain risks, so as to be better positioned to continue operations amid external uncertainties.

• Practicing Anti-monopoly and Fair Competition

During the reporting period, the company prepared and released country/region-specific anti-monopoly guidelines for countries such as Singapore, Thailand, Mexico, Egypt, and Canada, and studied anti-monopoly and fair competition laws in other overseas countries in preparation for the guidelines tailored for these countries. In addition, the *Guideline for Declaration of Concentration of Undertakings* was drafted and published, expanding the governance scope of anti-monopoly compliance.

• Consolidating Integrity Construction

In honor of the corporate value of "integrity and pragmatism", Hikvision upholds the fundamental principle of making the business environment clean and transparent. We're against bribery and corruption in all forms, and embrace an integrity culture. Our management regulations are under constant improvement, including the *Hikvision Global Anti-Bribery and Anti-Corruption Manual* – which clarifies the company's and employees' obligations and responsibilities regarding anti-bribery and anti-corruption respectively, and the *Management Measures for Whistleblowing and Complaint* – which improves the protection mechanism for whistleblowers, internal and external organizations and individuals, who may choose to remain anonymous. We aim to build a clean ecosystem together with customers, suppliers and partners.

**Whistleblowing Hotline and
E-mail for Potential Bribery
and Corruption Behaviors**

Whistleblowing Hotline
0571-88075998-66570

Whistleblowing E-mail
compliance@hikvision.com
jubao@hikvision.com

Whistleblower Protection Mechanism

By updating the *Management Measures for Whistleblowing and Complaint*, Hikvision keeps improving the protection mechanism for internal and external organizations and individuals that provide clues to non-compliant behaviors – whistleblowers may choose to remain anonymous. The company encourages and supports the report of any suspected non-compliant behaviors.

The company endeavors to ensure that no employee or stakeholder will be treated unfairly if he/she refuses to engage in bribery and corruption activities, or reports corruptive behaviors. Such unfair treatment includes dismissal, disciplinary action, threat or other adverse treatment. If any unfair treatment is incurred, he/she may contact Compliance Department and Internal Audit Department for help.

To improve clean operations at Hikvision, we reorganized gift-related policies and rules, improved the IT workflow for gift handover, and incorporated it into the compliance review during the reporting period. The company has improved the process for reporting conflicts of interest, while regularly receiving and checking the conflicts of interest submitted by employees.

During the reporting period, we delivered integrity training to all employees, and executed integrity commitments or integrity agreements with our employees, suppliers, and distributors to avoid violations. As of the end of the reporting period, 99.19% of our staff had signed the *Employee Integrity Commitment*. As for important and high-risk business modules – such as procurement, over 90% of suppliers had entered into the *Supplier Integrity Agreement*, and the corresponding proportion for dealership was close to 100%.

- **Building Robust Data Security Defense**

The company has developed a set of policies and standards for security incident management and other matters in strict compliance with applicable data protection laws and regulations such as the *Data Security Law of the People's Republic of China* and the *Personal Information Protection Law of the People's Republic of China*. Industry standards, customers' security demands, third-party analysis, industry activities, peer experience and business-specific security requirements have also been referred to when drafting these policies and standards.

During the reporting period, the company continued to review and optimize our personal data protection practices in the EU and North America, and updated the *Hikvision European Policy on Personal Data Protection* and the *Hikvision North America Policy on Personal Data Protection*. In the meantime, we expanded the scope of data protection compliance by releasing the *Hikvision Brazil Policy on Personal Data Protection*, and incorporating Brazilian laws on personal data protection into our ongoing compliance measures.

The Security Red Baseline 3.0 has been released to adapt to new safety situations and enhance the safety competitiveness of products.

Subject to regulations and policies, Hikvision has also launched a slew of APP-related security and compliance activities through APP security R&D procedures, in response to the nationwide operation on regulating APPs' illegal collection and use of personal data led by the Cyberspace Administration of China, the Ministry of Industry and Information Technology, the Ministry of Public Security, and the State Administration for Market Regulation. The aim is to improve the security and compliance of APPs.

- **Improving Human Rights Governance**

Throughout business operations, Hikvision honors the human rights as stipulated in the *Universal Declaration of Human Rights*, the *International Covenant on Civil and Political Rights*, the *International Covenant on Economic, Social and Cultural Rights*, and the *ILO Declaration on Fundamental Principles and Rights at Work*. With reference to the above covenants, initiatives and guidelines, we endeavor to incorporate applicable regulations into our policies and procedures.

During the reporting period, we communicated and promoted our fundamental business value – “respecting and protecting human rights” – among our employees worldwide, through compliance publications, centralized publicity, themed training by external consultants and many other approaches. At the same time, we stick to transparency and proactiveness in ongoing dialogues with government departments, mainstream media, financial institutions and other stakeholders in different fields and around the world. Based on communication with all parties, we continue to improve our mechanism and spare great efforts to establish a human rights compliance system in line with the *United Nations Guiding Principles on Business and Human Rights*.

Throughout the reporting period, we continued to seek the best practices to prevent end users' improper use of products, which leads to interference with human rights and violation of others' rights, and urged suppliers, customers, and partners along our business chain to assume explicit responsibilities for protecting human rights.

■ Industrial Compliance Ecosystem

Hikvision is dedicated to an industrial compliance ecosystem that encompasses suppliers, customers, and partners. It strives to create a responsible supply chain, by establishing a standard supply chain compliance system, having greater control over conflict minerals, and improving its risk management and control capabilities in the procurement process. At the same time, we advocate responsible marketing in accordance with the business principle of "integrity", and we see it as our responsibility to protect fair and orderly market competition as well as customers' legitimate rights and interests.

☒ Responsible Supply Chain

Hikvision's suppliers are selected as per rigorous criteria and subject to regular audits, as a way to minimize supply chain risks and ensure sustainable production and operation. During the reporting period, we properly managed suppliers at two stages – supplier development and selection, and supplier competence monitoring in accordance with the *Standards of Supplier Development and Selection Management*, the *Procurement Framework Agreement* and the *Supplier Corporate Social Responsibility Commitment*, among other internal regulations on supplier management.

Supplier Development and Selection

- HSF (Hazardous Substance Free), RoHS2.0 (Restriction of Hazardous Substances), and REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), and social responsibility are listed as part of the standard threshold alongside general evaluation indexes such as product quality, technology and service. Suppliers exposed to negative incidents, for example, credit loss and default are directly disqualified;
- During the reporting period, the supplier access criteria were refined, the *Suppliers' Onsite HSF Review Log* was drafted and revised, and explicit VOCs control requirements were set forth for chemicals related to inks, coatings and cleaning agents. Manufacturers are required to present a VOCs report at the time of introduction;
- New suppliers are requested to sign a supplier corporate responsibility agreement with provisions on integrity operation, labor protection, environmental protection, anti-bribery, confidentiality and other aspects as well as an integrity agreement and a non-disclosure agreement in the interest of both parties.

Supplier Competence Monitoring

- Our *Management Regulation on Supplier Evaluation* has been formulated with reference to the ISO 14001 Environmental Management System, the ISO 45001 International Standard for Occupational Health and Safety (OHS) Management, and the SA8000 Social Accountability International Standard. We assess suppliers from three dimensions: competence performance, social responsibility and HSF. Assessment schemes on qualified suppliers are developed every year and implemented quarterly and annually. Upon evaluation, we reward, punish or end partnership with existing suppliers, to optimize our supplier structure and resources;
- During the reporting period, we revised the *Management Regulation on Supplier Evaluation* for the third time to detail the assessment standards for suppliers of varied categories; also, the *Suppliers' Onsite Audit Log* was revised and updated, with two EHS-related inspection items added to optimize our regulations on supplier competence monitoring.

During the reporting period, Compliance Seminar and Compliance Class were organized to offer the latest legal advice to suppliers, urge them to improve their management systems, and ensure their legal and compliant operations.

Compliance Seminar

- We launched an environmental management capability improvement program for high-risk suppliers during the reporting period, to cope with the increasingly stringent environmental regulations, and to help some suppliers address issues such as low environmental awareness and ineffective control systems.
- The seminar included four sections: Introduction of Hikvision's Best Environmental Protection Practices, Suppliers' Environmental Management and Control, Sharing of Suppliers' Improvement Cases, and Presentation and Q&A of QC080000 System. Also, third-party professionals and suppliers were present for communication and discussion.
- A total of 92 suppliers attended the conference, and 22 of them completed self-examination and improvement on schedule and as required. The satisfaction rate of the program was 98.

Compliance Class

- In April 2021, the *Compliance Class (Environmental Protection Series) No. 01 of 2021* was released to all suppliers on the Supplier Relationship Management platform. The class included violation cases, legal and regulatory consultation, compliance knowledge, best management cases (material monitoring mechanism) and more.

• Social Responsibility Management

Hikvision underlines the management of suppliers' social responsibility. Suppliers are urged to sign the *Supplier Corporate Social Responsibility Commitment*, and undergo our quarterly and yearly assessments, so as to strengthen management over employment legal/compliance, environmental protection, safety management and firefighting capabilities. We evaluate each supplier's social responsibility risks on four dimensions – brand awareness, company model, its location, and its industry, and manage it according to its risk level.

Signing of *Supplier Corporate Social Responsibility Commitment***Low-risk**

Some low-risk suppliers may be exempted from signing by providing necessary certification or passing our evaluation.

Medium-risk

Suppliers (manufacturers) complete regular (annual) social responsibility self-assessment, and the Procurement (Resources) Department compiles evaluation reports on supplier's or subcontractor's social responsibility based on the self-assessment results.

High-risk

The Procurement (Resources) Department performs regular (annual) on-site audits on supplier's (manufacturer's) social responsibility and compiles evaluation reports on supplier's or subcontractor's social responsibility.

• Security Management

Hikvision has been certified by the ISO 28000:2007 Security Management System for the Supply Chain and established a supply chain safety management framework in order to better keep the supply chain stable and reduce potential security risks in our supply chain during international trade. Based on improved compliance, we're better positioned to tackle potential security threats to the supply chain, and ensure the healthy and orderly development of the industry.



Certification of ISO 28000 Security Management System for the Supply Chain

• Standard Conflict Minerals Management

Hikvision has strict control over conflict minerals. Under the *Procurement Framework Agreement*, all suppliers are required to promise that what they provide to Hikvision are DRC Conflict-Free.

Hikvision has established a conflict minerals management and control system for mineral resources and products, including tin, tungsten, tantalum, gold, and cobalt. We have been investigating our supply chain to bolster our risk control capability of such minerals in accordance with five steps set forth in the Organization for Economic Co-operation and Development's *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*.

During the reporting period, we routinely launched a conflict minerals investigation along our supply chain, and sent conflict minerals questionnaires via the Supplier Relationship Management (SRM) platform. As of December 31, 2021, nearly 1,000 suppliers had gone through our conflict metals review.

Five Steps of Risk Based Conflict Minerals Due Diligence in Supply Chain

Establish Strong Company Risk Management Systems

- **Structure internal management:** Hikvision Procurement Management Committee is responsible for risk-monitoring and strategy development. The Procurement Department and relevant functional departments are responsible for developing and implementing policies, and reviewing and revising measures for conflict minerals on a regular basis.
- **Complete procurement policies and rules:** For supplier selection, Hikvision includes conflict-minerals management and control as a mandatory criterion in the Supplier's On-Site Audit. On-site Audit items include, but are not limited to the inspection of raw-material purchase contracts and orders, the compliance of purchase channels and the operation of conflict-minerals management and control systems. All suppliers are required to sign and comply with the "commitment to conflict-free minerals" clause in the *Procurement Framework Agreement* and the "responsible mineral procurement" clause in the *Supplier Social Responsibility Agreement*.
- **Strengthen company engagement with suppliers:** Hikvision's Supplier Relationship Management (SRM) system assists suppliers in building their conflict minerals management and control capacity. We have also established a complaint mechanism, where a complaint mailbox compliance@hikvision.com is made available as part of the risk warning system.

Identify and Assess Risk in the Supply Chain

- Due diligence on relevant suppliers are performed each year. We issue and collect for verification the Conflict Minerals Reporting Template (CMRT)*.
- Whether suppliers' operations are in compliance with applicable rules and regulations are verified as part of the annual review. When problems are detected, we require suppliers to rectify and correct.

Design and Implement a Strategy to Respond to Identified Risks

- An emergency mechanism for conflict minerals has been established to respond to supply-chain-related risks. The mechanism has made clear provisions on the trigger mechanism and countermeasures for violations (see the figure below – Emergency Mechanism for Conflict Minerals Management), to improve our ability to handle conflict mineral emergencies.

*CMRT: It refers to a due diligence tool for conflict minerals devised by the international organization RMI (Responsible Minerals Initiative).

Carry Out Independent Third-party Audit of Smelter/Refiner's Due Diligence Practices

- The Responsible Minerals Initiative (RMI) has an independent third-party verification system for smelters/refiners to determine whether they are compliant with standards. During the reporting period, we continued to identify smelters/refiners accordingly, trying best to raise the percentage of "conflict-free" suppliers compliant with RMI standards.

Report Annually on Supply Chain Due Diligence

- CMRT questionnaire was sent to our key suppliers involved with conflict minerals. The response rate was 100%. There was no violation in relation to conflict minerals at Hikvision during the reporting period.

Conflict Minerals Management and Control Mechanism



Emergency Mechanism for Conflict Minerals Management

Emergency Mechanism for Conflict Minerals Management

In case of any suppliers' violation of regulations due to the use of conflict minerals, we will check and isolate the products involved in the use of materials and submit a screening report to the material team or the Procurement Management Committee for risk assessment and final decision-making.

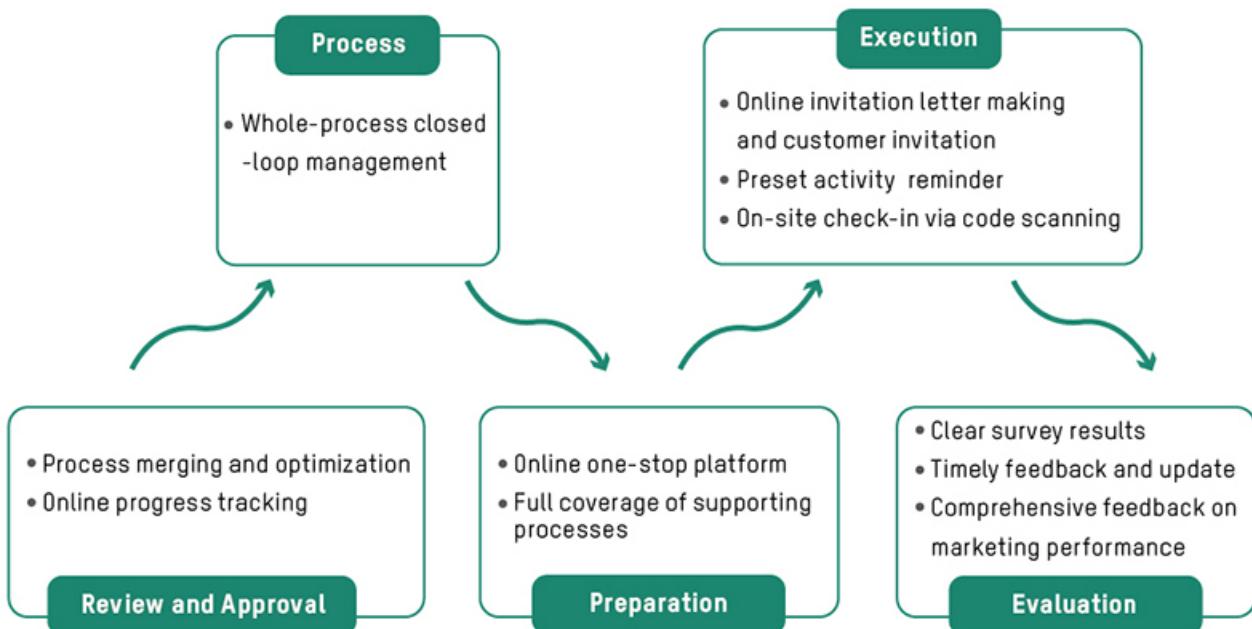
For suppliers involved in any violations, we will adopt the performance evaluation mechanism and take actions based on their evaluation results (including but not limited to establishing a special team for guidance and correction, reducing orders, withholding new product launch and even terminating transactions, etc).

In case of serious implications for the company, the company will reserve the right to further hold suppliers accountable under the Procurement Framework Agreement.

Responsible Marketing Management

In marketing management, Hikvision abides by the *Advertising Law of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of the Rights and Interests of Consumers*, and applicable laws and regulations of the jurisdictions where we operate. Internal regulations such as the *Sales Management Policy* and the *Ten Red Lines for Integrity Practices* are also available to regulate the behavior of marketers and dealers. This ensures the accuracy, truthfulness and legality of the information communicated, and protects the legitimate rights and interests of consumers. Throughout the reporting period, we have not been imposed with any regulatory punishment arising from marketing violations.

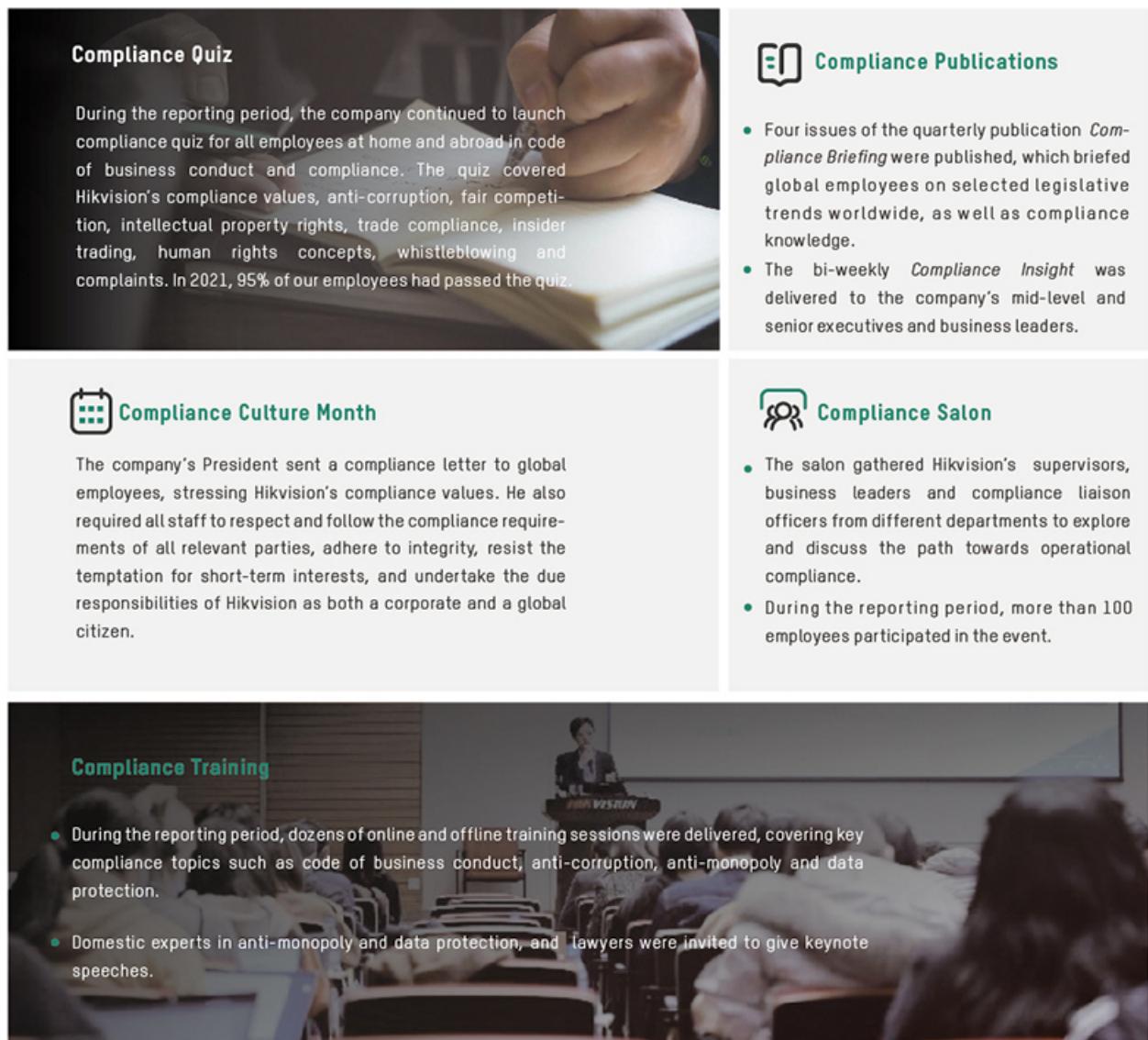
In 2021 we built a marketing platform powered by information technology, that is, the MarTech system. Running throughout the entire customer journey, it is designed to enhance user experience from knowing, attracting, to purchasing, operation and maintenance. On the other hand, we optimized the management of marketing activities by digital means. Internal policies such as the *(Non-operation) Management Policy on Marketing Activities* and the *Marketing Activities Operation Guide* have been enforced to manage marketing activities within a sounder system. Also, we have built a cross-departmental collaborative operation and evaluation system and a marketing management platform, and optimized the data empowerment that supports information systems, providing guidance and assistance for making business strategies.



Compliance Culture

Compliance culture is an integral part of the company's compliance operations. By upholding the value of "pursuit of rightness and compliance" and "Everyone do compliance", we seek to foster a compliance culture at Hikvision and instill compliance awareness in every employee's daily work and practices. We're constantly enhancing employees' compliance awareness and competency by executive training, staff training, themed training, compliance publications, the Compliance Culture Month, and compliance quiz.

Hikvision's Compliance Culture Actions



Compliance Quiz

During the reporting period, the company continued to launch compliance quiz for all employees at home and abroad in code of business conduct and compliance. The quiz covered Hikvision's compliance values, anti-corruption, fair competition, intellectual property rights, trade compliance, insider trading, human rights concepts, whistleblowing and complaints. In 2021, 95% of our employees had passed the quiz.

Compliance Publications

- Four issues of the quarterly publication *Compliance Briefing* were published, which briefed global employees on selected legislative trends worldwide, as well as compliance knowledge.
- The bi-weekly *Compliance Insight* was delivered to the company's mid-level and senior executives and business leaders.

Compliance Culture Month

The company's President sent a compliance letter to global employees, stressing Hikvision's compliance values. He also required all staff to respect and follow the compliance requirements of all relevant parties, adhere to integrity, resist the temptation for short-term interests, and undertake the due responsibilities of Hikvision as both a corporate and a global citizen.

Compliance Salon

- The salon gathered Hikvision's supervisors, business leaders and compliance liaison officers from different departments to explore and discuss the path towards operational compliance.
- During the reporting period, more than 100 employees participated in the event.

Compliance Training

- During the reporting period, dozens of online and offline training sessions were delivered, covering key compliance topics such as code of business conduct, anti-corruption, anti-monopoly and data protection.
- Domestic experts in anti-monopoly and data protection, and lawyers were invited to give keynote speeches.

2021年 合规文化宣传日

LEGAL COMPLIANCE CULTURE MONTH

正直做事，合规行远

合规在线课程

线下主题培训

年度合规沙龙

合规考试与认证

培训计划

机器人业务知识产权/反垄断实践	2021/11/11	线上课程
智能存储业务反垄断合规实践	2021/11/18	线下课程
数据出口管制动态与合规实践	2021/11/25	线上课程
反商业贿赂与合规实践	2021/12/02	线上课程

商业行为与合规简介	2021/11/22	培训课程
美国出口管制与制裁动态与合规实践	2021/11/25	线下课程
数据保护基础知识	2021/12	培训课程
礼品馈赠相关的合规要求与实践探讨	2021/12	培训课程

反垄断： 恪守公平竞争， 不止于拒绝价格管控！

海康威视倡导公平、正当竞争，
遵守业务开展所适用的公平竞争及反垄断相关的法律法规。

如果有任何疑问，可向法律与合规部咨询与提问，邮箱：compliance@hikvision.com

合规经营、不得实施价格管控行为：

- 禁止以任何方式对经销商/分销商的销售价格进行干涉
- 禁止利用定价算法与竞争对手或分销商实现协同，管控价格
- 禁止利用算法实施“区别化”对价，实施不合理、不正当的差异化定价行为

合规投资、对外投资前应妥善评估经营者集中

- 了解目标公司及其股东/合资方上年度营业额、4Q21
- 了解目标公司治理结构安排，我方控制要素
- 了解目标公司业务发展现状，独家合作商谨慎

海康威视 反贿赂与反腐败

公司禁止性规定

禁止为获得特定业务或为个人利益的目的而提供或接受财物。利益和好处：
禁止在任何情况下提供或接受现金或现金等价物（支票、礼券等有价证券）；
禁止向任何个人提供或接受礼品（一般不超过300元人民币）和招待。对涉及的业务决策产生影响，
禁止利用公司商业贿赂的缺陷。贿赂或腐败手段侵蚀或损害公司的财产和利益。

禁止在任何情况下提供或接受财物。利益和好处：

禁止向任何个人提供或接受现金或现金等价物（支票、礼券等有价证券）；

禁止向任何个人提供或接受礼品（一般不超过300元人民币）和招待。对涉及的业务决策产生影响，
禁止利用公司商业贿赂的缺陷。贿赂或腐败手段侵蚀或损害公司的财产和利益。

When we talk about compliance, what exactly should we do?

COMPLIANCE: STRUCTURE AND PROCESS

SPEAKER: Ambassador Pierre-Richard Prosper (Arent Fox) & M. Scott Peeler (Arent Fox)

LEGAL AND COMPLIANCE

- 尊重和维护国际公认的各项人权
- 不参与任何漠视与践踏人权的行为
- 倡导产品的使用尊重和保护他人权益
- 增加对环保所承担的责任，促进可持续发展

PROCESS

TRAINING FORM

Microsoft Teams

Please check the link
in the mail body)

海康威视 道德与商业行为准则

平等相待，尊重他人

- 建立良好的工作环境
- 尊重他人，无歧视、反种族
- 尊重和保护人权
- 尊重个人隐私，保护个人信息

诚信合规地开展经营活动

- 诚实守信，反商业贿赂
- 遵守与诚实守信等同的道德规范
- 市场竞争行为
- 遵循出口管制与制裁。包括保护、反洗钱等合规要求

保护公司资产，维护公司利益

- 保护公司资产与信息安全
- 尊重和保护知识产权、商业秘密
- 避免利益冲突，禁止内幕交易

承担社会责任与保护环境

- 将企业社会责任与可持续发展管理融入
我们的业务之中，以创新智能的产品和
服务，持续守护生态健康和环境保护

Compliance Culture Month is coming

Preview of blockbuster training activities

When we talk about compliance, what exactly should we do?

COMPLIANCE: STRUCTURE AND

Ambassador Pierre-Richard Prosper

Ambassador Pierre-Richard Prosper is a former US
ambassador at-large in charge of the Secretary of

2021.12

法律与合规部 | LEGAL & COMPLIANCE

TIME



Over the past 20 years, Hikvision has achieved rapid growth in both business scale and personnel size. We have focused on "consol-

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“Compliance shall involve all aspects of the company and relate to the daily work of every colleague. This requires the company and each of its employees to respect and abide by relevant compliance requirements and adhere to the principles of integrity. We should not be tempted by short-term interests. Instead, let us embrace our responsibilities and obligations and view this as an opportunity to lead as a global corporate citizen. On the other hand, we believe such respect and obedience will benefit our stable and organic development.

”

An Excerpt from *Compliance Culture Month: A Letter from Mr. Hu*

November 14, 2021





Green and Low-Carbon Development

Hikvision adheres to green development in its sustainability cause. In the process of production, operation and technological innovation, we continue reinforcing environmental management, optimizing the use of resources, reducing pollutant emissions, and exploring low-carbon technologies.

During the reporting period, the Carbon Neutrality Committee was established in active response to National Carbon Peaking and Carbon Neutrality Goals. The Committee is responsible for studying and developing new solutions and new models of energy conservation, carbon reduction and green development from the perspectives of internal operations, low-carbon materials, low-carbon products, intelligent manufacturing, and technology empowerment. While boosting our own green and low-carbon growth, we hope to empower the upstream and downstream of the industrial chain and make due contributions to the green and low-carbon development of the whole society.

- Environmental Management
- Green Production
- Green Operation
- Clean Technology
- Environmental Actions

Environmental Management

We are well aware of the significance of environmental protection and resource conservation to our sustainable development. Hikvision observes the *Environmental Protection Law of the People's Republic of China*, the *Energy Conservation Law of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on Prevention and Control of Air Pollution*, the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste* and other laws and regulations of the place where it operates. Meanwhile, internal management regulations are timely updated and adapted to our business operations. During the reporting period, new regulations and specifications were released, such as the *Radiation Safety Management Regulations*, the *Hazardous Waste Management Regulations*, and the *Chemicals Management Regulations*, intended to reinforce internal management and reduce the impact of production and operation on the environment. At the same time, we made explicit provisions for restricted and declared substances by revising the *Control Standards on Restricted Substances for Environmental Protection*. Also, it promoted total materials management and improved the efficiency of internal control under applicable environmental regulations.

We have obtained the *ISO 14001 Environmental Management System Certification*, and renewed our *ISO 50001 Energy Management System Certification* during the reporting period. Our security cameras and disk storage have also obtained a Five-Star Certificate of Green Supply Chain Assessment.



Hikvision has established a Work Safety Management Committee, which is responsible for coordinating and implementing environmental protection tasks step by step. The Work Safety Management Department is in charge of developing, supervising, and managing the company's environmental objectives, as delegated by competent government departments and superior organizations. During the reporting period, we prepared the *2021 Environmental, Occupational Health and Safety Targets, Indicators and Management Plan*, which has specified Hikvision's environmental management targets at all levels, detailed the priorities and actions of environmental target and indicator management, in order to reduce and control accidents, avoiding environmental pollution caused by accidents in the production process as far as possible.

Mid- and Long-term Goals for Environmental Management	Environmental Management Assessment Indicators	
<ul style="list-style-type: none"> To strengthen and continuously improve environmental management To continuously control the number of environmental pollution accidents To continuously launch energy conservation and emission reduction activities, promote cleaner production, save resources and cut energy consumption To continuously improve environmental management performance To promote EHS culture 	<p>Environment</p> <ul style="list-style-type: none"> Compliance rate of wastewater, exhaust gas, and ambient noise emissions: 100% Environmental pollution accidents caused by chemical leakage: 0 Radioactive contamination accidents: 0 Compliance rate of hazardous waste disposal: 100% Coverage rate of environmental protection publicity and education: 100% 	<p>Energy</p> <ul style="list-style-type: none"> Growth in power consumption is less than 5% of the previous year Growth rate of total water consumption is less than 5% of the previous year Growth rate of natural gas consumption is less than 5% of the previous year

Every department (branch, subsidiary, or holding company) of Hikvision regularly monitors its fulfillment of target indicators, which is subject to quarterly supervision and year-end comprehensive assessment by the Safety Management Committee. The assessment results will serve as an important basis for the annual environmental, occupational health and safety performance appraisal of all departments (branches, subsidiaries, and holding companies). During the reporting period, the company had reached the "Environment" assessment indicators.

■ Green Production

Hikvision, as an upholder of green production, pursues the effective use of resources and the lower impact of production and operations on the environment, aspiring to work with other parties and make our planet better.

⊕ Low-Carbon Production

Hikvision is devoted to cost reduction and efficiency enhancement in order to comprehensively improve energy utilization and reduce energy consumption in production and operations, as part of our efforts to address the climate change and support the fulfillment of National Carbon Peaking and Carbon Neutrality Goals.

Hikvision Launches a Smart Energy Consumption Monitoring System

- In September 2021, we launched an energy consumption measurement system in the Binjiang Phase I Park. The system allows the real-time monitoring of power consumption and data in each area, stores data automatically, generated reports, and conducted statistical analysis, etc. While improving the efficiency of O&M, it also provides massive data support for energy saving and consumption reduction.
- In December 2020 and July 2021, we put into use the automatic group control system for cold and heat sources in Binjiang Phase II and Tonglu Phase I, respectively. This is expected to save manpower and enable the efficient management of energy consumption.

1 million kWh

in Binjiang Phase II
were saved per year
(Frequency conversion and
energy saving transformation)

400,000 kWh

in Tonglu Phase I
were saved compared with previous
heating and cooling seasons

⊖ Efficient Water Resources Management

Hikvision has established a strict water resources management system. We reduce water consumption in the manufacturing process and improve the reuse rate of water resources through the application of water-saving equipment and optimization of production processes. We've also set up a leading group and a working group for water-saving management, as well as water-saving administrators, together with explicit water-saving responsibilities and assessment objectives to strengthen our water saving efforts.

During the reporting period, we actively responded to Zhejiang Province's *Notice on the Construction of Water-Saving Enterprises* by completing the application for a water-saving enterprise. Meanwhile, we have launched extensive water-saving publicity and education activities to raise the water-saving awareness of all employees. Balanced water testing was completed and a three-level water metering network was optimized to improve the management over water resources utilization at our operation sites. All water use points are under comprehensive monitoring, as a way to reduce the waste of water resources and reach water saving goals.

Hikvision has drafted a five-year water conservation plan for 2021-2026, which stresses efforts to improve both management regulations and hardware facilities. Water-saving transformation solutions will also be developed and implemented in accordance with actual water usage. Moreover, strengthened rainwater collection and reuse measures are taken in the Headquarters Phase IV project to improve the utilization rate of unconventional water resources.

- Increase the number of secondary water meters
- Establishment of three-level metering network

- Installment of smart water meters
- Connection to energy consumption platforms

- Comprehensive leak-source inspection over buried pipelines at operation sites

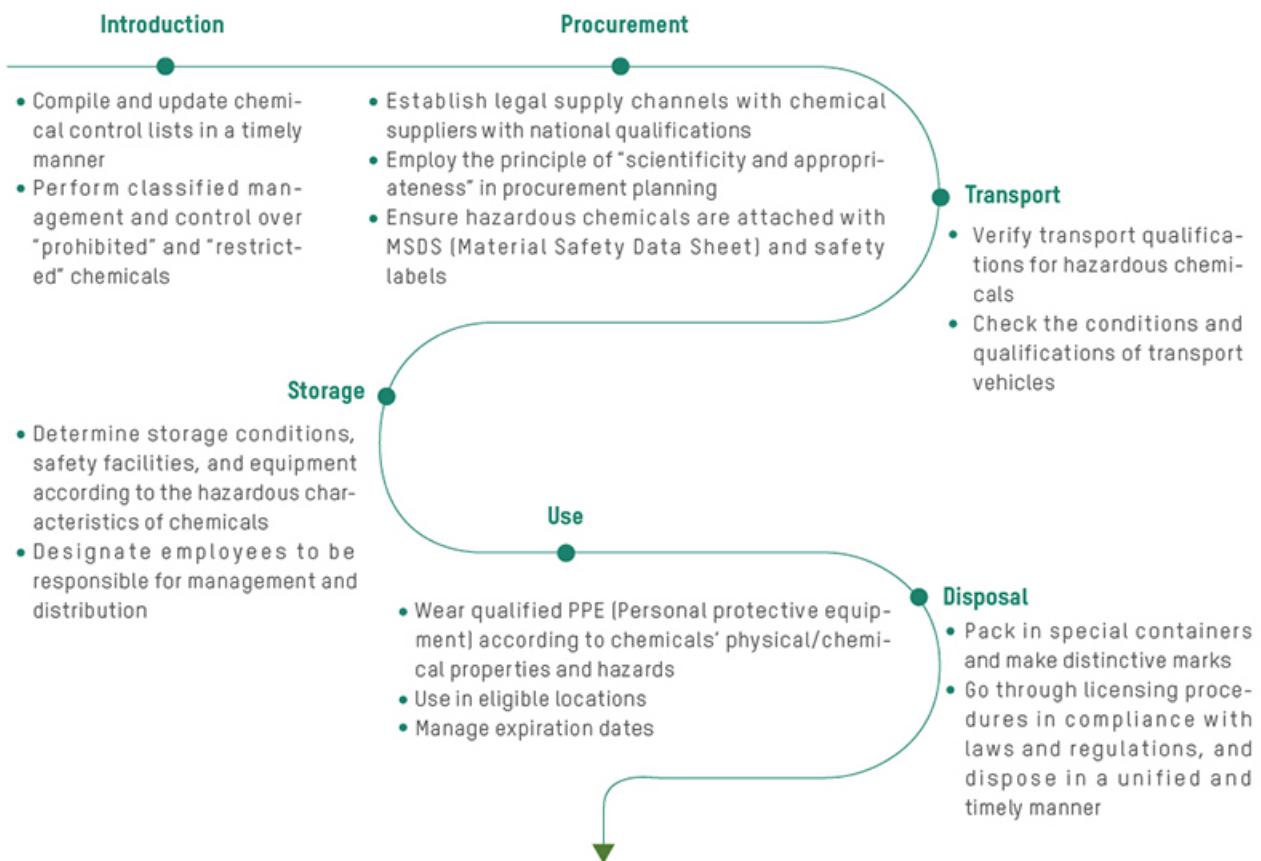
Fine Waste Management

In strict compliance with national laws and regulations, the company developed the *Hazardous Waste Management Regulations*, the *Regulations on Hazardous Waste Management Accountability* and the *On-site Response Plan for Hazardous Waste Emergency* during the reporting period. This has standardized hazardous waste disposal procedures at Hikvision and clarified the administrative requirements for the identification, generation, collection, storage, transfer and emergency response of hazardous waste. Also, related departments are urged to perform their hazardous waste supervision responsibilities. With these efforts, the environmental risks of hazardous waste are placed under effective control. During the reporting period, we upgraded our hazardous waste warehouses and improved their explosion-proof monitoring and management system.

On the other hand, the *Regulations on the Management of the Supply Chain Waste Disposal Implementation* and the *Regulations on the Management of Supply Chain Waste and Providers of Idle Material Disposal Services* have specified the supply chain waste disposal process and the selection criteria for third-party providers of material disposal services.

Strengthened Chemical Management

Hikvision has never stopped optimizing its chemical management processes and regulations for standardizing chemical management and personnel safety. Subject to national standards and provisions, we had revised the *Chemicals Management Regulation* for the 12th time. Besides new requirements for the introduction of chemicals, it has also improved the specifications for the procurement, transport, storage, use, and disposal of all chemicals.



Hikvision has been certified by the *QC080000:2017 Hazardous Substances Process Management System*, and has also established an HSF review mechanism for suppliers to ensure our products are harmless throughout their life cycle. We continue to promote total materials management through a product compliance management system to guarantee products' compliance with RoHS (*Restriction of Hazardous Substances*), REACH (*Registration, Evaluation, Authorization and Restriction of Chemicals*) and other environmental protection regulations, strictly controlling harmful substances and pollutants from the source.

Example: RoHS Certification



Example: REACH Certification



During the reporting period, we continued to promote the standard management system and regulations for internal chemicals. About 9,100 materials of the company have obtained RoHS certification, 21% more than that in 2020; and about 3,200 materials have been granted REACH SVHC certification, an increase of 7% over 2020.

While reinforcing internal control, the company also emphasizes the training and education of its staff. Emergency drills are organized to strengthen employees' sense of responsibility, emergency response capacity and orderly action, and to test the practicability, feasibility and reliability of emergency plans. During the reporting period, all Hikvision sites carried out emergency drills in an orderly manner as planned.

■ **Green Operation**

Hikvision honors the philosophy of green and low-carbon operation, and encourages every employee to put green office into practice. In the meantime, with the continuous expansion of our presence, we have applied green operation to the design of our office parks, broadening our influence in regional green development.

Promoting Green Office

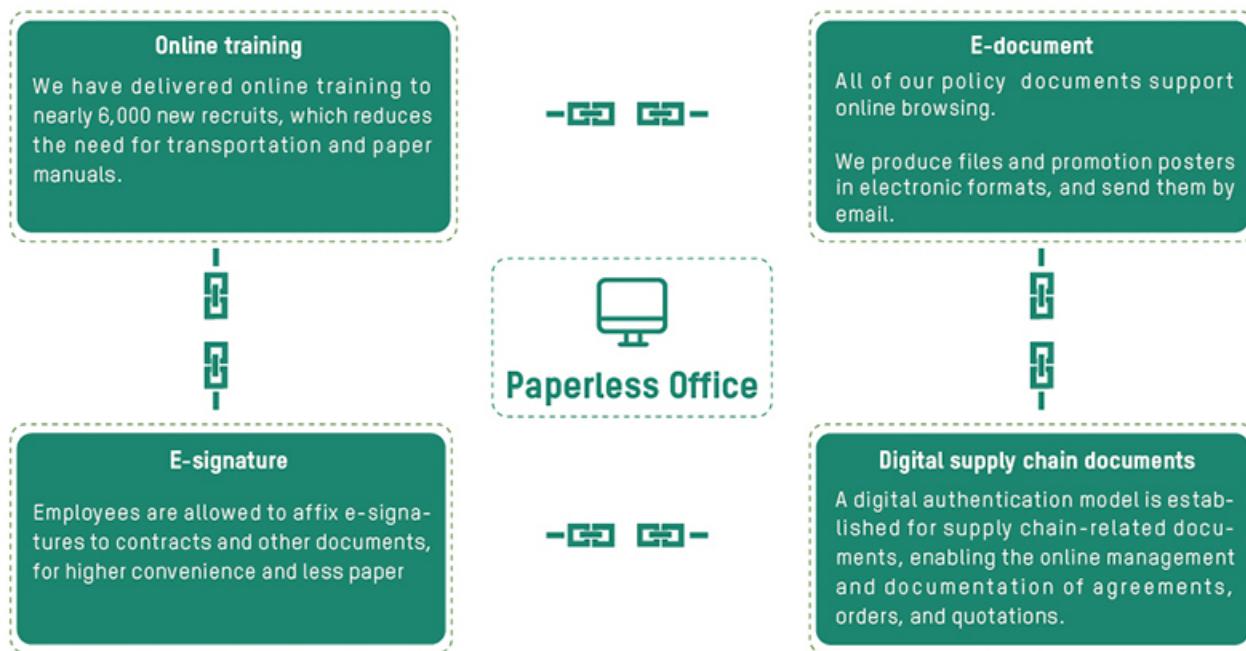
Hikvision continues to explore the ways of optimizing R&D processes, and gradually promotes P2V to maximize the integration and utilization of virtual machines and physical hosts. In 2020, the company started the construction of an R&D cloud platform environment, and has since then taken continued platform upgrade measures such as upgrading the deployment of virtual machines in the production environment to container deployment. This reduces the carbon footprint of physical servers while improving our innovation efficiency and lowering O&M costs. As of the end of the reporting period, the R&D cloud platform environment had provided nearly 3,000 R&D virtual machines for the Software R&D Department – equivalent to saving the consumption cost of more than 600 physical servers (256G), further reducing carbon dioxide emissions from energy consumption.

Optimizing Supercomputing Center's Energy Consumption

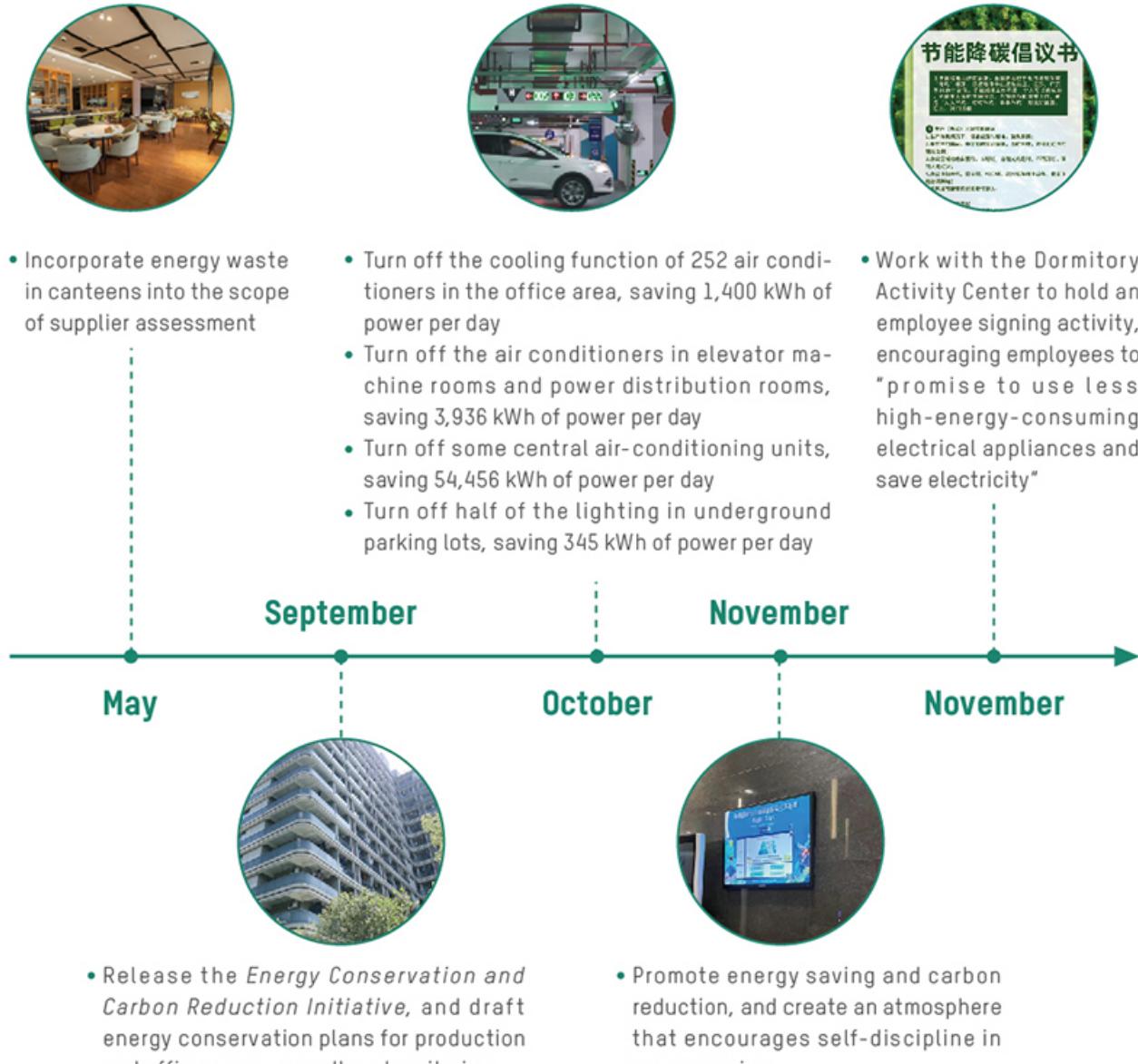
System power control is an outstanding challenge to supercomputers' development. To address the high power consumption and high calorific value of Hikvision Institute's original supercomputer center, we have established a new supercomputing center.

The new facility is located in Xining, surrounded by mountains on three sides, with an annual average temperature of 7.6°C, which effectively reduces the energy consumed by cooling. The 5kW computer room zone is equipped with the advanced "N+1" indirect evaporative cooling system, and the 8kW and 10kW computer room areas employ a combination of water-cooled chillers, plate heat exchangers, cooling towers, and low-temperature, natural water source process. Cold aisle containment is applied to all computer rooms to maximize the advantage of the natural environment. The new cooling model saves energy by 50% compared to traditional mechanical cooling, with PUE reduced from 1.38 to 1.2.

Also, activities are organized to encourage energy saving and emission reduction in offices. During the reporting period, in addition to the daily promotion of energy and water conservation concepts, we intensified the paperless office initiative, by gradually moving offline workflows online. While making work processes simpler and more standard, we have also saved a large amount of paper.



During the reporting period, Hikvision followed the government's power rationing arrangement, and organized green activities promoting energy saving and consumption reduction across the company. We introduced an automatic control system to the showroom of Binjiang Phase III, and connected it to the BA (Building Automation) system of Binjiang Phase III Park, embedding automatic adjustment, energy-saving operation, cooling and heating data statistics and other functions into the showroom's air-conditioning system. In addition, our Tonglu site, as a large consumer of industrial power, has been engaged in green operation since the first half of 2021, coupled with countermeasures for the control over energy consumption intensity and volume.



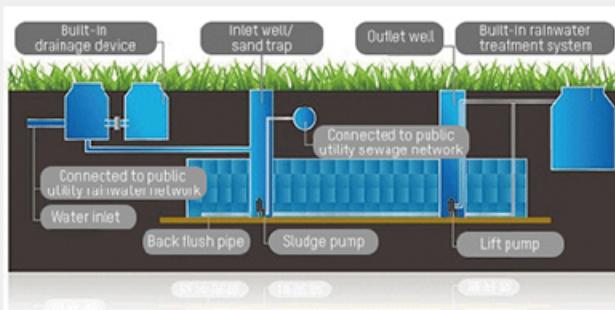
Building Green Office Park

Hikvision is gradually promoting the construction of green office parks, which serve as not only a pleasant environment for office workers, but also a green space with various natural service functions for cities and surrounding citizens. In particular, we hope to contribute to the construction of sponge cities, and thus have been considering the control of the total amount of stormwater runoff, and the improvement of rainwater purification and comprehensive utilization when designing and building our parks, so as to improve the effective utilization of water resources. Our Nanjing and Hefei parks, as well as the Nanchang project, have been planned and constructed with reference to the One-Star Green Building Standards of China.

We never hesitate to share our experience in the construction of low-carbon office parks. The company participated in the compilation of the *2022 White Paper on Zero-Carbon Smart Office Park*, which was published in January 2022.

Chongqing Phase III Green Park

Hikvision's Chongqing Phase III project is developed and constructed according to the actual conditions of the city, as well as the theory of sponge city. The source control over urban runoff is strengthened to make effective use of rainwater resources. The project has made scientific space planning, with appropriate setup of green rainwater infrastructure. The rainwater and pollutants entering public utility pipelines and water bodies are reduced through the construction of green roofs, rainwater tanks and rain gardens, to control the annual volume of stormwater runoff at 65%, and the pollutant removal rate at 54%.



Clean Technology

Apart from the environmental management over internal production and operations, Hikvision is also communicating the green concept of low carbon and environmental protection to customers through its technologies and products. We stay committed to the innovation of environmental protection products. During the reporting period, more than 29,500 of our products earned *China Environmental Labelling Product Certification*, an increase of about 23% from 2020; and about 28,500 earned *China Energy Conservation Product Certification*, an increase of about 58% from 2020.



China Environmental Labeling Product Certification (type I)



China Environmental Labeling Product Certification (type II)



China Energy Conservation Product Certification



CESI-PC-0D66 Certification

In the future, Hikvision will continue to invest more money and efforts in the iteration and optimization of clean technologies. By doing so, we intend to, on the one hand, put the environmental impact of our manufacturing process under proper control, and on the other hand, make our products greener and reduce the environmental footprint of product use.



Low-power Integrated Circuit

In the R&D stage, while ensuring product stability, we have also researched on the adaptation and application of low-power integrated circuits. The technology is expected to improve the energy efficiency of products, and also give birth to more portable products.

With improved semiconductor materials, low-power integrated circuit technology is applied to MEMS (Micro-Electro-Mechanical Systems) sensors, processors and memories.

The technology makes monolithic integrated circuits more integrated, which boosts computing power while reducing the overall power consumption and heat generation of the system. This leads to less energy usage and substantially reduces the carbon emissions by downstream customers.

The core voltage of a temperature measuring core component is reduced from

1V → **0.85V**

The storage voltage is reduced from

1.2V → **1.1V**

The power consumption of the product is reduced by

↓ 67%

1V

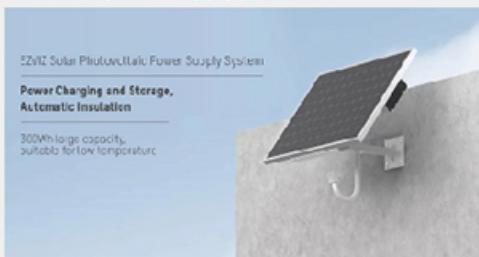
↑ 30%

The working voltage of the magnetic vibration sensor of a door alarm is lowered to



EZVIZ Solar Photovoltaic Power Supply System

The EZVIZ solar photovoltaic power supply system has addressed instable AC power supply for remote monitoring or outdoor monitoring in the harsh environment. The system makes good use of solar energy, a clean energy source, which reduces the carbon footprint of product use. Featuring a large capacity of 300Wh and a built-in battery heating and insulation system, the system can automatically activate the battery heat preservation function at low temperatures to ensure the battery's normal operation in the freezing environment. This is designed to improve the battery life of photovoltaic power supply products.



Application of Simulation Process to Product Development

The company has created a complete 3D digital prototype in the R&D stage of a camera project. The prototype has gone through a number of reliability and manufacturability simulation evaluations, which reduces the number of manual proofing verifications and mold repairs. This has avoided issues arising from structural reliability, assembly, and manufacturing in the trial production process. While improving the R&D efficiency and shortening the R&D cycle, the simulation evaluation technology also reduces the waste of materials and resources in the product development phase.



Spray-free Process

We keep exploring the feasibility of applying clean technology in the manufacturing process, and have tried to use a spray-free process for producing the side assembly parts of gate access. While maintaining the original product design, the process effectively reduces the emission of harmful substances during production, such as wastewater and VOCs (Volatile Organic Compounds), greatly mitigating the environmental pollution caused by paint spraying.



Environmental Actions

Bearing in mind its responsibility of sharing growth and achievements with the society, Hikvision is wholeheartedly engaged in social welfare and environmental protection actions. We have never stopped promoting a healthy and green lifestyle among all employees, inspiring them to protect the environment in work and life, and help China fulfill National Carbon Peaking and Carbon Neutrality Goals as soon as possible.

During the reporting period, we continued our environmental protection classes. Themed on carbon neutrality Q&A, water saving action, introduction of noise hazards, among others, the program has consistently shared with employees intriguing environmental protection knowledge in varied ways.



Carbon neutrality Q&A



Water saving action



Introduction of noise hazards

Franco-Chinese Environment Month

Founded in 2014, the Franco-Chinese Month of the Environment aims to raise the public's environmental awareness by sharing experience and innovative technologies in the field of environmental protection. Hikvision was invited to the opening ceremony of the 8th Franco-Chinese Month of the Environment in South China, and introduced our technological applications in natural resource protection and ecological protection at the first Franco-Chinese Enterprise Green and Sustainable Development Forum.



The World Environment Day

The yearly World Environment Day on June 5 is a crucial medium for the United Nations to promote environmental awareness worldwide and to encourage attention to and action on environmental issues among governments and people. As a business with a strong sense of social responsibility, Hikvision launched a public welfare activity with the theme of "Harmonious Coexistence between Man and Nature, Hikvision is in Action" at Siqiao Park in Hangzhou on June 5, introducing our environmental protection propositions to the public.





Harmonious Co-existence

We respect and value every employee's contribution, and we go to great lengths to provide a broad stage for growth, as well as a safe and welcoming workplace, with the goal of achieving shared growth for Hikvision and its employees. Regarding the industry and community ecosystem as the soil that nurtures Hikvision, we continue to inject sustainable vitality into our industry and community with the achievements of corporate development.

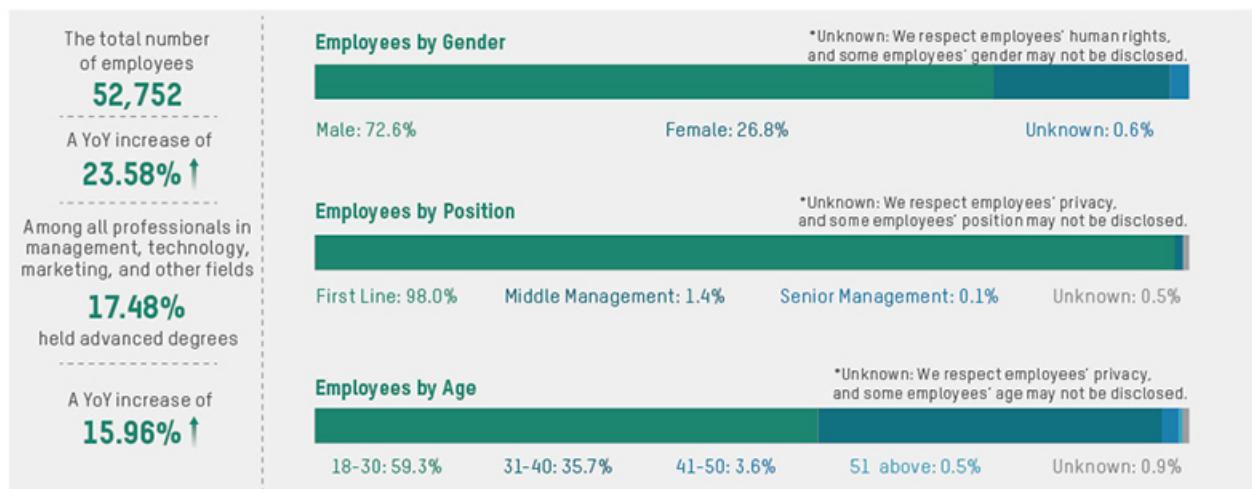
- Common Growth with Employees
- Contribution to a Harmonious Industry
- Gathering the Power of Public Welfare Undertakings

Common Growth with Employees

Employees are one of Hikvision's most valuable assets. Therefore, we do our best to protect the basic rights and interests of every employee, provide them with great development opportunities and benefits, and are highly concerned with their safety and wellbeing. We hope to grow alongside our employees in a harmonious and welcoming work environment that we have created.

Employment Overview

- Building a Professional Team



During the reporting period, we continued to recruit outstanding talents at home and abroad through two channels – internal recruitment and external recruitment (social recruitment, campus recruitment, etc.), endeavoring to build a global team of professional talents.

Online & Offline Recruitment Presentations

During the autumn campus recruitment season, we held more than 150 offline recruitment presentations in over 20 cities at home and abroad, attracting about 7,000 graduates to participate. Also, 5 online recruitment presentations were conducted through livestreaming to students from North America, Europe, Asia-Pacific, Australia and China, attracting nearly 80,000 views.

School-Enterprise Internship Programmes

We've jointly established internship bases with Shaanxi University of Science and Technology, Soochow University, Xi'an International Studies University, College of Computer Science and Technology-Nanjing University of Aeronautics and Astronautics, College of Mechanical Engineering-Nanjing University of Science & Technology and other universities, to further strengthen school-enterprise cooperation.

Open Days

We've organized 25 Open Days events, which were participated by more than 50 alumni. Through the Open Days, we established contacts with over 600 students to promote our employer brand.

New Media Recruitment

We continued to upgrade our WeChat official account and WeChat Channels account: "Hikvision Recruitment", and established an online recruitment platform. As of the end of the reporting period, "Hikvision Recruitment" has already accumulated around 280,000 followers.

• Protecting Rights and Interests

We strictly abide by applicable laws and regulations, including the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Trade Union Law of the People's Republic of China*. Child labor and forced labor are prohibited at Hikvision. We respect human rights, and stick to equal and fair recruitment, with no discrimination of race, nationality, region, ethnicity, or religion. Employees' legitimate rights and interests in recruitment, promotion, compensation and benefits are under our comprehensive protection. Meanwhile, the company pays social insurance for all employees, handles retirement procedures for retirees, and assists them in receiving pensions. During the reporting period, we updated our human resources management systems such as the *Operation-Level Employee Handbook*, and optimized the regulations on employee vacations; and there was no forced labor and child labor occurred.

During the reporting period, Hikvision also established a Women's Federation, established a work, deliberation and communication system and a care list for Women's Federation to safeguard the rights and interests of female employees.

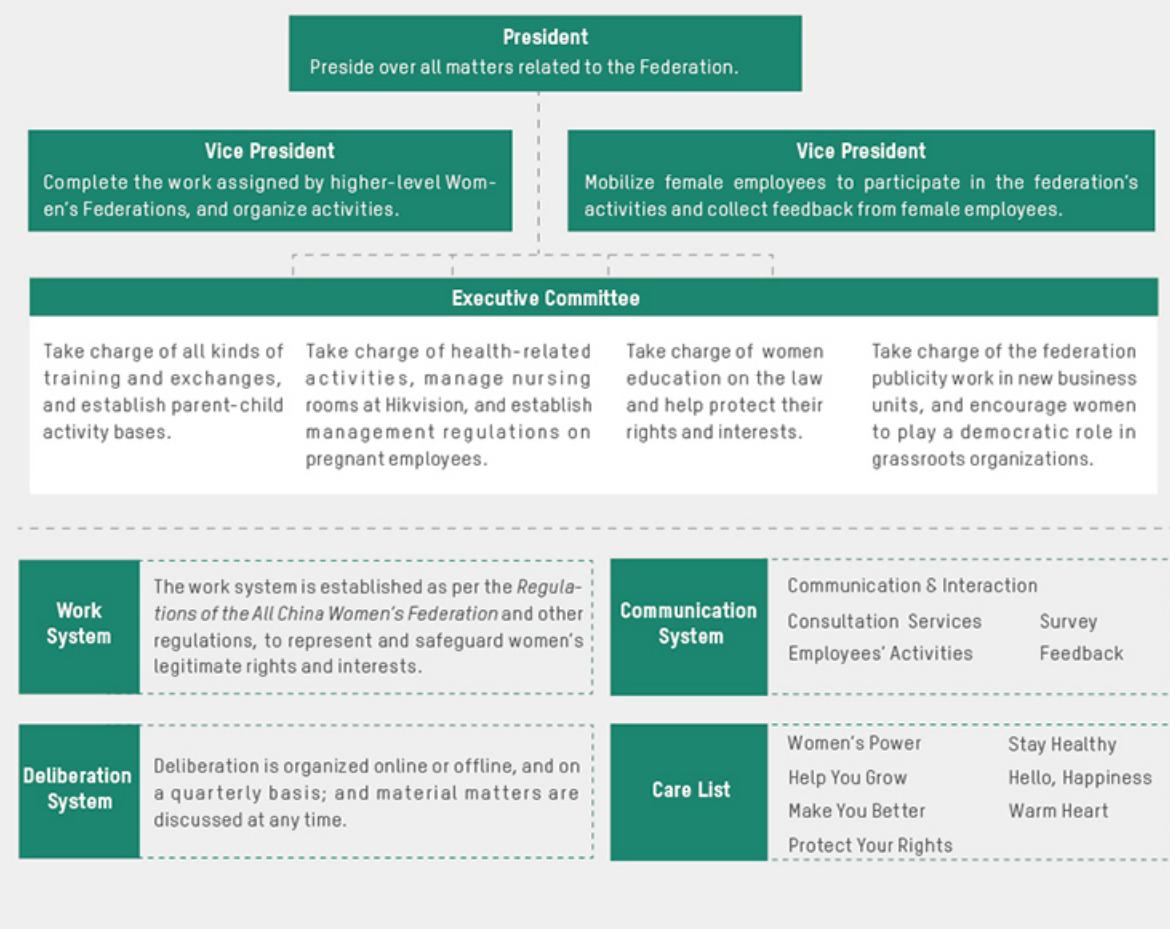
The coverage rate of collective contracts

95.9%

The coverage rate of employees in domestic labor unions

66.3%

Organizational Structure and System of Hikvision Women's Federation



• Optimizing Performance Management

In order to carry out work direction traction and value evaluation more effectively, as well as promote employees' stronger growth, the company has established an appropriate and sophisticated performance management system. The focus is on four phases: goal setting, periodic feedback and guidance, performance appraisal, and application of performance results. Also, it can also provide diversified performance solutions in combination with varied business scenarios and business units.

During the reporting period, we optimized performance objective management and process management and adjusted the archives query system, making the management process more comprehensive and performance objectives more targeted, further drive the penetration of the performance management system among employees.

Users in the company's new performance system

23,000+

Accounting for
69%

of all the staff under appraisal

• Upgrading Compensation and Benefits

Honoring the principle of "people-oriented", Hikvision provides competitive compensation and benefits, so as to ensure an industry-leading workforce. All employees are entitled to a fair compensation policy, regardless of their race, ethnicity, religion, health conditions, gender, family responsibilities, marital status, union membership, political opinion, age or otherwise.

During the reporting period, we offered the tailored 1+X welfare physical examination scheme in order to have a more comprehensive understanding of employees' physical conditions and meet their individual needs. Amidst the COVID-19 epidemic, subsidies were provided to personnel stationed in regions with medium and high risks, and remote consultation and epidemic prevention supplies were provided for expatriates. Also, we further expanded employees' welfare system by improving the standard of meal allowance.

In addition, high performers are eligible for our innovative businesses' co-investment schemes and share incentive plans. The innovative business co-investment scheme is an investment mechanism established by Hikvision with reference to the regulations on state-owned holding companies and the inherent needs of its own innovative business development. The aim is to stimulate key employees' passion for innovative businesses and to expand employee investment channels. The share incentive plans provide staff with restricted shares, as part of our regular incentive system. Hikvision's Board of Directors deliberated and approved the *2021 Restricted Share Plan (Revised Draft)* in December 2021, planning to grant 99,577,629 restricted shares to 9,953 employees. Finally, 97,402,605 restricted shares were granted to 9,738 employees, accounting for 18.46% of the company's total employees at the end of 2021. This incentive plan covered 59.77% more employees compared with the previous one. By seamlessly integrating business growth with employees, the incentive mechanism seeks to attract and retain talents, promote enterprise value increase, and enhance Hikvision's market competitiveness.

Allowances	Wellness	Enjoyable Life	Talent Incentives
High-temperature subsidy	Social insurance	Clubs	Innovative business co-investment scheme
Phone allowance	Supplementary commercial insurance	Staff canteen	Share incentive plan
Work meal allowance	Annual physical examination 1+X tailored scheme	Café	Year-end bonus
Epidemic prevention subsidy	Regular free clinics	Parking lot	Golden Brick Award
	Gym	Birthday benefits	
	Physiotherapy room	Kindergarten and nursery	
	Employee assistance program (EAP)	Housing loan scheme	
		Parental leave	

Shared Growth

- **Building Development Paths**

Adhering to fair, impartial and merit-based employment, we provide employees with two career development paths, as well as internal promotion, job rotation and other mechanisms, ensuring technical professionals and management professionals have the same opportunities in position, salary and development. We serve as a platform for staff to give full play to their talents and advantages, help them grow together with the company while fulfilling their self-worth and career development.



- **Inspiring Talent Potential**

The sustainable development of an enterprise is inseparable from the growth of its employees. To improve the competence of employees from multiple perspectives, Hikvision has established a complete training system, covering new employee training, general training, management training, professional training, internal trainer training, etc. During the reporting period, we updated the training and development section in the *Employee Handbook*, and added the *Management Regulations on HiStudy Online Learning Platform (Trial)* to promote the standard use of online learning platforms.

The total investment in employee training amounted to

RMB 17.8119 million

Up by
186.38%
over the previous year

A total of

45,776

employees were trained

Accounting for
86.87%
of the total

The total training hours were

1,804,110

The average training hours per person was
34.24

Officially Launched HiStudy Online Learning Platform

In order to meet employees' demand for mobile learning and different organizations' needs for customized learning, and to further enhance our talent development system, we independently developed and launched the HiStudy mobile learning platform in the beginning of 2021, which has replaced the online learning platform we purchased in the beginning of 2018.

As of the end of the reporting period, HiStudy had covered more than 40,000 employees, allowing them to study anytime and anywhere. So far, the platform has accumulated more than 1,890 online courses, covering five categories: general competencies, onboard training, leadership development, technical (business) and functions. Among them, 1,771 courses were independently developed, accounting for 94% of the total courses. As embodiment of all our employees' expertise, these courses are expected to greatly improve employees' professional capabilities.

Internal Trainer Program “Ferryman”

During the reporting period, Hikvision’s internal trainer program “Ferryman” saw its new system put into full operation. It has trained groups of outstanding experience inheritors, knowledge refiners and management guides. The program focuses on employees’ competency improvement, and designed to support the company’s substantial development.

In 2021, a total of 579 candidates voluntarily participated in the recruitment of internal trainers, and 91 of them were certified as internal trainers. As a result, there are currently 354 internal trainers at Hikvision, of which about 45% are internal trainers for P-Level employees, together with a total of 89 professional courses developed.

On the other hand, we’ve revised our internal trainer empowerment roadmap, by fine-tuning the growth paths and key capability indicators of internal trainers at all levels. As of the end of the reporting period, 23 offline empowerment training sessions had been delivered, with 481 participants, and the total training hours for internal trainer candidates reached 223 hours; online empowerment courses had been delivered to 819 students.

During the reporting period, we continued to promote targeted training programs for employees at different levels, including new manager embarking training program and on-the-job management open courses, leadership journey courses, and Qianmo School. Through a series of training courses to facilitate the differentiated management of employees at all levels, powering their growth and development.

Training Programs at Hikvision



⑧ Health and Safety

• Safeguarding Occupational Health

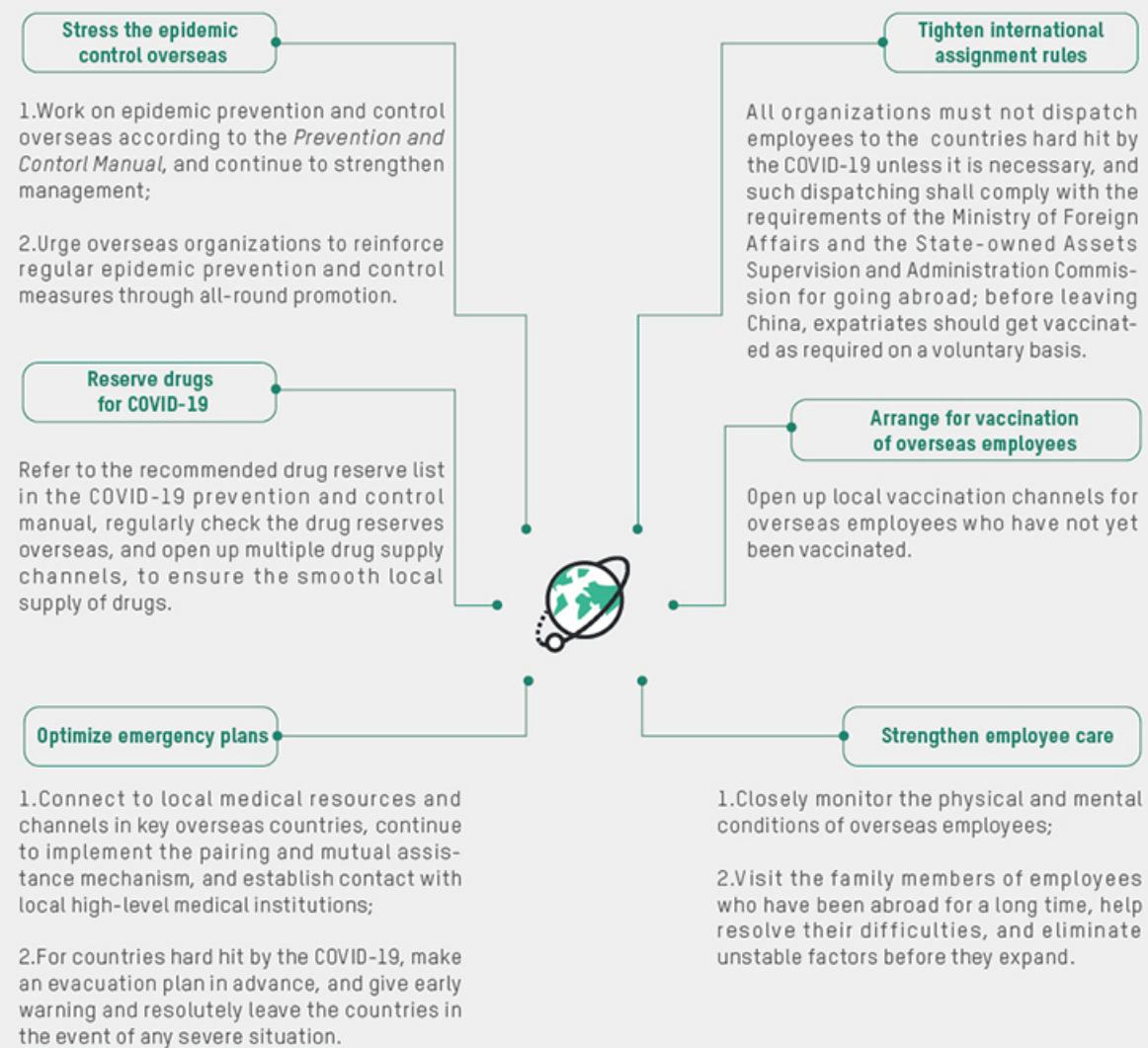
Hikvision strictly observes the *Labor Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, the *Measures for the Administration of Occupational Health Examination* and other national and local laws and regulations on occupational health. We have been certified by the ISO 45001 Occupational Health and Safety Management Systems. Third-party agencies are entrusted to detect all occupational disease hazards on a regular basis, and staff exposed to such hazards are provided with protective supplies and required to receive periodic occupational health examinations. There were no cases of occupational diseases found at Hikvision throughout the reporting period.

During the reporting period, we established an occupational health information collection process, which was put into use in November. This digital process is intended to collect the basic information of employees in positions with occupational hazards, and organize occupational health examinations for them accordingly. With it, we’ve improved the efficiency of information collection and facilitated the health examinations’ arrangement.

In the face of the global spread of the COVID-19 epidemic and its new variants, we keep abreast of its developments, and take corresponding control measures according to the epidemic situation to provide employees with a safe and healthy work environment. For overseas employees, we have also taken a slew of anti-epidemic measures to protect their physical and mental health.



Epidemic Prevention and Control Measures for Overseas Employees



• Assuring Work Safety

Hikvision abides by applicable laws and regulations such as the *Law of the People's Republic of China on Work Safety* and the *Regulation on Work Related Injury Insurance* in work safety management. Following the principle of "safety foremost, prevention first, comprehensive management", we've established a sound work safety management system featuring level-by-level accountability. With the work safety responsibilities of departments and staff at all levels, as well as the operation and management requirements on work safety accountability explicitly specified, we aspire to comprehensively protect employees' life safety and the company's property safety.

We released the *2021 Environmental, Occupational Health and Safety's Targeted Indicators and Management Plan*, specifying that the Work Safety Management Committee is responsible for setting and reviewing targets. The document includes environmental, occupational health and safety policies and mid- and long-term targets and indicators for occupational health and safety, as well as all-round provisions for indicator management, decomposition, action plans and assessment. Whether work safety indicators are reached will serve as an important basis for the annual assessment on environmental, occupational health and safety performance. All these efforts are intended to create a green, safe and harmonious environment for employees.

During the reporting period, there were 12 work-related injuries taking place in the company, with a total of 36 workdays lost due to work-related injuries, and no deaths were caused by work-related injuries.

Mid- and Long-Term Goals for Occupational Health and Safety

- To strengthen management over environmental, occupational health and safety
- To continuously control the number of work safety accidents and occupational illness cases, and strive for zero occurrence
- To continuously improve the management over environmental, occupational health and safety performance
- Establish the EHS culture

Assessment Indicators for Occupational Health and Safety

Occupational Health

- Number of new occupational illness cases: 0
- Detection rate of occupational hazards: 100%
- Medical examination rate of employees in positions with occupational hazards: 100%
- Intactness rate of facilities for protection against occupational hazards: 100%
- Wear rate of personal protective equipment for employees in positions with occupational hazards : 100%

Safety

- Number of serious injuries and above: 0
- Number of minor injuries: no more than 20
- Number of fire accidents: no more than 4
- Rectification rate of safety hazards: 100%
- Rate of licensed employees in special operation positions: 100%
- Coverage of safety education and training: 100%
- Timely and effective response to all kinds of emergencies

Hikvision's Main Progress on Work Safety in 2021

- Develop the *Emergency Rescue Plan for Work Safety Incidents*

To regulate the emergency management and emergency response procedures for work safety accidents, we have formulated the *Emergency Rescue Plan for Work Safety Incidents*, which requires that emergency rescue procedures should be enforced in the event of an emergency, to protect employees' lives and property.

- Organize work safety standardization review

During the reporting period, Hangzhou Hikvision Electronics Co., Ltd. organized a review on work safety standardization, and inspected all safety modules in Tonglu base, which were found in compliance with the Level II work safety standardization.

- Release the *EHS Evaluation Management Measures of Hangzhou Hikvision Electronics Co., Ltd.*

During the reporting period, we released the *Environment, Health & Safety (EHS) Evaluation Management Measures of Hangzhou Hikvision Electronics Co., Ltd.* The document includes a EHS evaluation process for the company, and has also improved the EHS rating mechanism to quantitatively evaluate the EHS performance indicators of each plant. This has motivated employees to work harder on safety management. As a result, the number of work safety accidents has dropped significantly compared with 2020.

Safety Credits Redemption Mechanism Launched to Raise Front-line Employees' Safety Awareness

In order to raise the safety awareness of front-line employees and engage more of them to foster a safety culture, the Supply Chain Center set up a gift redemption store in each factory in 2021. Employees can win credits in activities themed on safety culture, such as safety hazards identification and hazard reporting, and then redeem for gifts with the credits earned. Physical gift cabinets are set up in different areas for more timely redemption, making up for the shortcomings of long redemption cycle and product intangibility in online malls. By improving the offline atmosphere and experience, it is hoped to foster a better safety culture.

The program had covered

14
factories/departments
at Tonglu base

Attracting
11,979
participants



• Promoting Training and Publicity

In 2021, the company's headquarter educated employees on environmental, occupational health and safety through online, offline, and external training, including 34 training courses on three-level safety education, first aid, fire fighting, transportation, environmental factors and hazard identification, safety standardization, special operations, hazardous waste and other topics. Nearly 2,000 trainees were trained, including the person in charge, safety managers, and special operators.

Headquarter safety training

34 courses

Trainees
nearly 2,000

Participants

35 sessions

7,253

Training hours

142,212

Occupational Health and Safety Training at Hikvision



First aid training

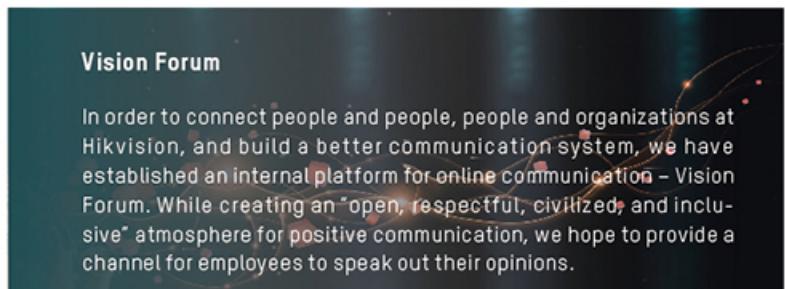


Training on fire safety in canteens

Employee Care

• Improving Employee Communication

Maintaining good and effective communication is the cornerstone for the company to work and grow together with its employees. We've built and continue to improve our communication system and channels to ensure smooth interaction across different positions, departments and levels.



Vision Forum

In order to connect people and people, people and organizations at Hikvision, and build a better communication system, we have established an internal platform for online communication – Vision Forum. While creating an "open, respectful, civilized, and inclusive" atmosphere for positive communication, we hope to provide a channel for employees to speak out their opinions.

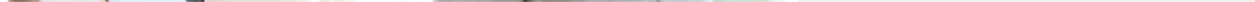


A group of diverse employees are gathered in a modern office setting, sitting around a white table. They are engaged in a discussion, with one person gesturing while speaking. The room has large windows in the background.



Hotline & Software & Email Consulting

- We provide employees with one-to-one online consulting services through a wide range of communication channels – such as the Dabai Hotline, Hiklink, and email – to help employees solve any problems at work and in life.
- By the end of the reporting period, the Dabai Hotline had received a total of 26,976 calls.

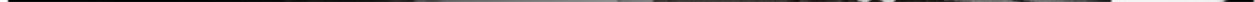


Two female employees are smiling and engaged in a conversation. One is holding a smartphone.



Conversation with Managers

- During the reporting period, we held a total of 19 sessions of Conversation with Managers, where senior executives were invited to share their insights into selected topics. This platform for dialogue between first-line employees and middle and senior managers is a great supplement to our communication system.
- The program also featured female managers, who helped female employees know better about the workplace and shared their experience in balancing family and work.



A male employee is seen from the back, looking towards a whiteboard where a female manager is gesturing while speaking.

• Caring Physical and Mental Health

The company highly concerned with the physical and mental health of all employees, we have been enhancing staff's wellbeing through activities such as the Dabai EAP, health roadshows, and on-site health care. During the reporting period, we held 12 sessions of on-site health care, with a total of 420 participants, and 12 weekend free clinic sessions, benefiting 490 participants.

Psychological Counselling

- Employee consultation: Employees are allowed to make appointments for consultation through the psychological consultation hotline and HikLink software;
- Manager consultation: Managers are allowed to arrange for consultation sessions and talk with psychological consultants by contacting HRBP and Hikvision's EAP liaisons;
- Crisis intervention: In the event of any internal crisis, the EAP team will contact personnel involved in a timely manner, arrange crisis intervention experts to deal with the crisis and provide suggestions.

- 611 hours of employees' psychological counseling
- 7 management consultation sessions
- 1 remote crisis intervention

Psychology Class

- Psychologists are invited to give regular EAP psychology classes in combination with latest topics and company activities. The classes are open for Hikvision employees around the world, both online and offline.

- 6 EAP psychology classes
- 278 participants per class
- 4.77 points of average satisfaction score

Workshop

- Each business unit may customize training courses according to its current situation and needs.

- 5 EAP psychology workshops
- 53 participants per course
- 4.63 points of average satisfaction score

• Making Life Better

We make employees' daily life more splendid and help them balance work and life with a wide range of diversified corporate culture activities. During the reporting period, we celebrated the New Year, the Women's Day and many other festivals, and held the "Happy Moments" activity, the "Recruitment Season" activity and Mid-Autumn singing activity. In particular, "Hello, Happiness" activities was held 18 times throughout the year, with over 540 participants in total.



To celebrate the 20th anniversary of Hikvision's establishment in 2021, the Guangxi Business Center organized a city orienteering. While giving their best wishes to the company, employees were also motivated to engage more in physical training.



Contribution to a Harmonious Industry

With the tenet of "To act as needed, meet customer needs, provide professional services, and maximize value", Hikvision has built a sound service supporting system centered on customer needs and experience. We stay true to our service mission "to help customers succeed with professionalism, and create value with services", committed to becoming "a specialist in AIoT and big data services". In the meantime, the company actively support the suppliers and the distributors to develop sustainable capabilities, and work with partners to create a healthy ecosystem that pursues mutual benefits and win-win cooperation, contributing to the entire industry's prosperity.

Industry Service System

During the reporting period, we continued to optimize and upgrade our systems, platforms and service innovation. While consistently observing the *Sales Manual*, the *Customer/User Management Measures* and other existing management measures, the company has also compiled or revised the *Basic Regulation on EZVIZ 400-Hotline*, the *Complaint Handling Process for EZVIZ International Contact Center* and other normative documents, to standardize the management of service processes.

Level I Global Technical Support and Service Center

With superior resources, it provides global operations with comprehensive on-site and remote services.

Level II Technology Department of Business Center/Function Center

It is vertically supervised by the headquarters and in parallel connection with each market.

Level III National/Regional Service Station and Local Authorized Service Station

Set up all over the world, it helps extend and supplement our local services.

- Three-level service system
- Assuring customer satisfaction
- Diversified service solutions
- Digital and intelligent service tools
- Local service resources all over the world
- Complete internal and external training and certification system

Service System Overview

Improving Service Capabilities

We seek to give full play to our core advantages in "comprehensive and unified service resources", "professional and efficient service team", and "trustworthy service support". While establishing a mature rapid response and quality inspection management mechanism, Hikvision has equipped diversified and customized service solutions with a professional service team and flexible feedback channels. By doing so, we are committed to providing seamlessly-matched premium products and services.

The company now focuses on the comprehensive improvement of service channels, service scope, service efficiency and intelligent service capabilities. For the various product lines, we provide an array of service solutions, including product parameters, procurement channels, operation instructions, troubleshooting, maintenance application, and complaints and suggestions.

Three Core Service Sectors - TS (Technical Support)

- It refers to the aggregation of all technical support activities centered on enhancing product competitiveness and maturity.
- It is responsible for the serviceability and deliverability of products in IPD (Integrated Product Development) activities.

Three Core Service Sectors - SD (Service Delivery)

- It refers to the process of delivering services to customers as agreed in contracts.
- It is an integral part of LTC (Leads To Cash), with customer satisfaction as the core and payment collection as the goal.
- Contract types include engineering project contract, service contract and so on.

Three Core Service Sectors - ITR (Issue To Resolution)

- It refers to the process from a customer's request for technical service to the fulfillment of such request.
- Technical service centers on customer satisfaction.
- Service methods and other details are subject to SLA (Service Level Agreement).

3D Presentation Enhances Customer Interaction Experience

Hikvision has innovatively applied the VR/AR technology to present product information in a multi-sensory integrated manner, bringing customers an immersive experience of interaction and meeting the needs of product promotion and service support.

The company has introduced 3D display tools into online platforms, as a way to gradually promote the 3D display transformation of display portals and other product presentation channels. For offline marketing, AR has been embedded in APPs to enable on-site selection in product marketing scenarios.

During the reporting period, Hikvision promoted the 3D upgrade of 5 display portals including our website and digital showroom. The AR-powered selection APP has effectively saved customers the time to wait for scene renderings. A total of 206 3D product models (including access control, front end, security check, etc.), and 12 typical scene libraries (including entrances/exits, lobbies, parking lots, etc.) were released. This has effectively reduced customer inquiries and complaints arising from the limitations of 2D product display.



- **Increasing Customer Satisfaction**

We value customers' full-process experience with multiple contacts and via multiple channels. The company has hence established a customer satisfaction management system, and prepared the *Return Visit Process for Hotline Service Satisfaction Survey*, the *Return Visit Process for After-sales Maintenance Service Satisfaction Survey*, the *Questionnaire Process for Customer Call Center Satisfaction Survey* and other documents to guide our service processes. A Customer Satisfaction Survey Team is also formed to supervise the whole-process customer satisfaction management, and promote the implementation of satisfaction surveys and optimization measure.



Hikvision Customer Satisfaction Survey Team

According to the characteristics of domestic and overseas markets and various business sectors, we have established online and offline communication channels. The company makes good use of digital platforms and tools to cover cities and channels at all levels. Customers may report lead information, request technical service and support, make hotline inquiries through traditional channels such as "Contact Us" on our official website. New digital channels like Hik-ePartner and "User Feedback" section on APPs are also available for users to leave messages online and search for frequently asked questions.

Hikvision regularly collects customer feedback through satisfaction surveys every year, which effectively improves customer loyalty and the efficiency of value transmission. Customer complaints are managed under a closed loop, through which we divide complaints by level, optimize complaint-related indicators, improve our complaint handling and accountability mechanism, and share complaint cases on a regular basis. Complaint specialists are responsible for the whole process from case assignment, handling, return visit and archiving, ensuring that customer requests are fully addressed.



Results of Hikvision's 2021 Customer Satisfaction Survey

EZVIZ Builds a Closed-loop User Experience Management System

EZVIZ always attaches great importance to user experience, and associates user satisfaction with the company's business value. Our follow-up product iterations and optimization plans are guided by the results of satisfaction surveys. In 2021, EZVIZ's user experience team innovated its user experience management by building a closed-loop user experience management system to help locate and solve product problems in real time.

Based on such efforts, in November 2021, EZVIZ launched a strategic satisfaction survey, which divided users by region (domestic/overseas) and type (To C/Offline Store*) for random investigation. The results show that the net promoter score of domestic consumers was 50.4%, that of overseas consumers was 26.67%, and that of offline store users was 57.2%.

Domestic consumers

50.4%

Overseas consumers

26.67%

Offline store users

57.2%

The Net Promoter Score

*To C means to consumers, and Offline Stores refers to service provider, etc.

Support for Industry Development

• Growing with Suppliers

Hikvision has been maintaining open communication with suppliers by a variety of means, such as the SRM online platform and regular communication and training sessions offline.

Joint Technology Development

In the early stage of new product design, we have thorough communication on design schemes with suppliers, seeking the local alternatives of devices from the design stage, to reduce supply chain risks.

Online SRM Platform

On the SRM platform, specialized training courseware, management requirements and periodicals are available for suppliers to download, view and learn remotely.

Offline Training

The company organizes a variety of training for suppliers, such as system training, and user training for IT systems.

Our departments help suppliers improve their process control capabilities via yearly inspections, which include on-site audit, face-to-face communication, instruction for improvement and other methods.

Supportive Financial Services

We seek balanced and healthy development at the two ends of our supply chain.

Upgrade of Slip Ring Supply Chain

During the reporting period, Hikvision drafted a plan for technical cooperation with suppliers of slip ring to help them improve product quality and reduce delivery risks. In the project, we assisted suppliers to make slip ring production cleaner, promoted the automation of key processes, and established a life cycle quality traceability management system to improve the process capability of each process. As a result, suppliers' daily production capacity was increased by nearly 2 times, the defect rate was reduced by 50%, and the service life of slip rings was extended – a best practice of cost reduction and efficiency increase.

Suppliers' daily production capacity was increased by nearly

2 times ↑

The defect rate was reduced

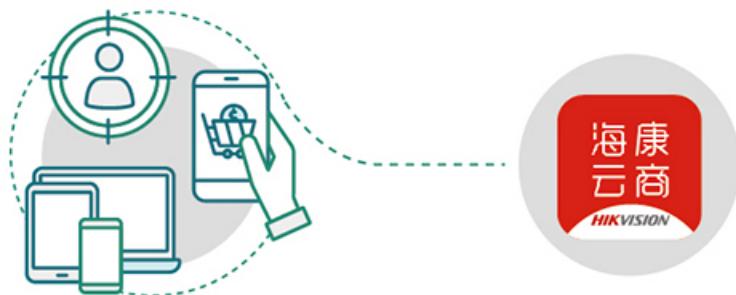
50% ↓



- **Boosting Distributors' Development**

To cope with the repeated outbreak of the COVID-19 epidemic, Hikvision has increased its online marketing efforts this year. New models such as livestream marketing on Hikvision SMBG E-commerce platform were born, together with innovative marketing channels including TikTok and live broadcasting, which has expanded the value system of our sales channels. By doing so, we've decentralized our communication model, transforming it from a ladder to a network. Thanks to the live broadcast function of the Hikvision SMBG E-commerce platform, distributors located in the regions that influenced by the epidemic have achieved an increase in both the number of transaction customers and sales.

The sales force at Hikvision has reorganized the data on downstream customers, attached clearer labels to secondary customers, and supported distributors for online marketing activities through subsidies, furnishing support, and other means. Also, we've established an official account for domestic digital marketing on HIKLINK, and continued to introduce the latest theories and knowledge of digital marketing to our distributors through the Digital Marketing Classroom.



Strengthened Industry Cooperation

In 2021, Hikvision and the China Computer Federation (CCF) jointly launched the CCF-Hikvision Bar-headed Goose Fund. The program aims to address the realistic issues and business needs in the industry, and to strengthen the partnership between the academic community and the R&D teams of enterprises in the form of scientific research projects. It is hoped to expand the academic influence of both parties and put research results into practice, thereby enhancing industry-university-research cooperation.

This is the first time that Hikvision has released a cooperation research project in the form of a scientific research fund. The Fund covers 8 fields, including visual perception, machine learning, privacy computing of big data, and in-memory computing. Since its launch, the program has received over 120 applications from 67 universities/institutes at home and abroad.

The Fund covers **8** fields

The program has received

120+ applications from

67 universities/institutes
at home and abroad

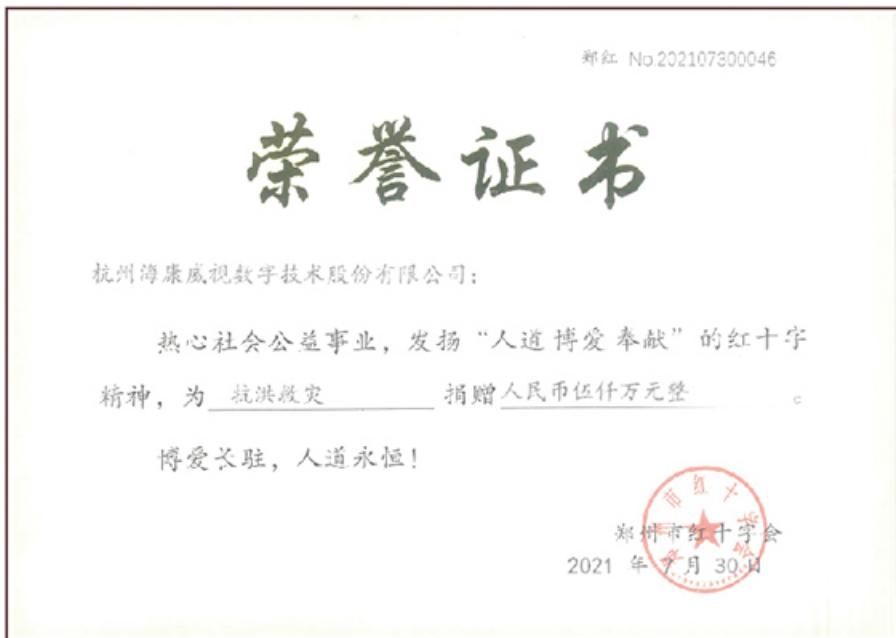




■ Gathering the Power of Public Welfare Undertakings

Hikvision stays true to its mission, and that is to share its achievements with the society by actively supporting and participating in social welfare undertakings.

In July 2021, many regions in Henan Province suffered heavy rainstorms, and some of them were hard hit. Learning that, Hikvision took the initiative to fulfill its corporate social responsibility and donated RMB 50 million to the Red Cross Society of China Zhengzhou Branch for disaster prevention, relief and post-disaster reconstruction in severely affected areas.



In the meantime, adhering to its belief of enabling public welfare undertakings through technology, the company has never stopped in pursuing more innovations and possibilities to serve human well-being and sustainable development. An online platform has been built under the Hikvision STAR Program, through which the company offers free AI capabilities, as well as products and technical support, to organizations in need. We also work with global professional organizations to deliver training to our partners, and help promote more public welfare projects.



Hikvision Public Welfare Partnership Program

Sustainability through Technology
Actions for Responsibility

Hikvision STAR Program (2020-2021)

Hikvision initiated the STAR Program in 2020, and expanded it to a wider range in 2020-2021. It is designed to recruit public welfare partners and call for the exploration and implementation of public welfare projects with focuses on four sectors: biodiversity monitoring and protection, environmental monitoring and protection, digital villages, and cultural heritage protection.

In 2020-2021, Hikvision STAR Program teamed up with World Wide Fund for Nature (WWF), One Planet Foundation (OPF), Green River, Society of Entrepreneurs and Ecology Foundation (SEE Foundation), Shanghai Daorong Nature Conservation and Sustainable Development Center, Gangri Neichog Research and Conservation Centre and many other public welfare organizations to launch technology-driven public welfare projects in varied fields.

In the upper reaches of the Huangpu River, we help with water quality monitoring in small watersheds in drinking water reserves

Jinze Reservoir is located in Jinze Town, Qingpu District, on the north bank of Taipu River in the upper reaches of Huangpu River. The reservoir was put into service at the end of 2016 and now it has played a crucial part in the water supply system of Shanghai, as it provides water to 1/3 of people living in that city.

Shanghai Daorong Nature Conservation and Sustainable Development Center (Daorong) is a non-profit organization dedicated to the protection of water resources and the prevention and control of non-point source pollution. Since 2013, Daorong has been working on drinking water source protection within the conservation area of Jinze Reservoir. In the second half of 2019, Daorong found in investigations that the total nitrogen and chemical oxygen demand of the water body in many villages within the reserve were far beyond limits, and the total nitrogen content in soil was high as well, indicating the adverse impact of agricultural activities such as fish ponds or paddy fields on water quality.

In October 2021, Hikvision and Daorong launched a small watershed monitoring project in the drinking water reserve in the upper reaches of the Huangpu River. We provided the project with hyperspectral water quality monitoring equipment and software platforms based on spectral analysis technology. They support the regular monitoring of 9 indicators, including chlorophyll, transparency, and permanganate, as well as the combined analysis of the water pollution monitoring data and the nonpoint source pollution data in surrounding villages. This provides basic information and decision-making basis for monitoring strategies for the small watershed, and helps send alerts on water security risks in Jinze Reservoir.



In the Qinghai-Tibet Plateau, we research on human-bear conflict

In recent years, human-wildlife conflict has emerged as a widely-concerned social issue, especially the human-bear conflict. Gangri Neichog Research and Conservation Centre (Gangri Neichog) is a primary public welfare organization rooted in Northwest China. It has been long engaged in the research on "human-wildlife relations" in the Qinghai-Tibet Plateau to find solutions to "human-wildlife conflicts".

In 2021, to support Gangri Neichog in its study on "human-bear conflict", Hikvision provided wildlife cameras for a number of monitoring points located in Nangqian County, Yushu Prefecture, Qinghai Province. Equipped with different bear fences and deterrent tools, the observation points can monitor and compare local brown bears' behaviors and the damages they cause to houses, while helping local herdsmen to better understand this creature, and improving the tolerance to wildlife in the local community.

The project helped a pilot program focusing on brown bear observation propose a feasible human-bear conflict prevention solution to Qinghai Forestry and Grassland Administration and Sanjiangyuan National Park, and the solution has been gradually put into practice in Sanjiangyuan National Park, Qilian Mountain National Park and other conservation areas in Qinghai Province.

A staff at Gangri Neichog said: "Hikvision has provided highly professional infrared sensing and monitoring equipment to the primary NGOs for wildlife protection in Northwest China, along with professional engineers to give us instructions on equipment use, after gaining a thorough understanding of local needs. We would like to express our gratitude to Hikvision for providing these necessary and rare hardware devices for our field monitoring work."



In Wuqinzhang, Huidong County, Guangdong, we use technology to protect pangolins

Since 2021, we have been working on the upgrade of the intelligent monitoring and protection system for Chinese pangolins in Wuqinzhang Reserve under the Hikvision STAR Program. The project is in collaboration with Alxa SEE Pearl River Project Center, Society of Entrepreneurs and Ecology Foundation (SEE Foundation), and Xizijiang Ecological Conservation Center.

A professional video platform software, a wildlife monitoring system, a human-wildlife conflict monitoring system, and an intelligent analysis system for pangolins, are used for the intelligent identification and monitoring of wild pangolin populations, providing useful image data for the Wuqinzhang Reserve. In particular, the records of pangolins' living habits in forests are expected to better support the research and protection of the species.

"The protection of pangolins is of great value in protecting the biodiversity in our forests," said Li Cheng, director of Xizijiang Ecological Conservation Center. "The intelligent video system allows for smart, information-based and real-time monitoring of pangolins. It relieves researchers from patrolling and provides precious data for the scientific research of pangolins. We are expecting more conservation technologies to be used in the future of the Wuqinzhang Reserve, so that more pangolins can thrive here."



Hikvision STAR Program 2021-2022

Biodiversity Monitoring and Protection Let the world see growing hope for life



- Wildlife monitoring
- Animal recognition algorithms
- Digital biodiversity protection

Environmental Monitoring and Protection Let the world see more clear waters and blue sky



- Intelligent atmospheric environment monitoring
- Intelligent water environment monitoring
- Intelligent meteorological monitoring

Digital Villages Let the countryside see better life



- Rural telemedicine services
- Agriculture intelligent research (insect infestation analysis and early warning, intelligent observation of crop growth, crop disease observation and early warning)

Cultural Heritage Protection Let the world see more civilization we inherited



- Smart fire management in ancient villages and buildings
- Preventive conservation of underground cultural relics



During the reporting period, we launched the STAR Employee Program to recruit employees as Hikvision's public welfare partners. Through the program, staff members are encouraged to help individuals and organizations in need and serve the society using their skills, knowledge and experience. So far, a total of 290 employees have applied for the program. Those 290 STAR Partners were invited to a training workshop where they worked and made progress together through lectures and experience given by external experts and internal coaches. With the knowledge and experience gained there, they will do a better job in the collaboration with each other to implement other public service projects.





Within 2 months after the employee partnership program kicked off, STAR employees have practiced their philosophies of public welfare undertakings and took the lead to help others by launching a number of voluntary activities to send their warm-hearted care to disabled people, the elderly and children left behind in mountainous areas, and helping fulfil the little wishes of the students in a rural elementary schools.



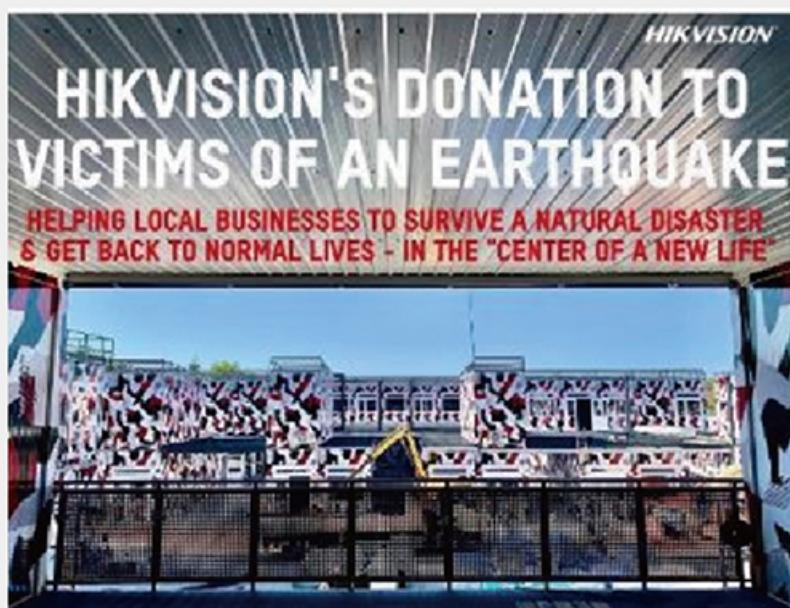
Overseas Public Welfare Activities

Participating in the Lampedusa Turtle Rescue



Sea turtles, as one of the oldest creatures in the world, have lived on Earth for about 200 million years, but now they are endangered. Loggerhead sea turtles, one of the species of sea turtles native to Lampedusa, Italy, are suffering from environmental pollution and human activities. Fishing, pollution and sea transport are the most common threats to them, and the urbanization of beaches where turtles lay their eggs has hindered their reproduction.

During the reporting period, Hikvision participated in the Lampedusa Turtle Rescue Program, and provided its video technology for 24/7 observation and ongoing recording of loggerhead turtles in water tanks. This helps evaluate the movement of the sea turtles during their recovery and verify their response to stimulation. Then the footage will be analyzed by research institutions to better understand the characteristics of sea turtles and mitigate the danger they face. Scientific detection tools will allow us to research in a precise manner, which leads to positive impact on this species and the natural environment.



Overseas Donation



In December 2020, an earthquake struck the Banovina region in central Croatia. To aid post-quake economic recovery there, Hikvision Europe provided ColorVu cameras to ensure that local residents could work safely while rebuilding their economy. Apart from this, CCTV systems were offered to some local families and children's charities, and later installed and commissioned by our official distributors in Croatia.

Overseas Public Welfare Activities



Animal Protection

Riyadh Animal Shelter in Saudi Arabia is dedicated to caring for animals in need of help and medical treatment and finding permanent homes for them. Thanks to the consistent efforts of its staff and volunteers, thousands of animals have been rescued. Hikvision has provided cutting-edge AI video solutions not only to protect the safety of animals and visitors in the shelter, but also ensure animals abandoned near the shelter can be found and saved, so that each and every animal enjoys a good chance of recovery and a new life.



At the invitation of the China Commerce in Cambodia Association, Hikvision participated in the activities organized for Cambodian orphanages. Paying attention to the daily needs of children there, we delivered dolls, basketballs, volleyballs, pens and notebooks to them and joined them in sports events.



Take Care of Orphans



Synchronous Learning Opens a Window for Primary Schools in Mountainous Areas

Jiazishan Primary School is located in the hinterland of Qinglong Mountain in Hebei Province. The mountain has trapped 11 local students, but has not restrained their thirst for knowledge and dream for the future. In April 2021, Hikvision engineers introduced a "synchronous learning" solution to the school, allowing children to learn, draw, and sing in the classroom with their classmates in cities.

During the reporting period, we have provided online classroom construction plans for more than 100 schools in mountainous areas, benefiting over 20,000 teachers and students with 10,000 online courses and more. If each online course is attended by 20 students and 2 pages of a textbook are taught per student on average, every year 400,000 pages of textbooks could be taught through online courses.

100+
schools

20,000+
teachers and students

10,000+
online courses

400,000
pages of textbooks



Appendix 1: KPI Tables

■ Key Operating Performance

KPI	Unit	2019	2020	2021
Direct economic value	RMB 1,000,000	57,658.11	63,503.45	81,420.05
Cash dividend	RMB 1,000,000	6,541.51	7,474.73	8,489.89
Tax paid	RMB 1,000,000	5,192.43	4,901.86	6,447.30

■ Key Environmental Performance

KPI	Unit	2019	2020	2021
Energy use				
Unleaded gasoline	Ton	469.0	513.8	406.3
Diesel	Ton	45.7	27.3	39.9
Natural gas	10,000 cubic meters	225.8	135.6	227.2
Purchased electricity	MWh	173,318.8	203,339.3	225,951.1
Clean energy				
Photovoltaic power	MWh	6,404.6	8,494.3	8,994.3
Energy consumption				
Total energy consumption	Ton of standard coal equivalent	24,801.5	27,433.4	31,186.0
Direct energy consumption	Ton of standard coal equivalent	3,500.6	2,443.0	3,416.6
Indirect energy consumption	Ton of standard coal equivalent	21,300.9	24,990.4	27,769.4
Energy consumption intensity	Ton of standard coal equivalent per million revenue (RMB)	0.43	0.43	0.38
Greenhouse gas emissions				
Total emissions(Scope 1 + Scope 2)	Ton of carbon dioxide equivalent	124,238.9	146,550.5	157,014.3
Scope 1	Ton of carbon dioxide equivalent	6,347.3	4,471.8	6,250.3
Scope 2	Ton of carbon dioxide equivalent	117,891.6	142,078.7	150,764.0
Emission intensity	Ton of carbon dioxide equivalent per million revenue (RMB)	2.15	2.31	1.93

KPI	Unit	2019	2020	2021
Water resources				
Total use	Ton	1,186,882.18	1,131,865.01	1,730,970.8
Municipal water	Ton	1,181,680.4	1,272,248.0	1,721,527.7
Underground water (overseas operations only)	Ton	5,196.1	3,816.1	9,443
Surface water (overseas operations only)	Ton	5.7	2.0	0.05
Water consumption intensity	Ton per million revenue (RMB)	20.55	17.82	21.26
Packaging materials				
Total use	Ton	42,164.9	39,667.5	54,950.4
Plastics	Ton	5,869.7	6,000.7	13,390.1
Cartons	Ton	34,601.6	31,571.4	38,477.4
Wood	Ton	1,628.8	1,982.7	2,916.4
Metal boxes	Ton	64.8	112.8	166.5
Packaging material use intensity	Ton per million revenue (RMB)	0.73	0.62	0.67
Recyclable waste				
Total	Ton	12,903.2	17,986.2	18,129.4
Plastics	Ton	2,884.7	3,764.2	3,865.5
Wood	Ton	986.7	1,506.6	1,342.3
Paper	Ton	7,600.8	10,053.0	10,093.6
Metal	Ton	1,302.1	2,629.7	2,226.8
Others (wiring harness, oiled paper, etc.)	Ton	128.9	32.7	601.2
Intensity	Ton per million revenue (RMB)	0.22	0.28	0.22
Non-recyclable waste				
Total	Ton	5,404.3	7,019.1	6,323.1
Kitchen waste	Ton	1,759.3	1,686.3	1,668.5
Office waste	Ton	1,722.3	3,215.5	2,083.1
General industrial waste	Ton	1,922.7	2,117.3	2,571.5
Intensity	Ton per million revenue (RMB)	0.09	0.11	0.08
Hazardous waste				
Total waste	Ton	502.1	513.1	761.5
Waste intensity	Ton per million revenue (RMB)	0.009	0.008	0.009

■ Notes on Key Environmental Performance:

- The time scope of environmental data is from January 1st 2021 to December 31st 2021; the organizational scope of environmental data includes Hikvision's research institutes in China, Binjiang Phase I, Phase II, and Phase III (including Binjiang manufacturing base and office areas), Tonglu manufacturing base, Chongqing manufacturing base, India manufacturing base, Brazil manufacturing base, all marketing centers in China (covering 32 provinces, autonomous regions and municipalities) and all international marketing centers overseas (covering 48 countries and regions); by use scope, environmental data is roughly divided into two categories: office operation and manufacturing.
- Intensity is calculated using the total amount in 2021 divided by the company's revenue for the year, in millions of RMB.
- Direct Greenhouse gas emissions (Scope 1) are from the use of unleaded gasoline, diesel and natural gas. The calculation of Hikvision's direct greenhouse gas emissions in China refers to the *Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions from Industrial Enterprises and Other Industries (Trial)* by the National Development and Reform Commission of the People's Republic of China; and the calculation of direct greenhouse gas emissions overseas refers to the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, and some parameters are from the WRI/WBCSD GHG Protocol.
- Indirect Greenhouse gas emissions (Scope 2) are from the use of purchased electricity. The calculation of Hikvision's indirect greenhouse gas emissions in China refers to the *Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions from Industrial Enterprises and Other Industries (Trial)* by the National Development and Reform Commission of the People's Republic of China; and the calculation of indirect greenhouse gas emissions overseas refers to the *EIB Project Carbon Footprint Methodologies*.
- Direct energy includes unleaded gasoline, diesel and natural gas, and indirect energy includes purchased electricity. Total energy consumption is calculated in tons of standard coal, with reference to the National Standard of the People's Republic of China *GB/T 2589-2020 General Principles for Calculation of the Comprehensive Energy Consumption*.

■ Key Social Performance

KPI	Unit	2019	2020	2021
Employment				
Number of employees worldwide	/	40,403	42,685	52,752
Occupational health and safety				
Coverage rate of safety education	%	100	100	100
Number of occupational diseases	/	0	0	0
Number of work-related fatalities	/	0	0	0
Training and education				
Total investment in employee training	RMB 10,000	1,671.90	621.97	1,781.19
Training hours per employee	hour/person	51.6	44.0	34.24
Innovation and R&D				
Investment in R&D	RMB 1,000,000	5,484	6,379	8,252
Number of new patents	/	1,339	1,270	1,507
Number of new software copyrights	/	161	202	256
Number of new trademarks	/	--	169	337
Supply chain management				
New suppliers selected using environmental criteria	%	--	100	100
New suppliers selected using security criteria	%	--	--	100
Distributors' training	/	--	14,000+	120,240*

*Note: The statistical scope of distributors' training in 2021 covers training courses on products, solutions and technologies, including the livestream training on Hikvision SMBG E-commerce, and the training data on secondary distributors is a newly added item from 2021.

Appendix 2: GRI Standards Index

Disclosure issues /disclosures	Disclosure title	Chapter index	Page number index
GRI 102 General disclosures			
Organization Profile			
102-1	Name of the organization	About This Report	
102-2	Activities, brands, products and services	About Hikvision	
102-3	Location of headquarters	About This Report	
102-4	Location of operations	About This Report	
102-5	Ownership and legal form	Legal form: company limited	
102-6	Markets served	About Hikvision	
102-7	Scale of the organization	Appendix 1: KPI Tables Harmonious Co-existence - Common Growth with Employees	93-96 67-76
102-8	Information on employees and other workers	Harmonious Co-existence - Common Growth with Employees	67-76
102-9	Supply chain	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
102-10	Significant changes to the organization and its supply chain	No major changes in the organization and its supply chain during the reporting period.	
102-11	Precautionary principle or approach	ESG Management	02-10
102-12	External initiatives	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
102-13	Membership of associations	Harmonious Co-existence - Contribution to a Harmonious Industry	77-82
Strategy			
102-14	Statement from senior decision-maker	Message	
Morality and Integrity			
102-16	Values, principles, standards and norms of behavior	About Hikvision	
Governance			
102-18	Governance structure	ESG Management	02-10
Stakeholder Involvement			
102-40	List of stakeholder groups	ESG Management - Stakeholder Engagement	06-10
102-41	Collective bargaining agreements	Harmonious Co-existence - Common Growth with Employees	67-76
102-42	Identifying and selecting stakeholders	ESG Management - Stakeholder Engagement	06-10
102-43	Approach to stakeholder engagement agreements	ESG Management - Stakeholder Engagement	06-10
102-44	Key topics and concerns raised	ESG Management - Stakeholder Engagement	06-10

Disclosure issues /disclosures	Disclosure title	Chapter index	Page number index
Reporting Practice			
102-45	Entities included in the consolidated financial statements	About This Report	
102-46	Defining report content and topic boundaries	About This Report	
102-47	List of material topics	ESG Management - Stakeholder Engagement	06-10
102-48	Restatements of information	No information restatement	
102-49	Changes in reporting	No significant changes	
102-50	Reporting period	About This Report	
102-51	Date of most recent report	April 17, 2021	
102-52	Reporting cycle	Annually	
102-53	Contact point for questions regarding the report	About This Report	
102-55	GRI content index	Appendix 2: GRI Standards Index	97-104

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Material Topics			
Economy			
GRI 201 Economic Performance 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	About Hikvision	
	103-3 Evaluation of the management approach	About Hikvision	
GRI 201-1	Direct economic value generated and distributed	Appendix 1: KPI Tables	93-96
GRI 201-3	Defined benefit plan obligations and other retirement plans	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 202 Market Performance 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	About Hikvision	
	103-3 Evaluation of the management approach	About Hikvision	
GRI 204 Procurement Practices 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
	103-3 Evaluation of the management approach	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
GRI 205 Anti-corruption 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Integrity and Compliance - Compliance System	
		Integrity and Compliance - Compliance Programs	41-44 50-52
		Integrity and Compliance - Compliance Culture	
	103-3 Evaluation of the management approach	Integrity and Compliance - Compliance System	
		Integrity and Compliance - Compliance Programs	41-44 50-52
		Integrity and Compliance - Compliance Culture	
GRI 205-2	Communication and training about anti-corruption policies and procedures	Integrity and Compliance - Compliance System	
		Integrity and Compliance - Compliance Programs	41-44 50-52
		Integrity and Compliance - Compliance Culture	
GRI 205-3	Confirmed incidents of corruption and actions taken	Integrity and Compliance - Compliance System	
		Integrity and Compliance - Compliance Programs	41-44 50-52
		Integrity and Compliance - Compliance Culture	
GRI 206 Anti-competitive Behavior 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10

Disclosure issues /disclosures	Disclosure title	Chapter index	Page number index
	103-2 The management approach and its components	Integrity and Compliance - Compliance System	41-44
		Integrity and Compliance - Compliance Programs	
GRI 206-1	103-3 Evaluation of the management approach	Integrity and Compliance - Compliance System	41-44
		Integrity and Compliance - Compliance Programs	
GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Integrity and Compliance - Compliance System	41-44
		Integrity and Compliance - Compliance Programs	

Environment

GRI 301 Materials 2016/GRI 103 Management Approach 2016

GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Green Production	56-58
	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Green Production	56-58
GRI 301-1	Materials used by weight or volume		Appendix 1: KPI Tables 93-96

GRI 302 Energy 2016/GRI 103 Management Approach 2016

GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Green Production	56-63
		Green and Low-Carbon Development - Green Operation	
		Green and Low-Carbon Development - Clean Technology	
		Green and Low-Carbon Development - Green Production	
GRI 302-1	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Green Operation	56-63
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		Appendix 1: KPI Tables	
GRI 302-2	Energy consumption within the organization	Appendix 1: KPI Tables	93-96
GRI 302-3	Energy consumption outside of the organization	Appendix 1: KPI Tables	93-96
GRI 302-4	Energy intensity	Appendix 1: KPI Tables	93-96
GRI 302-4	Reduction of energy consumption	Green and Low-Carbon Development - Green Production	56-63
		Green and Low-Carbon Development - Green Operation	
		Green and Low-Carbon Development - Clean Technology	
GRI 302-5	Reductions in energy requirements of products and services	Green and Low-Carbon Development - Green Production	56-63
		Green and Low-Carbon Development - Green Operation	
		Green and Low-Carbon Development - Clean Technology	

GRI 303 Water and Effluents 2018/GRI 103 Management Approach 2016

GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Green Production	56-58
	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Green Production	56-58

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GRI 303-2	Management of water discharge-related impacts	Green and Low-Carbon Development - Green Production	56-58
GRI 303-3	Water withdrawal	Appendix 1: KPI Tables	93-96
GRI 303-5	Water consumption	Appendix 1: KPI Tables	93-96
GRI 304 Biodiversity 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Gathering the Power of Public Welfare Undertakings	84-92
	103-3 Evaluation of the management approach	Harmonious Co-existence - Gathering the Power of Public Welfare Undertakings	84-92
GRI 305 Emissions 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Green Production	56-58
	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Green Production	56-58
GRI 305-1	Direct (Scope 1) GHG emissions	Appendix 1: KPI Tables	93-96
GRI 305-2	Energy indirect (Scope 2) GHG emissions	Appendix 1: KPI Tables	93-96
GRI 305-4	GHG emissions intensity	Appendix 1: KPI Tables	93-96
GRI 306 Effluents and Waste 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Green Production	56-58
	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Green Production	56-58
GRI 306-1	Water discharge by quality and destination	Appendix 1: KPI Tables	93-96
GRI 306-2	Waste by type and disposal method	Appendix 1: KPI Tables	93-96
GRI 306-4	Transport of hazardous waste	Green and Low-Carbon Development - Green Production	56-58
GRI 307 Environmental Compliance 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Green and Low-Carbon Development - Environmental Management	55
	103-3 Evaluation of the management approach	Green and Low-Carbon Development - Environmental Management	55
GRI 308 Supplier Environmental Assessment 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
	103-3 Evaluation of the management approach	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
GRI 308-1	New suppliers that were screened using environmental criteria	Appendix 1: KPI Tables	93-96
Society			
GRI 401 Employment 2016/GRI 103 Management Approach 2016			
	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10

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GRI 103 Management Approach	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 401-2	Benefits provided to full-time employees (excluding temporary/part-time employees)	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 401-3	Parental leave	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403 Occupational Health and Safety 2018/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-1	Occupational health and safety management system	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-2	Hazard identification, risk assessment, and incident investigation	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-5	Worker training on occupational health and safety	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-6	Promotion of worker health	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 403-9	Work-related injuries	Appendix 1: KPI Tables	93-96
GRI 403-10	Work-related ill health	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 404 Training and Education 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 404-1	Average hours of training per year per employee	Appendix 1: KPI Tables	93-96
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 405 Diversity and Equal Opportunity 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 405-1	Diversity of governance bodies and employees	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 406 Non-discrimination 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76

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GRI 407 Freedom of Association and Collective Bargaining 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 408 Child Labor 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 409 Forced or Compulsory Labor 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Common Growth with Employees	67-76
	103-3 Evaluation of the management approach	Harmonious Co-existence - Common Growth with Employees	67-76
GRI 413 Local Communities 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
		Technology for Goodwill	
		Green and Low-Carbon Development - Environmental Actions	12-38
		Harmonious Co-existence - Contribution to a Harmonious Industry	63-64
		Harmonious Co-existence - Gathering the Power of Public Welfare Undertakings	77-92
	103-2 The management approach and its components	Technology for Goodwill	
		Green and Low-Carbon Development - Environmental Actions	12-38
		Harmonious Co-existence - Contribution to a Harmonious Industry	63-64
		Harmonious Co-existence - Gathering the Power of Public Welfare Undertakings	77-92
GRI 414 Supplier Social Assessment 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
	103-3 Evaluation of the management approach	Integrity and Compliance - Industrial Compliance Ecosystem	45-49
GGRI 416 Customer Health and Safety 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Technology for Goodwill - Innovation Management	29-38
	103-3 Evaluation of the management approach	Technology for Goodwill - Innovation Management	29-38
GRI 416-1	Assessment of the health and safety impacts of product and service categories	Technology for Goodwill - Innovation Management	29-38

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GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Harmonious Co-existence - Contribution to a Harmonious Industry	77-82
	103-3 Evaluation of the management approach	Harmonious Co-existence - Contribution to a Harmonious Industry	77-82
GRI 417-1	Requirements for product and service information and labeling	Harmonious Co-existence - Contribution to a Harmonious Industry	77-82
GRI 417-3	Incidents of non-compliance concerning marketing communications	Harmonious Co-existence - Contribution to a Harmonious Industry	77-82
GRI 418 Customer Privacy 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Technology for Goodwill - Innovation Management	29-38
	103-3 Evaluation of the management approach	Technology for Goodwill - Innovation Management	29-38
GRI 417-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Technology for Goodwill - Innovation Management	29-38
GRI 419 Socioeconomic Compliance 2016/GRI 103 Management Approach 2016			
GRI 103 Management Approach	103-1 Explanation of the material topic and its Boundary	ESG Management - Stakeholder Engagement	06-10
	103-2 The management approach and its components	Integrity and Compliance - Compliance System	41
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About This Report

● Overview

This Report offers comprehensive exposition into Hangzhou Hikvision Digital Technology Co., Ltd.'s (referred to as "Hikvision", "we" or the "company") performance and management measures in environmental, social and governance (referred to as "ESG") matters in 2021, with particular focus on stakeholder concerns.

● Reporting Scope

This Report covers data and information about the company from January 1st to December 31st 2021 (referred to as the "reporting period"). Of note some information references data dating back to 2020 or before, or looks forward into 2022. This Report covers Hikvision and its subsidiaries.

● Basis of Reporting

This Report is in accordance with the *GRI Sustainability Reporting Standards* issued by the Global Sustainability Standards Board (GSSB) (referred to as the "GRI Standards"), and the *Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies*.

Further, this Report is prepared in accordance with a set of established procedures, including key stakeholders identification, material ESG issues identification and ranking, reporting scope determination, data collection, report preparation and report review, etc.

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● Data Source

The financial data included in this Report comes from the 2021 Annual Report, which has been independently audited by Deloitte Touche Tohmatsu LLC. Other information and data mainly come from the internal statistical reports or documents of the company. The monetary amounts herein are denoted in RMB.

● Confirmation and Approval

After confirmation by management, this Report was approved by the Board of Directors on April 14th 2022.

● Access and Feedback

This independent ESG Report is available in both Simplified Chinese and English. To view online or download, please visit www.cninfo.com.cn or <https://www.hikvision.com/en/>

We highly value stakeholder and reader feedback, as your suggestions and comments will help us further improve this Report and our ESG performance. Feel free to contact us through relevant means.



见远行更远
See Far, Go Further



杭州海康威视数字技术股份有限公司
HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD.