



# 2022 | DAHUA TECHNOLOGY

## Environmental, Social and Governance Report



## Mission

Enabling a Safer Society and Smarter Living



## Vision

The World-leading Video-centric  
Smart IoT Solutions and Service Provider



## Core Concepts

Customer-oriented, Employee-based

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## About This Report

This report describes the actual practice of Zhejiang Dahua Technology Co., Ltd. (hereinafter referred to as the Company or Dahua) in environment, society and governance in 2022. It also details the Company's efforts at corporate governance, integrity management, the protection of shareholders' rights and interests, technological innovation, environmental protection, and public service activities, so as to strengthen the communication and connection between interested parties and the Company.

### ▪ Basis of Preparation

This report has been prepared in accordance with GRI standards of the Global Sustainability Standards Board (GSSB), and the content of the 2022 Corporate Environmental, Social and Governance (ESG) Report has been finalized with reference to "Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies".

### ▪ Time Scope

The reporting period is January 1, 2022 through December 31, 2022, and some information may be beyond this scope. The report covers the information of Zhejiang Dahua Technology Co., Ltd. and its major subsidiaries.

### ▪ Data Source

Information and cases disclosed in this report are mainly from the official documents, reports and relevant open data of Dahua and its major subsidiaries. The Company's board of directors is responsible for the authenticity, accuracy, and completeness of this report.

### ▪ Data Description

The Company's financial statements of this year, the related documents, and the company's statistics. Zhejiang Dahua Technology Co., Ltd. reserves the right to interpret this report.

### ▪ Release Method

This report can be downloaded from Juchao Information Network ([www.cninfo.com.cn](http://www.cninfo.com.cn)) and the website of Dahua ([www.dahuatech.com](http://www.dahuatech.com)). For more information beyond this report, refer to the Company's annual report or visit the Company's website.

## Statement from the Chairman



2022 was a remarkable year when Dahua strove to empower the industry with digital intelligence and pursued high-quality development. Due to geopolitical conflicts, high inflation and other factors, global economy was under downward pressure. In the face of the complex economic and business environment, the Company has focused on city-oriented strategy and enterprise-oriented strategy as the two key business strategies, and AIoT and IoT digital intelligence platform as the two key technical strategies, gathering partners to jointly build a smart IoT ecological community of co-construction, win-win outcome and symbiosis, so as to empower cities through digital innovation and enterprises through digital transformation.

We have put forward the vision of "harmonious coexistence between man and nature, man and society, and man and the city", and come up with innovative ways to facilitate pollution prevention and control through digital intelligence. We have enhanced forest fire prevention efficiency through a variety of fire monitoring and perception technologies, built an all-round perception system to protect arable land, helped upgrade elderly care services and make them become more considerate, and reduced carbon emissions through science and technology. We have committed ourselves to 13 business areas and worked on scenarios with quantifiable and measurable value, while optimizing clients' security systems, improving their production efficiency, assisting their business management and facilitating the digital upgrade of thousands of industries. Focusing on the five nodes of "generator, grid, load, storage and charging" in power supply, the Company has facilitated the fine management of energy consumption in building spaces with intelligence to implement the "carbon peaking and carbon neutrality goals". We have developed a smart video tracking system for competitive events that was able to capture the exciting moments during Winter Olympic games. We have provided solutions for scenarios related to electricity, petrochemical, coal, iron and steel to guarantee the safe production of energy enterprises. We will actively apply the power of digital intelligence to protect nature and biodiversity, safeguard our green mountains and clear waters, and build a better world together.

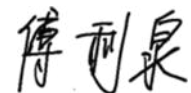
The Company has continuously optimized governance systems and governance efficiency. With an efficient, reasonable decision-making mechanism, a supervision mechanism of checks and balances, and a stable and long-term incentive mechanism, we have ensured the healthy, stable and sustainable development of the Company. To prevent and respond to compliance risks in the Company's business around the world and further enhance its global competitiveness, the Company has established an ethics and compliance management organization to systematically improve its compliance management capabilities.

The Company has paid close attention to the protection of human rights of employees in itself and its supply chain, and respected and valued the hard work of every employee. We have taken great care of both business growth and public welfare, actively participated in public service activities, organized donations, blood drives, volunteering activities, events that provide handy service to the public to cultivate and disseminate the virtues of solidarity, friendship, helpfulness, courage and selfless dedication.

We are embracing 2023 with excitement, and also with dreams and high morale. There is a lot of work to be done and so much awaiting us ahead! In the new year, the keyword for the Company's development will shift from "stability" to "progress" and we aim to deepen high-quality development. Development and growth are the most important and the most wonderful goals. They are the key to solving all problems and difficulties.

There is a lot to expect in 2023! We look forward to an amazing 2023!

Chairman and President:



## Introduction to Dahua

Zhejiang Dahua Technology Holdings Co., Ltd. is a world-leading video-centric smart IoT solutions and service provider. According to the Dahua Think# strategy, the Company has focused on city-oriented strategy and enterprise-oriented strategy as the two key business strategies, and AIoT and the IoT digital intelligence platform as the two key technical strategies, empowering cities through digital innovation and enterprises through digital transformation based on customer needs to create more value for thousands of industries through their digital transformation.

The Company has more than 23,000 employees, over 50% of which are engaged in R&D. Around 10% of its sales revenue is invested in R&D each year. We have made continuous efforts in technological innovation. Currently, Dahua has established the Advanced Technology Research Institute, Big Data Institute, Central Institute, Cyber Security Research Institute, and Smart City Institute. Based on the insight into the smart IoT and the relevant planning, Dahua has continuously explored new business opportunities, and extended its business scope to machine vision, robots, smart life, smart fire protection, automotive electronics, smart storage, smart security check, smart display control, smart control, and smart thermal imaging, among others.



**NO. 2\***  
market share in  
the world



**23,000+**  
employees



**51**  
domestic and  
overseas branches



**8,000+**  
patents



**180**  
countries and  
regions covered



**200+**  
domestic offices

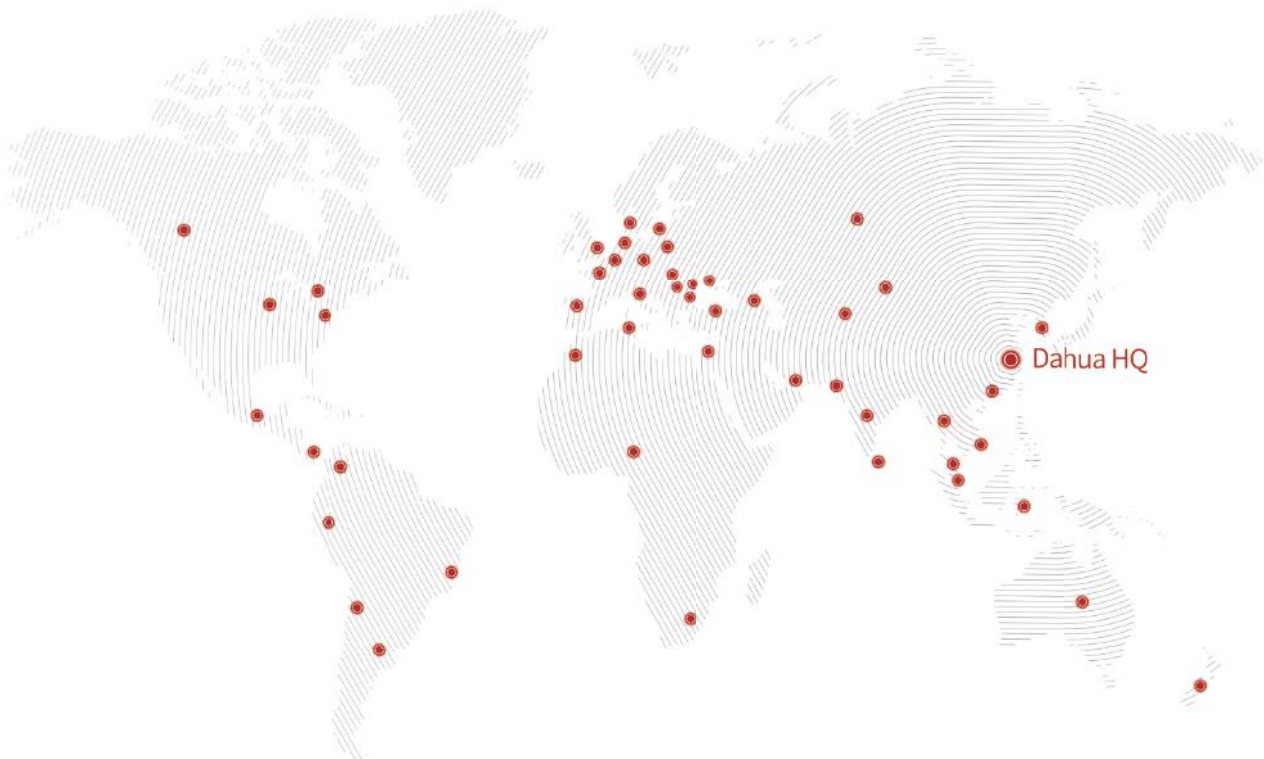
\* Data source: 2021 Global Intelligent Video Surveillance Market Information Service Report released by Omdia, a market research organization



# Introduction to Dahua

## Global Service Network

Dahua has a global marketing and service network with 51 domestic and overseas branches in Asia, North America, South America, Europe, Africa and Oceania, and more than 200 offices in China to provide fast and high-quality services to customers. Dahua products are available in over 180 countries and regions around the world. They have been widely applied to multiple fields such as smart city, traffic, livelihood, manufacturing, education, energy, finance and environment protection, enabling a safer society and smarter living.



**3 manufacturing and supply centers**  
Hangzhou (China), Changsha (China), Vietnam



**6 continents covered**  
Asia, Europe, Africa, North America, South America, Oceania



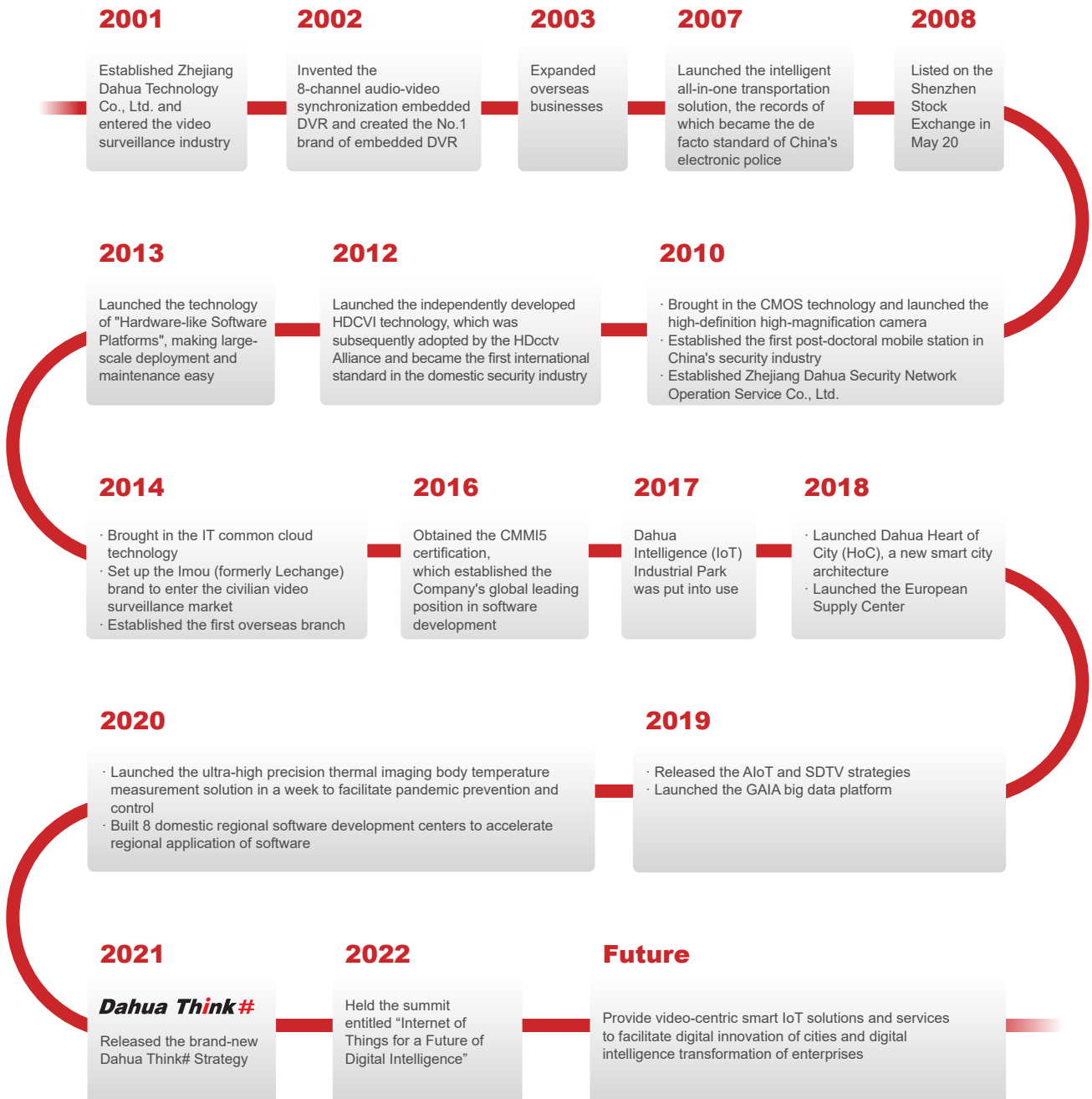
**5 research centers**  
Hangzhou (China), Xi'an (China), Chengdu (China), Poland, Mexico



**160+ global service outlets**  
Hangzhou (China), Hong Kong (China), Poland, Dubai, India, Indonesia, South Africa, Brazil, Mexico, etc.

# Introduction to Dahua

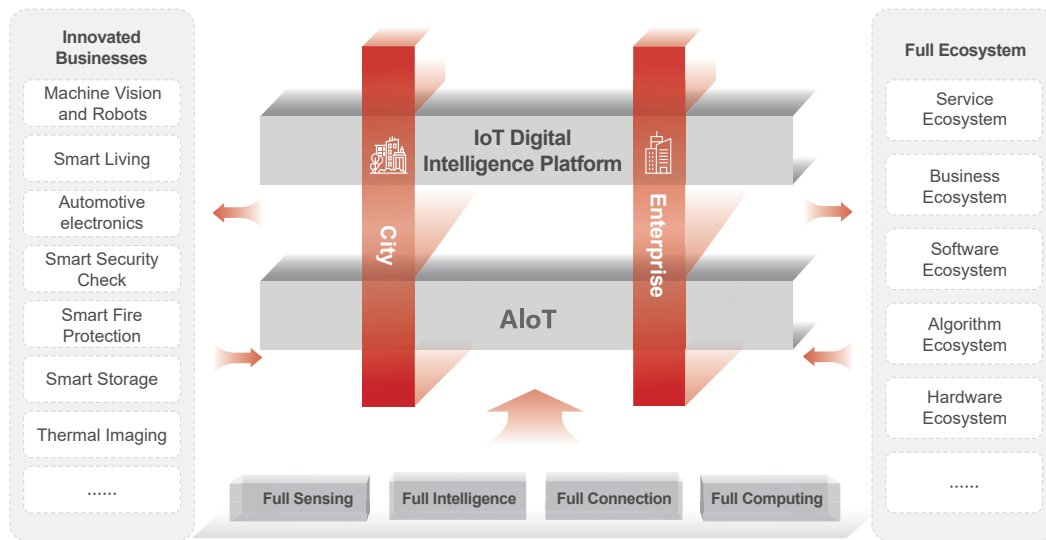
## History





# Development Strategy of the Company

The Company adheres to "driving technology iteration with business operation and driving business upgrade with technology iteration", and continues to develop and increase investment in the two key technology strategies: AIoT and the IoT digital intelligence platform. By building video-centric full-stack AIoT capabilities, the Company has provided more diversified perception, connection, computing, and intelligent services for the market. By developing its IoT digital intelligence platform, the Company has accelerated the launch of comprehensive solutions and services and built its agile development capabilities, accumulated more business scenarios and paradigm applications, and laid a foundation for digital transformation that involved private cloud, public cloud and the entire technology development ecology to enhance the Company's business value. With the development and maturity of multimodal and foundation model technologies, etc., the video-centric multimodal fusion perception technology will lead to higher-quality, more efficient and more useful technologies, products and solutions for markets needing digital transformation such as cities and enterprises.



## Facilitate urban digital innovation

Based on the Company's four business directions of social security, urban order, governance efficiency, and livelihood, the Company commits itself to urban scenarios, provides leading in IoT solutions for various industries and sectors in the city, and helps realize the vision of harmonious coexistence between man and nature, man and society, and man and city.

Accumulate scenarios of various business areas

**5,000 +**

Launch solutions for various industries

**200 +**

## Facilitate digital upgrade of enterprises

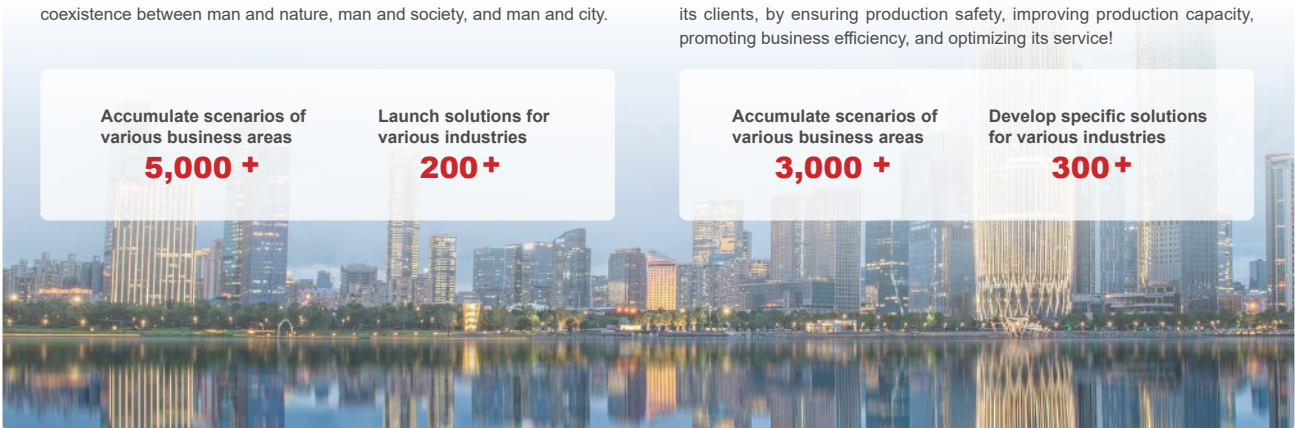
In the fields of construction, education, manufacturing, petrochemical, coal, electric power, iron and steel, agricultural products, logistics, cultural tourism, medical care, finance, commercial chain and other fields, Dahua is committed to becoming the most trustworthy digital upgrade partner of its clients, by ensuring production safety, improving production capacity, promoting business efficiency, and optimizing its service!

Accumulate scenarios of various business areas

**3,000 +**

Develop specific solutions for various industries

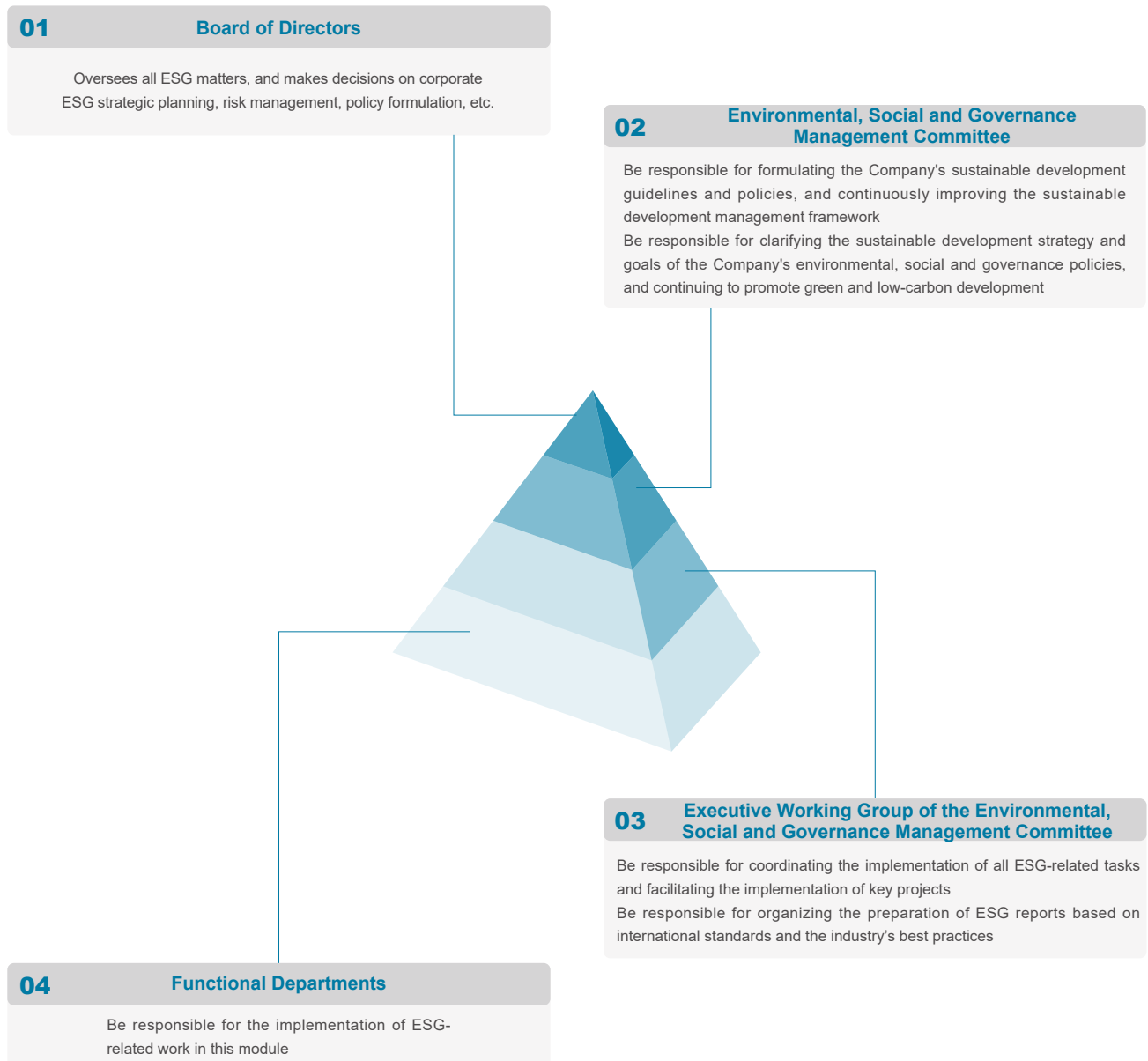
**300 +**



# ESG Architecture

As a world-leading video-centric smart IoT solutions and service provider, Dahua is committed to building a green, environment-friendly and safe world of intelligence, empowering industries with the five capabilities of "full perception, full intelligence, full connection, full computing and full ecosystem", striving for the digital transformation of cities, enterprises and families, creating greater value for customers and playing a greater role in the sustainable development of society. These are captured by Dahua's mission of "Enabling a safer society and smarter living" that it advocates and makes great effort to realize.

The Company has built a clear and transparent ESG structure, based on the overall strategy of "digital intelligence empowerment, low-carbon future, shared ecology and compliant operation". Following a top-down management structure, all functional centers and subsidiaries have strengthened corporate governance and sustainable business development in a more systematic way to ensure the effective implementation of ESG-related work.



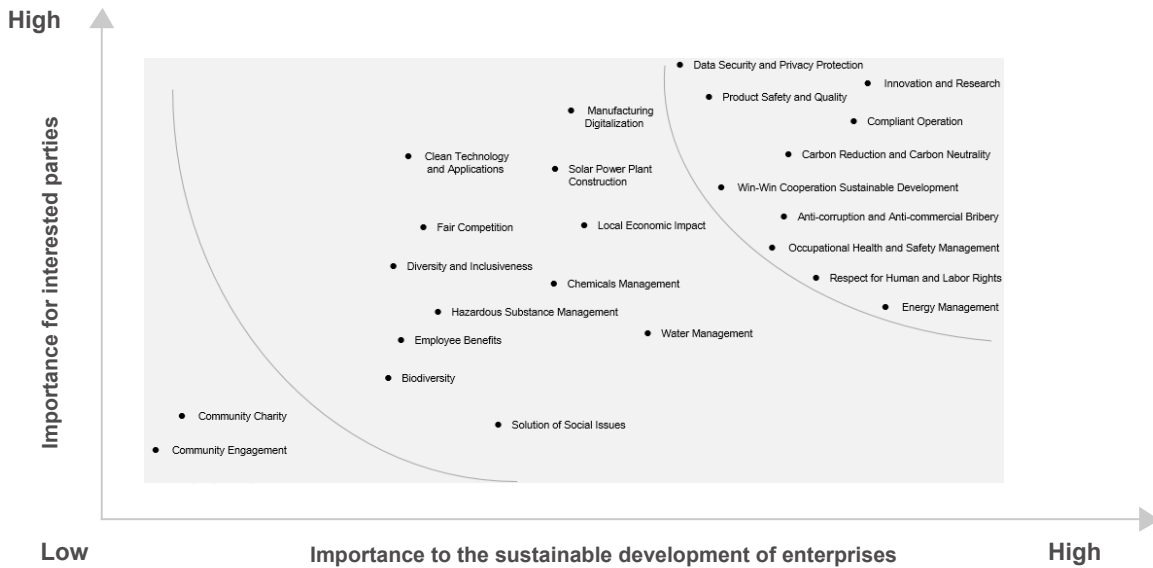
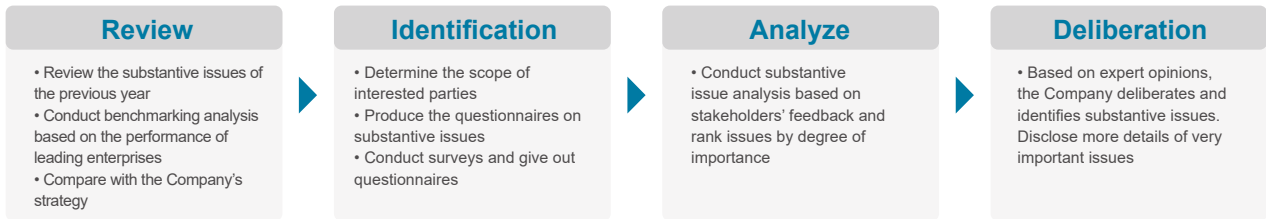
## Interested Party Participation

The main interested parties of Dahua include customers, partners, employees, governments, investors, etc. The trust and support of stakeholders are the basis for the survival and development of the Company. The Company has established communication mechanisms with interested parties. Understanding interested parties' expectations of the Company and their major ESG issues of concern, which can help the Company plan for its long-term ES development. The Company actively works on building the bridge of communication with interested parties, as well as identify and respond to the expectations of interested parties in multiple dimensions and through multiple channels.

Interested Party	Interested Party Expectations	Main Communication and Participation Mechanisms	Enterprise Response
Shareholder/ Investor	<ul style="list-style-type: none"> <li>Transparent and compliant information disclosure</li> <li>Optimize corporate governance and improve profitability</li> <li>Increase value of investments in sustainable development to protect shareholders' interests</li> </ul>	<ul style="list-style-type: none"> <li>Shareholders' meeting, information disclosure, the Company's website</li> <li>irm.cninfo.com.cn, investor hotlines, investor meetings, field research, strategy meetings, investor presentations, etc.</li> <li>Questionnaires, official accounts for investor relations</li> </ul>	<ul style="list-style-type: none"> <li>Timely, accurate and truthful disclosure of business information</li> <li>Improve the governance structure, and regulate the operation of the general meeting of shareholders, the board of directors, the board of supervisors regularly</li> <li>Strengthen compliance and internal control systems</li> <li>Find more ways to communicate with investors and maintain stable investment dividends</li> </ul>
Customer	<ul style="list-style-type: none"> <li>Product safety and service quality</li> <li>Customer health and safety</li> <li>Cyber security and user privacy protection</li> <li>R&amp;D and innovation</li> <li>Scenario-based customer solutions</li> </ul>	<ul style="list-style-type: none"> <li>400 customer service hotlines</li> <li>Customer satisfaction survey</li> <li>Customer meeting</li> <li>Customer evaluation, research and cooperation projects</li> <li>Questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>Insist on customer-centric, quality-backed craftsman spirit that seeks opportunities from customer demands and boost the success of customers</li> <li>Establish a strict product safety control mechanism, implement strict product safety standards, and provide consumers with safe and reliable products and services</li> <li>Integrate sustainability requirements into the whole life cycle of products and advocate circular economy</li> <li>Regard cyber security and user privacy protection as an important guiding principle for the Company</li> </ul>
Employee	<ul style="list-style-type: none"> <li>Health and safety at work</li> <li>Compensation and welfare</li> <li>Career development</li> <li>Humanistic care</li> </ul>	<ul style="list-style-type: none"> <li>Employee representative communication meeting</li> <li>Employee survey</li> <li>Manager feedback</li> <li><i>Dahua Staff</i> electronic magazine</li> <li>Complaints, suggestions, reports and complaints for receiving complaints, suggestions, reports and complaints</li> </ul>	<ul style="list-style-type: none"> <li>Establish sound management and safeguard systems for employee health and safety</li> <li>Adhere to the striver-awarded principle, encourage all kinds of talents to make the greatest contribution at the best time at the best position, and ensure they get the biggest returns</li> <li>Establish a sound training system and a clear path for career development</li> <li>Pay attention to diversification, establish good work conditions, and create a healthy work atmosphere</li> </ul>
Partner	<ul style="list-style-type: none"> <li>Win-Win Cooperation</li> <li>Training and Empowerment</li> <li>Integrity and Trustworthiness</li> <li>Supplier Management</li> <li>Sustainable Development</li> </ul>	<ul style="list-style-type: none"> <li>Field Investigation</li> <li>Supplier Conference</li> <li>Supplier Training</li> <li>Channel conference</li> <li>Cloud-e-commerce platform</li> <li>Questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>Adhere to ethical and transparent procurement and zero tolerance for bribery and corruption</li> <li>Conduct supplier training and coaching and carry out supplier development program</li> <li>Adhere to the sinking strategy, continuously empower partners and achieve co-construction and sharing</li> </ul>
Governments and Regulators	<ul style="list-style-type: none"> <li>Compliance with Law</li> <li>Employment and Wealth Creation</li> <li>Safe Production</li> <li>Green Production</li> <li>Tax Payment According to Law</li> <li>Environmental Protection</li> </ul>	<ul style="list-style-type: none"> <li>Policy Consultation</li> <li>Governmental Meetings</li> <li>Compliance management</li> <li>Fill in various forms as required and attend related trainings and meetings</li> </ul>	<ul style="list-style-type: none"> <li>Abide by business ethics, international conventions and relevant laws and regulations of various countries</li> <li>Engage local labor force in employment process and local suppliers in procurement process, and pay taxes in accordance with laws</li> <li>Step up campaigns on production safety and strengthen oversight</li> <li>Make effort to reduce total emissions of industrial pollution</li> <li>Reduce carbon emissions, advocate circular economy and increase the use of renewable energy</li> </ul>
Community	<ul style="list-style-type: none"> <li>Communication with Communities</li> <li>Environmental Protection</li> </ul>	<ul style="list-style-type: none"> <li>Community Activities</li> <li>Interviews and investigations</li> </ul>	<ul style="list-style-type: none"> <li>Community activities</li> <li>Waste classification in the park</li> <li>Rectification and treatment of sewage discharge</li> </ul>

# Focus on Substantive Issues

Substantive assessment is an important step in Dahua's ESG work. The Company launched the assessment in 2022 to ensure that the assessment results reflect stakeholders' weighting and considerations on ESG issues. Through the process of "review, identification, analysis and deliberation" of substantive issues, information of more than 150 internal and external stakeholders were collected through interviews or questionnaires, and 24 substantive issues were identified and ranked.



Degree of Importance	Category	Environment Issues	Degree of Importance	Category	Environment Issues
Very Important	Environment	Energy Management	Moderately Important	Environment	Photovoltaic power station construction
	Environment	Carbon Emission Reduction and Carbon Neutrality		Environment	Biodiversity
	Social	Respect for Human and Labor Rights		Environment	Chemicals Management
	Social	Product Safety and Quality		Environment	Water Management
	Social	Innovation and Research		Social	Diversity and Inclusiveness
	Social	Win-Win Cooperation Sustainable Development		Social	Manufacturing Digitalization
	Social	Occupational Health and Safety Management		Social	Employee Benefits
	Corporate Governance	Anti-corruption and Anti-commercial Bribery		Social	Solution of Social Issues
	Corporate Governance	Compliance with Law		Social	Local Economic Impact
	Corporate Governance	Data Security and Privacy Protection		Corporate Governance	Fair Competition
Moderately Important	Environment	Hazardous Substance Management	Less Important	Social	Public Welfare
	Environment	Clean Technology and Applications		Social	Community Participation

# Environmental Management Systems

## Environmental Management System

Dahua has established and obtained the ISO14001:2015 Environmental Management System Certification, and the Company has fully recognized national and local laws, regulations and other requirements, and formulated the Company's internal document *List of Laws, Regulations and Other Requirements Recognized and Evaluated*. The document *Regulation on the Recognition and Evaluation of Environmental Factors* has been formulated to comprehensively identify, evaluate, control and update the environmental factors involved in the Company's business activities. The Company adjusts the operational activities at risk, and conducts regular internal and external audits to reduce or eliminate environmental risks. The Company's environmental plans are reviewed annually, and professional third-party organizations are invited to issue environmental supervision and evaluation reports to ensure that the Company's various operation in all areas meet the requirements of environmental protection policies and objectives.

### Environmental Management System Guideline

- Safe and environment-friendly, green and healthy
- Compliance with laws and regulations, continuous improvement

### The Company's Environmental Protection Indicators for 2022

- Environmental emergencies: 0 cases
- Annual environmental monitoring completion rate: 100%
- Penalties from environmental-protection-related authorities: 0 cases
- Environmental-protection-related training completion rate: 100%

In terms of regulating waste treatment, the Company has formulated the *Regulation on Solid Waste Pollution Prevention and Control Management*, which classifies solid waste according to relevant national laws, regulations and standards; in terms of regulating environmental management, the *Regulation on Environmental Management Throughout Products' Life Cycle* has been formulated, and the Company has developed schemes and requirements to achieve best practices in different stages of products' life cycle including design and development, process design, production, logistics and transportation, sales, use and maintenance, recycling, etc. to reduce or avoid environmental pollution and establish standards.



## Energy Management System

Dahua has established and obtained the ISO50001:2018 Energy Management System Certification, integrating energy conservation into the Company's daily operation and management process.

The Company regularly checks and monitors the equipment showing high power usage, and according to the use of power, tracks down the manufacturing processes and manufacturing equipment to reduce power consumption. The Company has formulated the *Energy Review Management Procedures* and established a decision-making system based on data, and it conducts regular energy reviews, and formulate energy management plans. The Company encourages all employees to take the initiative to improve energy utilization efficiency, set up energy-saving projects, and implements refined energy management approaches to further improve energy management and reduce energy consumption during production and operation. The monitoring and measuring equipment used for energy management should be calibrated and maintained according to the *Monitoring and Measuring Equipment Control Procedures* to ensure that the data provided by the monitoring and measuring equipment is accurate and reproducible.

The Company adheres to the strategy of creating green development, low-carbon development and sustainable development, builds office parks in accordance with national green construction standards, builds green factories featuring smart manufacturing. Meanwhile, it continuously improves employees' awareness of energy conservation and environmental protection, encourages employees to contribute ideas, gives full play to the wisdom of all employees, asks employees to shut down equipment, turn off the lights and save water, and practices energy conservation and environmental protection within the Company to make green development and energy conservation take root in the mind of everyone in the Company.



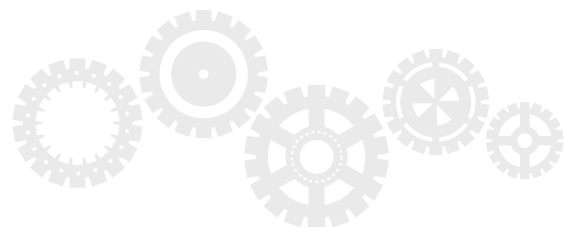
## Hazardous Substance Process Management System

Considering the global trend of diversified green development and the continuous trade barriers created due to environmental management standards in various countries, Dahua strives to create a green and safe harmonious environment and continue to promote the sustainable development of the Company. It has established and obtained IECQ QC080000:2017 Hazardous Substances Process Management System Certification, and fully recognized relevant laws and regulations of environmental protection, actively promoted environmental protection requirements to all employees and external suppliers, and created a working environment and atmosphere that support green development.

### The Company's Hazardous Substance Process Control Indicators in 2022

- Environmental compliance rate of finished products: 96%
- HSF sampling pass rate (high-risk materials): 95%
- HSF sampling pass rate (low-risk materials): 96%
- Rate of suppliers signing for environmental agreements (production suppliers): 86%
- Rate of suppliers signing for environmental agreements (construction suppliers): 85%
- PCBA wave soldering furnace qualification rate: 100%
- Number of HSF-related customer complaints: 0

During the reporting period, no external complaints were found regarding environmental management.



# Environmental Management Systems

<p><b>Environmental compliance management organization</b></p>	<p>The environmental compliance management team of Dahua is a cross departmental organization led by senior managers, and is responsible for dealing with environmental protection issues in business activities and formulating sustainable environmental policies and medium and long-term reduction objectives.</p> <p>Environmental Compliance Group: Responsible for following up the interpretation, update, process transformation, management and implementation of all environmental regulations and requirements, as well as regularly reviewing the suitability of environmental compliance management policies and making timely adjustments when necessary.</p> <p>Procurement, supply chain and other departments: Responsible for the formulation and implementation of the overall requirements for environmental compliance of suppliers, carrying out relevant business activities in strict accordance with the requirements, and identifying environmental protection risks in time.</p> <p>In addition, Dahua has established a unified business interchange window for environmental compliance to connect with external environmental compliance requirements, suppliers' technical support, and internal process management consulting as the supplement to the compliance management system.</p>
<p><b>Green design of products</b></p>	<p>According to the identified domestic and overseas regulations and standards, including RoHS, REACH, CA65, PAHs and other representative environmental protection requirements, <i>DH QP 055 Dahua General Hazardous Substances Restriction Requirements</i> have been formulated. These requirements are synchronized internally and externally in the Suppliers' Portals and supplier quality agreements.</p> <p>In the early stage of product design and production, relevant regulatory requirements should be fully identified. Also, as one of the input requirements for the design and production of Dahua's own products, it is necessary to meet relevant requirements, such as the limit of hazardous substances.</p>
<p><b>Environmental protection properties of materials and products</b></p>	<p>Each material in the material management system has its independent environmental protection property/ label (including finished products). In addition to providing the necessary RoHS inspection report and completing REACH substance declaration requirements, material introduction shall carry out sampling inspection by the third party according to the environmental protection risk level.</p> <p>The environmental protection label of finished products is convoluted by the material BOM and bound to the sales area and target customers in the CRM sales system. Ordering of products that do not meet the environmental protection requirements is restricted by the system to ensure compliance with the relevant policy requirements of the company's product compliance and trade compliance, and ensure the smooth global delivery of products in terms of environmental compliance.</p>
<p><b>Supply chain introduction and environmental protection risk identification</b></p>	<p>Supplier environmental protection requirements: In order to be included as official suppliers, all suppliers shall be inspected by SQE, procurement, and R&amp;D on the site for supplier environmental protection review and sign <i>EHS and Environmental Protection Commitment</i> when being introduced into the supply chain. The on-site inspection includes but is not limited to whether environmental protection management requirements of raw materials, and consumable materials applied in the manufacturing process and key technologies meet the environmental protection requirements, and the implementation of other internal environmental protection management process of the supplier.</p> <p>Supplier introduction: The review group, composed of Procurement, R&amp;D, SQE, and other departments, shall grade the assessment requirements, including environmental compliance requirements, according to the classification of suppliers, which can be included in the supplier system after passing the review. All suppliers are required to sign and comply with the relevant provisions of <i>EHS and Environmental Protection Commitment</i> in the <i>Supplier Quality Agreement</i>.</p>
<p><b>Environmental protection information update and self-declaration</b></p>	<p>The Company independently developed the Green Product Management Platform (GPM), an environmental protection system, forming an environmental compliance management mechanism from the material source. Trigger the update mechanism: Update the environmental protection information of the materials which are still in mass production and delivery every two years. Compliance declaration mechanism: Establish compliance declaration procedure based on different regulations to complete the collection and confirmation of substance information and compliance status.</p>
<p><b>Chemical analysis laboratory</b></p>	<p>In 2018, Dahua founded a professional chemical analysis laboratory and put it into use to undertake the detection of components in hazardous substances and other testing and analysis for the environmental protection of internal products, as well as the verification of the environmental compliance for incoming material after mass production and delivery.</p> <p>Testing capability coverage: The chemical analysis laboratory conducts physical testing and chemical testing, which is mainly composed of XRF (X-ray fluorescence spectrometry), GC-MS (gas chromatography-mass spectrometer), and other core devices. The experiment operators can only operate after receiving a series of training in standards, operation, and safety awareness, and passing the examination. Meanwhile, in order to ensure the continued accuracy and effectiveness of internal test results, it is required to tighten internally the standard limit requirements, increase the quality control samples, and irregularly carry out the blind sample comparison tests in third-party laboratories.</p>
<p><b>Environmental protection random inspection and control of critical process (CCP)</b></p>	<p>On the premise of full assessment of the environmental protection risks of materials, Dahua has developed an efficient sampling inspection mechanism for incoming materials. Meanwhile, Dahua has conducted environmental compliance monitoring of the processes of high risk and relevant consumables in the production process to eliminate environmental compliance risks of mass production to the greatest extent.</p>
<p><b>Improvement of environmental compliance awareness</b></p>	<p>Establish internal and external environmental compliance standard libraries respectively, conduct training on management requirements for relevant employees in the environmental compliance management system, and reinforce the education on external suppliers at the same time to jointly enhance internal and external environmental compliance awareness.</p>
<p><b>Green sustainable management</b></p>	<p>Dahua reviews the environmental protection objectives set every year, including material introduction, signing of environmental protection agreement by suppliers, achievement rate of sampling inspection, qualification rate of environmental protection quality, customer satisfaction, reduction achievement progress and other environmental indicators, which will be included in the performance appraisal, and has established the HSPM management system review mechanism.</p> <p>HSPM management system review mechanism: By combining the Hazardous Substances Process Management System with the Quality Management System, Dahua formulates its annual internal audit plan, conducts cross-departmental audit by professionally trained auditors, and fully verifies the effectiveness of the system operation.</p> <p>Internal auditor team: In strict accordance with the Environmental Compliance Management System QC080000:2017, conduct internal review and regular management review every year according to the review plan and correct the non-conformance items and items to be improved. Currently, there are more than 40 certified internal auditors specializing in environmental management in Dahua and working in various departments.</p>

## Environmental Management Systems

### Green Factory

Dahua has successively obtained the national green supply chain certificate and green factory certificate issued by the Ministry of Industry and Information Technology, and has met the requirements in plant intensification, harmless raw materials, clean production, waste recycling and low-carbon energy use. Every year, Dahua supervises, audits and evaluates the operation of its factories to ensure that its venues and facilities as well as its business operation are environment-friendly.



In 2022, Dahua won the honor of "Leading Green Enterprise"

Dahua practices "green manufacturing" and has established an advanced wastewater recycling system to achieve zero discharge of industrial wastewater. Its manufacturing process adopts fully automatic lead-free soldering that does not produce waste lead gas. The workshop is equipped with a fresh air system capable of Class-100,000 dust-free purification through airflow and dust control. Exhaust gases are treated by UV photolysis and activated carbon, and after thorough adsorption, the exhaust gases reach the acceptable standard for discharge. Low-noise equipment is used in workshops, and high-noise equipment is placed in

spaces separated with sound-absorbing materials, and third-party testing is carried out every year to ensure that noise control meets relevant requirements.

Dahua practices "green warehousing" and adopts automated guided vehicles (AGV), robots that deliver materials to realize unmanned operations in dark environment in the warehouse area. When an order is ready for delivery from the warehouse, there will be no paper version of the order information slip. Carton containers are replaced by reusable plastic containers. With "put wall", a smart device for secondary sorting of orders ready to be delivered, orders for the same customer will be put in one package or sent in the same batch to reduce the number of cartons used.

Dahua practices "green logistics", and integrates logistics and labeling for the entire transportation process to deliver orders faster and improve customer satisfaction. All stages in the delivery process including dispatch, product information, arrival adopt electronic signature. Entrance permits for delivery vehicles are reserved electronically. The electricity consumption of Dahua's vehicles is monitored through an on-board platform.

Dahua's green development strategy is kept in line with international and domestic environmental protection requirements, customers' requirements and its own high-quality development needs, and Dahua insists on achieving green development through innovation. The application of intelligent IoT technology in the design and management of parks can improve energy efficiency, which is conducive to building smart parks that meet China's carbon peak and carbon neutrality goals.

## Empowerment by Digital Intelligence

### Protect forests with comprehensive monitoring and sensing technology

In addition to setting up a forest fire prevention system capable of monitoring a large area of forests to improve monitoring efficiency and accelerate incident response, Dahua has upgraded the system with digital intelligence to solve the problems of false alarms and alarm inaccuracy in many scenarios during the actual use by customers and to improve the system's functions needs based on the characteristics of forest protection in different places. Dahua has created through digital intelligence a full-coverage, full-intelligent, and full-process forest fire prevention monitoring and analysis system capable of real-time early warning of fire in midair, in tall buildings and on the ground. It can accurately locate fire, thoroughly analyze the fire situation, and complete the fire-related task in a closed loop to improve the accuracy of forest fire monitoring and alarm and emergency response in fire prevention and fire fighting.

Based on the new needs and new problems found during the use of the forest fire prevention intelligent monitoring system in one place, Dahua has upgraded its pyrotechnic detection function with artificial intelligence algorithm and thermal imaging technology. Meanwhile, Dahua streamlined the process of fire analysis, greatly reduced the occurrence of false alarms brought by various complicated scenarios and workload of manual analysis to improve the accuracy of fire alarm, identify the real fire alarm at the earliest time possible, improve the efficiency of forest fire prevention, reduce the workload of management personnel, accelerate the circulation of information on real fire

situations, and win more time for fire fighting, so that customers can identify the fire at an early time, fight the fire before it goes out of control, and finally put out the fire. In addition, based on IoT sensing and big data analysis, Dahua's system can give daily forecast of fire risk levels, provide auxiliary fire spread analysis after fire occurrence, swiftly execute fire fighting plans, and quickly notify fire experts and connect them into the system to provide guidance, so as to help customers prevent and extinguish fire in a closed loop efficiently. More than ten real cases of mountain fires were found within half a year after the use of the system, and the number of false fire alarms decreased by 88% compared with the previous period. This means the accuracy of early warnings of fire has been improved and forests have been better protected.



## Empowerment by Digital Intelligence

### Protect biodiversity with ecological sensing powered by digital intelligence

To observe and record of wild animals and plants in protected areas more intuitively and efficiently with the purpose of biodiversity conservation, Dahua has built an intelligent monitoring system with full coverage from the sky to the ground and to underwater capable of all-round accurate observation and evaluation of wild animal and plant activities, ecological factor changes, and events caused by human activities in various types of protected areas. The system has identified hundreds of protected animal species, provided technological assistance for better protection of species preservation, ecological balance, and biodiversity. In order to protect and observe gibbons, a typical species in the rainforests, Dahua has assisted local authorities to build an intelligent gibbon monitoring system that adapts to the characteristics of rainforests. The system can monitor the main habitats of gibbons in the rainforest reserve and identify gibbons active there. Unlike traditional infrared cameras that can hardly observe gibbons active on trees, the system is capable of long-distance observation so that human observation is less needed and the impact of human activities can be reduced, and as a result, gibbons' habitats and their activities are less affected.



### Protect arable land with digital intelligence and safeguard critical land resources

To protect arable land, on the basis of satellites-based remote sensing, unmanned aerial vehicles, high-point lookout, and video monitoring on the ground, as well as artificial intelligence, big data analysis and other technologies, Dahua has built a visualized 3D management system for arable land which includes functions such as service vehicle detection, illegal construction detection and warning, connection to ground video monitoring, and key land management. The system has realized a closed-loop process of intelligent identification, interlinked review, task distribution, on-site disposal, review and recording, and statistical analysis, covering various business scenarios. Customers can grasp information about land use within their jurisdiction in real time, and improve their ability of arable land resource management and protection. Dahua has participated in the intelligent protection of arable land across Zhejiang Province, and provided all-weather, all-day and visual monitoring covering key arable land with a 3D sensing system. By adopting intelligent algorithms to monitor and give warnings in real time, the system can help discover activities damaging arable land at the earliest time possible, detect and make response early, and reduce the occurrence of irreversible large impacts on arable land. Meanwhile, all work in the process including analysis and judgment, task distribution and disposal, and problem feedback and rectification can be completed online, and the role and responsibility of each person are clarified to ensure efficient arable land protection.



### Tackle pollution with technological innovation powered by digital intelligence

Protect the ecological environment with digital intelligence technology and practice the social responsibility of enterprises. All along, Dahua has been vigorously promoting digital green technology innovation in the field of ecological environment, aiming to improve the ecological environment monitoring system, enhance the modernization of monitoring capacity, and promote the development of a beautiful China!

Through the integration of video AI and IoT sensing application technology, achieving the intelligent monitoring and early warning of various scenarios, especially that of sewage outlets, Dahua has prevented the occurrence of various incidents such as illegal discharge, excessive discharge and human interference on online monitoring, improved the intelligent application level of prevention and regulation of fixed pollution sources, and accelerated the transformation of pollution prevention from post-event processing to proactive early warning and prevention.

Dahua has assisted a province in central and western China in realizing intelligent visual monitoring of the discharge of more than 800 key pollution enterprises in 11 prefectures and cities in the province. The province can manage the enterprises' pollution discharge in a comprehensive way as Dahua's system can monitor pollution discharge in real time, give warnings of abnormal pollution discharge at an early time, and conduct analysis based on the data collected. It can detect and giving warns about suspected abnormal behaviors at the sampling site of sewage outlets to prevent interference with the sampling process to ensure the authenticity and accuracy of the monitoring data. The intelligent visual monitoring and early warning function has changed the traditional management mode of pollution discharge, improving management capabilities and efficiency. Meanwhile, the system is capable of online sharing of pollution source videos across provinces, cities and counties, so that AI management system for pollution sources can be built. With the help of digital intelligence, the province has realized precise pollution control in a scientific way, and carried out in-depth pollution prevention and control.



### Execute the "10-year ban on fishing in the Yangtze River" with technological supports

To help implement China's "ten-year fishing ban" policy, Dahua has launched a set of fishing ban supervision solutions for key waters adopting video visualization and AI, and has built an integrated monitoring and early warning system featuring high-point monitoring, water surface supervision and manual ground inspection. It can detect and give warning of vessels and fishing behaviors, perform visual supervision on one single map, alarm and analysis, and incident response, so as to realize timely detection, fast analysis and judgment, and swift law enforcement. This system provides strong technical support for improving the ability to prevent prohibited fishing behaviors in key waters and to respond to daily illegal behaviors.

In a county in Chengdu, Dahua and the fishery administration aimed to build a system that can monitor the entire rivers, give warnings fully automatically, realize unified scheduling throughout the process and create a closed loop of all business segments. For this purpose, Dahua and the fishery administration have determined the surveillance points in key water areas and key areas, and have set up intelligent video surveillance cameras with binocular thermal imaging as the core in areas where fishing was prohibited, so as to monitor the entire waters in real time. 145 messages regarding illegal fishing, personnel invasion, vessel intrusion, etc. have been generated since the trial use of the system starting from March 2022. Through further review and screening, a number of people violating the fishing ban have been added to the blacklist database, and 14 illegal fishing



## Empowerment by Digital Intelligence

cases and 3 illegal fishing cases have been handled. The management effect obtained praises from the leaders of the Ministry of Agriculture and Rural Affairs, making this county becoming a good example in the execution of the 10-year fishing ban in the Yangtze River.

### Manage water with digital intelligence based on different scenarios

Water is the source of life. Dahua has been continuously exploring a new path of water management through digital intelligence and accelerating the adoption of digital technology in diverse water conservancy scenarios. Dahua has actively participated in the compilation of the *Technical Guidelines for the Construction of Digital Twins of Water Networks* led by the Ministry of Water Resources to strengthen cooperation between industries, universities and research institutes. Dahua has taken practical actions to provide technological assistance in the fields of digital sensing and intelligence. Dahua has undertaken projects including the video safety monitoring of canals used for the Yangtze River-Huai River water diversion project, the monitoring of a small reservoir in a central province, the modernization of a state-level hydrological station in Shandong and the construction of the digital twin of Wanjiangzhai.

In the Yangtze River-Huai River water diversion project, Dahua quickly collected data to build models with its algorithm training ability, and provided 13 abnormal behavior recognition algorithms such as clothes washing identification, fishing identification, and service vehicle detection along the river canal to guarantee the smooth progress of the water diversion project. At a hydropower station in North China, Dahua leveraged its expertise in video intelligence to replace traditional sensors with video cameras for water level recognition and flow measurement, increasing the monitoring coverage scope, enhancing the timeliness of data and providing a more solid foundation of data for the construction of digital twins for water conservancy.

### Benefit people's livelihood with digital wisdom and make elderly care more considerate

With the aging of China's population and the great challenges faced by the elderly welfare system, Dahua has launched solutions powered by IoT, AI, Internet+ and other technologies to provide services to institutions, communities and households. The application scenarios include living rooms, activity rooms, canteens, community activity centers, etc., where upgrade elderly care services are upgraded in terms of elderly safety, elderly health, and medical services including monitoring in real time the physical health of the elderly, giving alarm of abnormal behaviors, and alert to emergencies.

In a district of Nanjing, by adopting Dahua's smart elderly care service platform and using technological means to give warnings of falling and monitor people leaving nursing homes at night, 24-hour full-cycle smart supervision has been made possible in more than 30 elderly care institutions in the district. This has greatly improved the safety and efficiency of the institution, built a safety protection network for the elderly, and made their life healthier, safer and more convenient. This project has been highly praised by provincial and municipal government departments.

### Realize traffic management powered by AI

Aiming for safe, smooth and convenient traffic through management, Dahua has applied video AI technology to various traffic management scenarios, and helped traffic management departments build a smart, modern, flexible command mechanism featuring analysis and judgment, efficient traffic directing, flexible and precise scheduling, and real-time supervision. By empowering traffic management with AI, Dahua has helped build a digital governance system for urban traffic management and improve the digital governance capability of traffic management.

To meet the needs for modernizing traffic police in a city in Zhejiang, strengthen traffic congestion control, improve traffic services for the public, and build a traffic safety governance system, Dahua has adopted the "1+7+N" architecture

in the solution, which includes 1 set of KPIs for traffic police and 7 core modules such as traffic directing, comprehensive traffic management, and online order maintenance. This system supports different practical tasks by providing a number of useful functions. It is an important basis and effective tool for the comprehensive upgrade of the city's traffic police.

After the application of the system, the police arrival rate in the main urban area within 5 minutes after an accident happens has increased to 81%, and the police arrival rate on expressways within 5 minutes after an accident happens has increased to 92.8%. This has ensured smooth traffic and road safety. More than 9 million drivers' traffic safety codes, more than 3,000 village community risk indication maps, and nearly 10,000 transportation enterprises risk indication maps are generated for targeted governance. More than 1,500 emergency parking spots have been built to provide 26,000 times of convenient parking services every day, significantly improving transportation service efficiency.

### Use technologies to improve service quality and efficiency in expressway service areas

Today, an expressway service area is no longer just a place to fuel vehicles and take a rest, but has become a tourist destination that shows local culture and features, and gives passers-by a good time.

Dahua has implemented video IoT, AI, big data and other technologies in service areas, created a new mechanism and management mode featuring "Internet + service area", and provided services automatically throughout the process for drivers and passengers, so as to realize efficient management, quality service and operation upgrade of service areas.

Dahua has been deeply involved in the transformation and upgrade of an expressway service area known as the "South Gate" of Zhejiang. Based on the concept of "5C+1E" (short for Clear, Clean, Comfortable, Convenient, Charming and Ecology), a total of 240 toilet units have been built which can automatically switch themselves between toilets for men and those for women according to the number of people using the toilets. Temperatures, humidity levels and other indicators can be monitored to meet the diverse needs of drivers and passengers.

The intelligent parking guidance system can plan a space layout where the driving routes for passenger vehicles and those for freight vehicles are separated and the walking paths and driving routes are separated. The number of parking places has been increased from 185 to 289, and the day/night mode switching function can meet the parking needs of passenger vehicles and freight vehicles at different periods. Information on the vacant parking places, fueling, tourist attractions and other first-hand travel services is sent to drivers and passengers, prolonging the overall user's stay by 1 hour and enhancing the overall reception capacity by 10%. At the same time, the intelligent early warning system of the service area is used to timely warn the entry of vehicles carrying hazardous chemicals and illegal parking of vehicles in the service area through video identification technology powered by AI, to comprehensively improve the efficiency of daily management and ensure the area's orderly operation. Also, it can timely detect congested areas in the lobby to facilitate staff to quickly divert traffic, improving customer experience and ensuring public safety.



## Empowerment by Digital Intelligence

### Rely on technologies to manage overloaded vehicles and guarantee road safety

Every year, about 70% of road traffic safety accidents are caused by overloading, and 50% of fatal road traffic accidents are directly related to overloading. Overloaded vehicles are major hidden dangers to the life and property of drivers and pedestrians, road facilities, and smooth traffic operation, and overloading has always been in the spotlight of supervision in the transportation sector.

Dahua has provided scenario-based overloading supervision solutions for highway checkpoints, key freight enterprises, important sections of state-level and provincial-level roads. By collecting evidence from overloaded vehicles in multiple aspects, Dahua has helped customers enforce relevant laws and regulations without visiting the site in person, create "one real-time digital map" that monitors overloaded vehicles, and share relevant information in time with other competent departments. Two months after the launch of the overloading control system in a place, the occurrence of truck overloading was reduced, and the occurrence of ex-works overloading of trucks was reduced from 40% to 15.7%. The supervision on overloaded trucks ensures the safety of road transportation, protects people's lives and property, improves the service life of highways, reduces the occurrence of accidents, and improves the ability of competent departments in the transportation sector to manage vehicle overloading.



### Fully participate in constructing new energy stations to boost industrial development

In terms of new energy sources, Dahua has fully participated in the digitalization of new energy stations, supporting power generation enterprises through high technology, helping them reduce costs and increase profits, improve resource utilization, and optimize facility and business operation efficiency.

In the wind power field, Dahua has built a comprehensive sensing system with remote production inspection for core wind power providers, which can help them achieve intensive management and facilitate visualization, digitalization and automation in the production process with useful data. In the photovoltaics field, Dahua has adopted thermal imaging technology to carry out auto-inspection in large-scale photovoltaic power plants through drones to accurately locate defects in components so that the operating efficiency of photovoltaic plants can be greatly improved. In the hydropower field, at the Wudongde Hydropower Station, the fourth largest in China and the seventh largest in the world, home to the world's thinnest 300-meter-class ultra-high arch dam, Dahua has adopted machine vision technology to examine the process quality of the dam and monitor the construction quality of the dam throughout the entire process.



### Make new energy vehicles a beautiful urban view

Dahua has built an immersive digital experience center for many domestic new energy vehicle manufacturers, using technology to create a pleasant car buying experience and help these brands become known by more people.

Dahua has provided the brands' exhibition halls with curved large-screen cinema-level audio equipment that fits the design of the exhibition halls to better display brand history, advertise promotional activities, show user feedback, etc. in real time. These high-quality pictures and interactive content can be shared through a cloud-based platform and can be used in various exhibition halls of the brands across the country. The tech-infused style of display can enhance customers' car purchase experience and save more than 50% of the cost of display materials. At the entrances and exits of stores, the customer flows can be detected in real time, and this data can be imported to the management platforms at the brands' headquarters for analysis. Based on the analysis of customer flows, the brands can make adjustments to shift arrangements in stores to make sure that even in peak time, there are staff members to provide services. Also, by collecting information on the amount of heat near vehicles on exhibition and in other areas of the exhibition halls, brands can adjust the locations of different vehicles, send more staff members to populated areas, optimize customer visit routes, so that customers can have a better experience and the conversion rate can be improved.

From vehicle production to digital design and smart operation of exhibition halls, to transparent after-sales service, Dahua has fully participated in the production, sales and service of new energy vehicles to create the most wonderful experience for customers.



### Promote the digital reform of teaching in higher education institutions

Dahua's solution for accelerating the digital transformation and upgrade of higher education has been developed based on real needs. It easy to use and can be applied in many education scenarios. The solution integrates itself with the existing teaching modes in depth, and teachers and students are willing to adopt the solution in classrooms. Through the upgrade of traditional classrooms in teaching environment, teaching mode, teaching data and teaching management, the solution features closed-loop teaching which includes pre-class preparation, in-class teaching, and after-school homework assignment. Students can book multi-functional classrooms easily online, discuss in groups and interact with each other in real time remotely, and play online courses anywhere they want. By providing this solution, Dahua has contributed to the digital reform of teaching in higher education institutions.



## Empowerment by Digital Intelligence

### Turn waste into treasure and facilitate the digital transformation of steel enterprises

During the production and processing of steel, with the increasing consumption of non-renewable resources such as iron ore, it is necessary to gradually shift to renewable resources such as scrap iron and scrap steel. Compared with the lengthy steelmaking process using iron ore and coal, steelmaking using scrap steel as raw material has obvious advantages in terms of environment protection, energy consumption and cost.

Dahua has launched in collaboration with a large domestic special steel corporation an automatic scrap grading system to take on the responsibility of scrap purchase yard personnel. Dahua has realized the full-process supervision of scrap unloading. By adopting the AI scrap analysis algorithm trained by deep learning and following a quality inspection and grading process similar to the steps a human inspector would take, Dahua has helped the corporation conduct layer-by-layer grading, vehicle grading, non-steel substance identification and alarming, and deduction of non-steel substances from vehicles.

After the completion of the system, the working environment of scrap quality inspectors and the overall work efficiency have been significantly improved. Moreover, the automatic grading of scrap steel has greatly reduced disputes and accelerated the digital transformation of steel enterprises through the automatic grading and automatic deduction functions of the system.

### Create environment-friendly buildings where source, network, load, storage and charging are integrated

In the new energy consumption field, Dahua has built digital solutions in terms of the source, grid, load, storage and charging, and realized the refined management of energy use in and around buildings. In terms of the source, the empty space of buildings is used for solar power generation and the utilization rate of clean energy in the buildings can be improved. In terms of the grid, based on the peak-valley electricity price difference, transformer capacity and electricity demand estimates, Dahua has realized flexible adjustment of buildings' energy consumption to reduce energy cost. Through the application of smart air conditioning and smart lighting solutions in buildings and the adoption of energy conservation strategy, the energy consumption expenditure for buildings can be reduced by 30%. In terms of storage, the energy absorption capacity of buildings has been enhanced and the peak electricity load and frequency of the power grid can be adjusted to realize the value of electric energy. In terms of charging, Dahua's solution enables electricity storage in vehicles and makes the electricity stored in vehicles a buffer for the buildings' power grid and renewable energy. The electricity stored in vehicles can be used during the peak price period and supplemented during the valley price period. Energy consumption data is monitored in real time, and suitable strategies are automatically deployed, so that the entire microgrid of the buildings can adapt itself automatically. The use of electricity and the carbon footprints are tracked to ensure the efficient use of energy in the entire buildings. This can help enterprises save energy, reduce emissions, and contribute to China's carbon peak and carbon neutrality goals.



### Build green bank outlets to facilitate digital green finance

The *Fintech Development Plan (2022-2025)* puts forward environment-friendliness as a priority in development, aiming at carbon peak and carbon neutrality, deepening the integration of fintech and green finance, and developing innovative ideas to boost digital green finance.

Dahua has joined hands with Shanghai Pudong Development Bank to build green bank outlets, spread green, low-carbon measures to serve green enterprises. By using air switches, water meters, electricity meters and other equipment with IoT functions, the bank outlet can monitor its electricity use. The status of air conditioning and lighting can be adjusted through IoT equipment. Lights will turn themselves off when people leave the area. Back-up lights are available when an emergency happens. More electricity can be saved from adjusting air conditioner settings, reducing the overall energy use in bank outlets. Bank outlets provide green finance information and environmental protection information to customers using low-power-consumption LED and smart screens. With the goal of helping Shanghai Pudong Development Bank provide green finance services, Dahua has successfully transformed the outlets into green outlets by enabling the outlets to spread information on environmental protection, hold environmental protection activities, and save energy and reduce emissions, etc., enabling Shanghai Pudong Development Bank to better serve green enterprises.



### Develop smart cultural tourism and show the charm of speed skating through technological support

Located in Yanqing, the National Sliding Center hosted three events during the Winter Olympics: bobsled, skeleton and luge. The 1.9 km long track boasts the world's top design and features a vertical drop of more than 120 meters. The theoretical sliding speed is up to 130 kilometers per hour, which made the events among the fastest sports events during the Winter Olympics. As athletes would pass the complex and narrow courses at super fast speeds, huge pressure would be brought to the judges' race decisions and team support.

Through thorough verification of the environment and the racing process, by virtue of its powerful video sensing ability, imaging technology and digital intelligence technology, Dahua developed an innovative video tracking system for the racing event to realize the seamless connection and orderly display of the videos recording athletes sliding at high speeds between different ramps, record every detail of the event, ensure that the wonderful moments of athlete swooping at high speeds are recorded. Without any interference with the setting of the track, Dahua's intelligent video tracking system provided a strong basis for judges' decision making and maintaining fairness and made contribution to the success of the Winter Olympic Games.



### Protect the safety of miners using digital intelligence and upgrade coal mine production

With safety and efficiency being its primary goals, Dahua has closely followed the latest standards for inspection through digital technology in key coal mine provinces, continued to explore the key scenarios of coal production, and worked on the

## Empowerment by Digital Intelligence

key tasks such as multidimensional underground awareness, main coal stream monitoring and major rule-breaking incident management, and coal mine digital governance. Dahua has worked with regulatory bodies and coal mining enterprises to build a management mode featuring co-governance and digital intelligence.

Based on its video monitoring, data visualization, and product and equipment integration capabilities and rich experience in intelligent coal production, Dahua has developed nearly 100 types of algorithms for the coal industry in business scenarios such as supervision of water prospecting and release operations, linkage operations of coal cutter, drag conveyor and hydraulic support, foreign matter detection on belt, coal stream information, major violations control in coal mines and coal washing and selection plants, intelligent parks above mines, exchange of scheduling information, illegal mining, etc. Through a series of intelligent mining applications, Dahua provides one-stop solutions capable of AI video assisted management of coal mines, video chat for emergencies, and identification and analysis of non-compliance behaviors. This has reduced the workload of miners, improved the working environment, guaranteed the safety of coal production, improved production quality and efficiency, and provided a new direction for intelligent management in the coal mine industry.

### Risk identification to ensure safe production in the petroleum and chemical industry

Petroleum and chemical industry is an important basic and pillar industry in China. Dahua adheres to providing digital intelligence services for all scenarios of the industry to promote new production and practice technology-powered safety. By creating digital scenarios for safe production based on AI optics and multidimensional awareness technology, Dahua is committed to the prediction and early warning of major hazards, risks, hidden dangers, etc., so as to make production safer and management more intelligent. Dahua has joined hands with Sinopec to empower the intelligent upgrading and construction of its major oil depots with science and technology. By building a provincial-level AI central console, Dahua can help Sinopec identify hidden risks in its oil depots to protect its personnel and the environment.

In terms of oil and gas sales, Dahua has provided safety upgrading construction with the theme of "Promoting new production and practicing new safety" for nationwide oil/gas stations. Dahua has provided safety protection through AI optical technology for nearly 1,000 oil/gas stations, guarantee the safety of loading and unloading operations, and assure the society the safe use of oil and gas. Dahua has empowered enterprises handling hazardous chemicals with science and technology, guarded energy security and production safety with actions, and contributed to the stable operation of petroleum and chemical enterprises.



### Facilitate lean production and deliver first-class products

Manufacturing is a key growth driver of China's economy. It is the foundation of the country, and an essential contributor to national rejuvenation. Equipment is the key to ensuring stable production, and also an important precondition for the business growth and development of enterprises. Dahua has developed intelligent equipment management systems for key production locations such as workshops and production lines. Information about on-site work orders, production, load, first-pass yield, equipment failure and fault warnings recorded in videos shot by panoramic cameras shown in the systems to help enterprises manage workshops remotely and give warning in real time. Using Dahua's intelligent sensing equipment, enterprises can obtain data on equipment vibration, temperature, speed, etc. in real time, analyze equipment operating

status, predict equipment failure and check or repair equipment in time to reduce losses caused by equipment failure. At the same time, Dahua's systems can enhance production efficiency and reduce labor costs, playing a crucial role in the transformation of the equipment manufacturing industry.



### Reinforce the bottom line and give timely warning to ensure logistics compliance

Dahua has joined hands with the State Post Bureau to launch a smart logistics compliance solution covering all operations in the business processes of distribution centers, outlets and vehicle transportation. This solution is capable of video monitoring and automatic analysis in the scenario of logistics-related operations. A comprehensive intelligent analysis and application center for violations of regulations has been built to identify illegal operations threatening parcel safety and even personal safety such as rough handling, leaving posts at will, causing fire hazards, and going beyond one's working platform. This intelligent supervision solution for logistics companies can give timely warning to the employees and urge them to act in line with industry standards. At the same time, by connecting their systems with the system of the State Post Bureau, logistics companies have their logistics delivery operations automatically analyzed, thus improving the quality of transportation and delivery and better protecting the legitimate rights and interests of consumers.



### Digital intelligence technologies-empowered breeding

In response to the needs of a corporation in the breeding industry, Dahua aims to achieve three targets: unified management of all the corporation's platforms, closed-loop business management on each breeding site, and integration of various production data. With the aid of the Internet of Things, AI, big data and other technical means, Dahua has helped the corporation better supervise its breeding sites through videos remotely and improve its ability in closed-loop management. With Dahua's smart applications for accurate temperature measurement, inventory counting, pig weight estimation and pig counting, fewer employees are needed on breeding sites and more efforts can be made in stepping up production. Dahua's solution has improved the corporation's breeding technology and realized digital management for them. Based on the "3+2" five-level prevention and control principle, sterilization, zone crossing and all operations related to people, vehicles, items, pigs and breeding areas are under closed-loop management for disease prevention and control throughout the process to strengthen biosafety on breeding sites in all rounds. In terms of management, the digital solutions developed by Dahua for the breeding industry have improved production efficiency, guaranteed the safety and good quality of meat, and further promoted the digital transformation of the traditional breeding industry.

## Empowerment by Digital Intelligence

### Facilitate the digital management of a Mexican industrial park

In response to the needs of Haitian International Industrial Park in Mexico that requires perimeter protection, access control and on-site video surveillance, Dahua has helped the park install a plant-wide video security system. With perimeter protection visualization tool, safe and efficient pedestrian and vehicle traffic guidance, and professional weak current system integration design and services, the safety of the park is guaranteed and the park can be managed efficiently.

With the aid of Dahua's fully integrated security system, Haitian International's management personnel can now move to this highly secure park with confidence. In addition, Haitian International is now adopting state-of-the-art technology for efficient and secure operations, and its facilities are running smoothly with the help of Dahua's access control and vehicle management solutions.



### Provide car auctioneers with extensive perimeter protection

The Great Northern Auction (TGNA) is the largest bus auction company in eastern Canada and currently has state-of-the-art facilities on its compound of more than 50 acres. Due to the need to protect its vast inventory of vehicles, TGNA needed a cost-effective way to reduce losses due to the high rate of theft at its compound. In response, the local Centurion Alarm & Lock was introduced to address TGNA's security needs for such a large area. The all-in-one solution includes remote connection to Maximum's video surveillance center (third-party monitoring center) using Dahua's DSS server and VMS main platform, capable of remote video verification, targeted scheduling of security personnel, etc.

As a result, Dahua's affordable all-in-one solution puts TGNA at the forefront of the trend of adopting video surveillance technology.

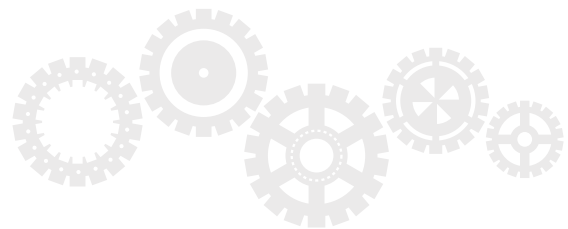


### Facilitate Antarctic research and conservation with high-tech products

Antarctica, located at the southernmost point of the earth, is the last continent in the world to be discovered. Glaciers, extreme cold, and penguins are its unique features. In 2022, Dahua stepped into the Antarctic region for the first time and donated 15 smart devices to local scientific bases, facilitating research on local fauna and meteorology with intelligent video sensing capabilities to better protect the cute penguins! The lowest temperature in Antarctica can reach -57 degrees Celsius. The wind velocity can reach up to 320km/h. To cope with the extremely cold climate conditions there, Dahua engineers in Argentina pushed beyond their limits. During their in-depth field investigation, they overcame many difficulties, and finally developed intelligent equipment systems suitable for the extremely cold region to help scientists observe Antarctica in real time for a long time.

The project has brought advanced security technology to Antarctica, an unprecedented initiative on the white continent. In addition to facilitating field research and assessing the environment where plants and animals grow, the system can provide security to runways upon arrival, laying the foundation for in-depth research in the region.

So far, Dahua has provided products on all the seven continents, protecting biodiversity with digital technology, and making every effort to protect species and ecological balance. In the future, Dahua will continue to innovate and explore digital technology to share knowledge for global environmental protection!



# Environment-friendly and Low-carbon Products

Dahua always adheres to the responsibility of protecting the environment and practicing green development. In the report period, Dahua actively carried out innovative green design for products, reduced product energy consumption and promoted green expansion and business upgrading in the global market through clean technologies.

## Low-power-consuming design of products

On the basis of ensuring the stability of product functions, Dahua has adopted low-power-consuming design and added sleep and wake-up schemes according to application scenarios to automatically switch to energy-saving modes at an appropriate time. This design has improved energy efficiency and reduced energy consumption during product use to a large extent.

### Low-power-consuming wireless alarm keypad

Product power consumption

↓96%



### Smart access control products

Product power consumption

↓15%



### Low-power-consuming wireless alarm keypad

Product power consumption

↓60%



### Low-power-consuming multi-camera PTZ

Product power consumption

↓66%



## Solar system design

While developing extreme low-power-consumption solutions, Dahua has actively adopted solar power system design in various application scenarios, which not only reduces the energy consumption of the product itself, but also reduces the consumption of installation materials and long cables needed in the application environment to reduce the carbon footprint in the process of product use.

### Small-ball solar power supply system



### 6-inch-ball solar power supply system



## Design driven by Internet of Things

Based on the planning for IoT solution development, Dahua has actively explored the application scenarios of energy-saving products, adopted intelligent energy-saving and emission reduction design in various IoT solutions, and promoted the application of green solutions recognized across the globe to help reduce global carbon emissions.

The smart lighting solution supports the transformation of traditional lighting and the one-stop smart lighting installation in new projects, determines whether to turn on the light and to adjust illuminance through environment light sensing, saves energy as the solution automatically turns light off when people leave with the aid of infrared sensing and radar detection, and formulates energy-saving strategies through data analysis to further improve intelligent lighting control and achieve better energy-saving effect.

### Smart warehousing solution

Energy consumption after application ↓20%



The smart air conditioning solution is uniformly deployed and managed through the platform, and the equipment automatically turns itself turn on and off according to the application scenario. The solution allows users to set instructions to the air conditioner so that it will automatic adjust its operating temperature according to the room temperature it monitors in real time. It also uses temperature, humidity and human body sensing radars for linkage control, to guarantee comfort and reduce energy consumption.

### Smart air conditioning solution

Energy consumption after application ↓30%

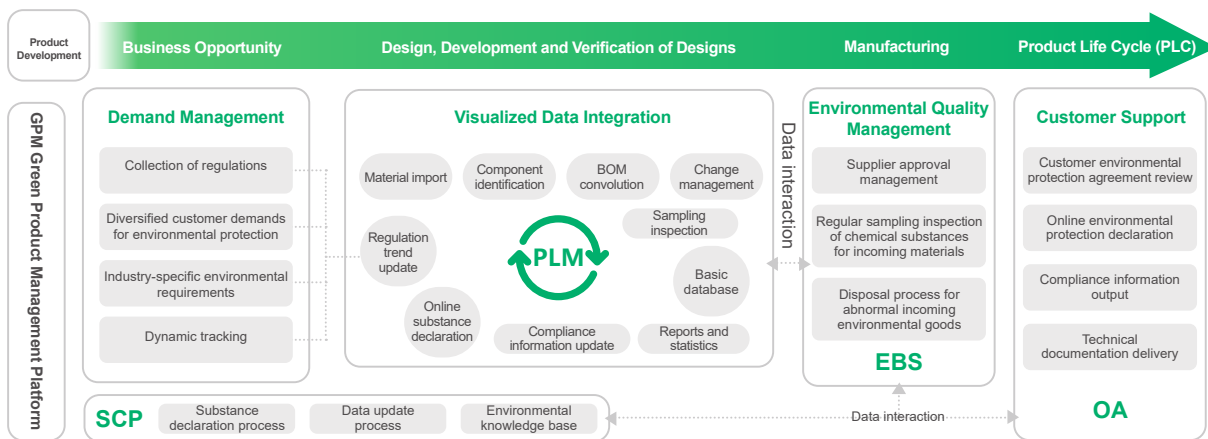


# Green Operation

## Green Design

### Green Product Management Platform (GPM platform)

The Green Product Management Platform (GPM) is a cross-platform IT system independently developed by Dahua Technology, dedicated to more effectively and comprehensively managing the green pro-environment features of products. This tool has fully realized the transition from the previous passive, manual and fragmented environmental protection management to an intelligent and open environmental management platform fully integrated with existing business processes, greatly promoting the standardization and systematic process of environmental protection design, avoiding negligence caused by manual operations, improving the efficiency of green product management, reducing the risk of excessive harmful substances in products, lowering management costs, and enhancing customer satisfaction. By connecting the upstream actors and downstream actors in the supply chain, Dahua has created a one-stop self-declaration process that involves suppliers, Dahua, primary-level markets and regulators. This process can meet the needs of typical compliance application scenarios such as REACH SCIP declaration, conflict minerals investigation, and preliminary research into new regulations.



### Packaging Material Management

Following the principles of lightweight, recyclable and sustainable, all packaging materials used by Dahua including paper, plastic, wood and metal, as well as auxiliary materials such as packing straps and tapes, are regulated for hazardous substances according to the requirements of the *EU 2005/20/EC Packaging and Packaging Waste Directive* to ensure that the total content of lead, mercury, cadmium, and hexavalent chromium therein does not exceed 100mg/kg. Carton products strictly follow the relevant requirements of *GB/T 12123-2008 General Requirements for Packaging Design*, *GB/T 6544 Corrugated Board*, and *GB/T 13024 Carton Board*. According to the actual functional requirements and material property standards, Dahua has determined corresponding carton material schemes and performance indicators to improved standardization. Dahua has released the standards *T/ZJAF 9-2021 Technical Specification for Green Packaging of Electronic Protection Products* and *DH JS 1728 Packaging Materials - Paper and Paperboard Technical Standard* to provide specifications and standards for the design, production and inspection of suppliers, manufacturers and engineers, so as to improve production in scale and production consistency and to reduce design redundancy.

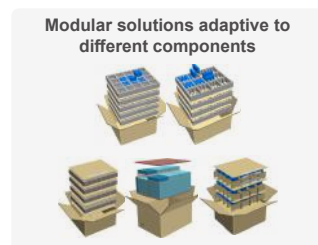
### Green Packaging Design

Packaging is designed to be lightweight, standardized, green and sustainable. Suitable packaging materials are selected to provide products with safe, reliable, simple and lightweight, green and environment-friendly packaging solutions through ingenious design and technological means so as to achieve the optimal balance between functionality, quality and cost of product packaging. Through innovation in technology and design, environment-friendly packaging can be developed as alternative new materials that can be recycled; through innovation in design, the reuse of packaging solutions and automated adaptation can be strengthened. Dahua aims to achieve standardization and automation in packaging design, improve the efficiency of storage and transportation space, reduce the use of plastics, packaging materials, and the energy consumption of upstream actors and downstream actors in the packaging industry supply chain.

### Packaging Standardization

Dahua has always acted in line with the principle of "standardization" for packaging design and development, actively promoted the standardization of packaging materials, specifications and materials, improved concentration and standardization in production and processing, realizing the low cost and high efficiency of packaging material management.

The innovative film packaging technology can partially replace the traditional buffer inner packaging, and increase the reuse rate of product packaging by 30%, significantly reducing consumption of materials. Based on the standardized design of basic logistics modules, Dahua has developed modular packaging technology featuring 1 standard box specification and 22 packaging solutions. The packaging technology can be used to package more than 1,000 types of components, so as to reduce the use of packaging materials, and improve the utilization efficiency of storage and transportation space.



# Green Operation

Five types of durable, recyclable boxes of standard specifications are used in the delivery of materials (components) from suppliers and transportation of materials in the park. They are convenient for transportation through large containers or in batches, and can greatly improve the utilization efficiency of storage and transportation space, saving about 128 tons of paper per year.

## Less Packaging

Dahua has implemented the packaging reduction strategy, and under the premise of ensuring the protective effect of packaging on products, use of packaging materials is minimized and the weight of packaging materials is reduced to the greatest extent, so as to save more resources and reduce carbon emissions.

The innovative self-developed film composite packaging technology featuring high-strength new material film and sheetboard, when applied to electronic product packaging, can reduce the use of packaging materials by 40%, an average of about 12.5 tons of cardboard per 1 million sets of products.

**40%** Quantity of packaging materials used

By using self-developed EHS ecological pallet with paper replacing plastic in products delivered by one-time pallet, Dahua has replaced plastic and wood (pallet) with paper. This can improve the packaging recycling efficiency in the scenario of one-time pallet shipment, achieve more than 50% weight reduction, and reduce energy consumption and carbon emissions during product transportation.

**50%** Pallet weight

Current assembly / heavy load packaging → Assembly / heavy load packaging using EHS ecological pallet with paper replacing plastic

瓦楞纸板  
蜂窝芯

## Green and Sustainable

Dahua has always been committed to using more environment-friendly packaging materials, reducing plastic in product packaging materials and the consumption of non-renewable resources. The non-degradable plastic in packaging is replaced by green, plastic-free packaging technologies such as high-strength all-paper cushioned lining, plastic-free color printing curing technology, and novel-coating moisture-proof box, to realize green, degradable packaging overall. The plastic in packaging has been reduced by 9%, and 75 tons of disposable plastic have been saved throughout the year.

- High-strength all-paper cushioned lining
- Plastic-free color printing curing technology
- Automated paper film composite screw package
- Novel-coating moisture-proof box

## Simulation Design

Based on its leading simulation capabilities and years of research by its Engineering Experiment Center, Dahua has built Galaxy Cloud Simulation Management Platform, a powerful interdisciplinary simulation platform by integrating various disciplines. It can greatly improve the accuracy and efficiency of simulation, accelerate R&D progress, and better ensure product quality and reliability. By integrating thermal, mechanical, electrical and other multidisciplinary simulation capabilities, Dahua can simulate extreme physical environments. Dahua has gained dozens of interdisciplinary simulation capabilities, achieved 100% simulation coverage in the development of new products, and reduced a large number of real tests or experiments to facilitate green design, build more powerful technical capabilities for R&D, better ensure that products withstand various extreme environments, and improve both product reliability and quality. Dahua's interdisciplinary simulation platform project won the Excellence Award of the Engineering Simulation Innovation Design Competition. Using the simulation platform, Dahua has developed a full-stack digital R&D system for the construction of an intelligent digital factory which was awarded Model Digital Factory 2022 in Zhejiang Province (Certification Category).

Thermal simulation      Mechanical simulation

Electrical simulation

## Green Manufacturing

**7** low-cost solutions  
**4** high-cost solutions

Power saved: 1.783 million kWh  
Emission reduced: 15T of waste cleaning liquid / 170.64kg of VOCs

Dahua attaches great importance to green manufacturing, focusing on energy saving, pollution reduction and efficiency improvement. By taking actions including energy consumption platform construction, equipment upgrading, plant transformation, waste gas purification, testing and upgrading, Dahua practices green manufacturing, improves the effective use of resources, and continues to create a green manufacturing model that takes good consideration of customer needs, enterprise benefits, resource utilization and environmental impact.

In May 2022, based on the strategic planning of environmental protection, Dahua established a clean production team to maximize resource utilization and reduce waste generation by cutting down waste from its source to reduce or eliminate adverse impact on the environment and human health. 7 low-cost solutions and 4 high-cost solutions have been implemented, saving a total of 1.783 million kWh of electricity and reducing 15t of waste cleaning liquid and 170.64kg of VOCs.

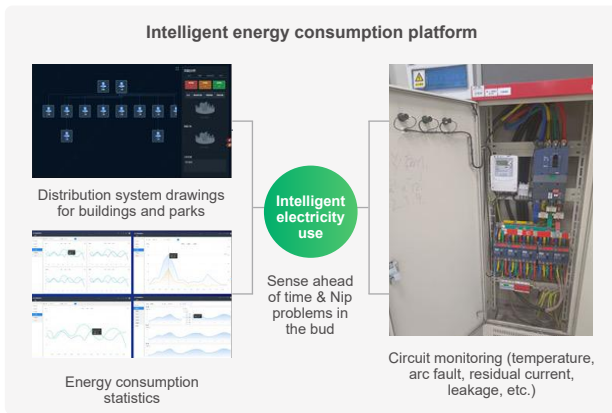


# Green Operation

## Energy Saving

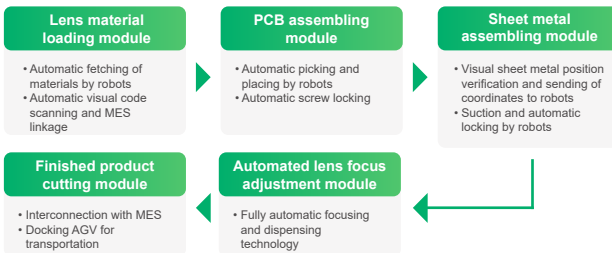
### Establishment of an intelligent energy consumption platform

In order to refine power use in production bases, Dahua has established the intelligent energy consumption platform in production bases. Real-time monitoring of electricity consumption data of each workshop and statistical analysis can help identify issues for improvement precisely.



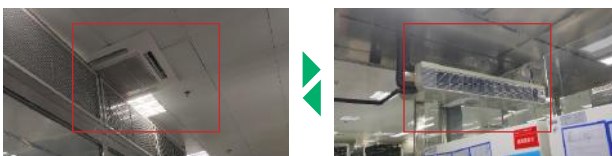
### Digital upgrade of lens module assembly and testing lines

Through the monitoring and analysis of energy consumption, it was found that if the equipment for lens module assembly and testing lines was upgraded, the assembly, testing and packaging efficiency could be improved, and the energy consumption per unit product could be reduced. After design, research and development, testing, 2 assembling and testing lines have been updated to the fourth generation, which can meet the need for automatic high-flexibility production of 15 types of sheet metal and more than 7,000 models. The average annual electricity saved has amounted to 1.081 million kWh, generating a total revenue of RMB 2.667 million.



### Dust-proof workshop renovation

During daylight saving time, a water-cooling screw chiller with a host power of 256kW usually needs to be turned on separately to guarantee the smooth operation of dust-proof workshops. The chiller is in particular used for the 1000-class dust-proof workshop for modules, which consumes a large amount of energy consumption yet still cannot effectively control the temperature. Dahua has set up a separate internal circulation air conditioning unit in each dust-proof workshop, connecting the central air conditioning drain line, so that separate water-cooling units can be turned off. The average annual electricity saved has amounted to 638,000 kWh, generating a total revenue of RMB 606,000.



Annual electricity saving: **638,000 kWh**; economic saving: **RMB 606,000**

## Pollution Reduction

To effectively improve air quality, Dahua, as a high-tech research and development enterprise, actively explores and upgrades the means of air prevention and control. During the reporting period, Dahua's factory environmental impact assessment was upgraded from level one to level two.

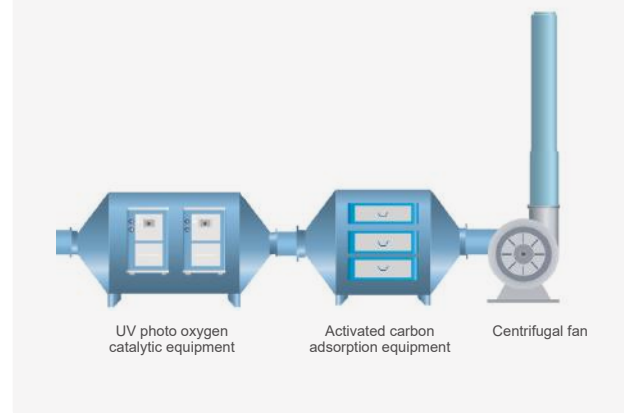
### Reducing environmental pollution through technological applications

Dahua has installed an exhaust system to collect exhaust gases and discharge them after testing that they meet national standards. For PCBA, conformal coating, and screen printing photo-curing workshops that use pollution-causing materials, Dahua has installed an exhaust gas treatment and purification unit to effectively remove toxic and harmful substances such as hydrocarbons, chlorocarbons, and oxy hydrocarbons through photocatalysis and activated carbon adsorption.

### Reducing waste at source by using clean materials

Dahua prioritizes the use of non-polluting and less polluting raw materials. We use lead-free solder pastes and environmentally friendly polyurethane conformal coatings. Their hazardous substance levels tested by SGS are lower than the international standard range.

### Schematic diagram of the exhaust gas treatment device



### Exhaust emission pre-test report

杭州睿扬泰斯检测科技有限公司			
检测报告			
序号	检测项目	标准	检测结果
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检验检测报告			
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# Green Operation

## Better Efficiency

Dahua continues to improve its intelligent manufacturing capacity, develop and upgrade its automated testing platform, and constantly break through the bottlenecks of industry testing technology. The coverage of fully automated testing technology of core products has reached 94.51%.

### Equipment for proactive prevention and control

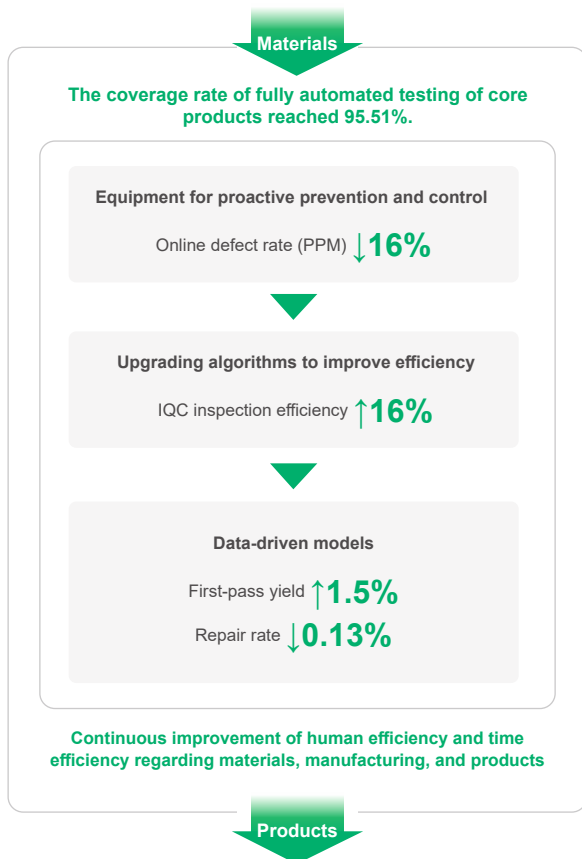
Dahua encourages its suppliers to use automation and visual inspection equipment for the proactive quality control of suppliers' materials. The overall PPM level of materials has been reduced by 16%.

### Upgrading algorithms to improve efficiency

The MTF algorithm was upgraded for the compatibility testing of super starlight high-resolution IPCs. The visual AI algorithm realized test card fool-proofing. The automated testing rate of core product lines increased from 61% to 75%. The Extreme Mart algorithm could dynamically adjust the inspection method, improving the IQC inspection efficiency by 10%.

### Data-driven models

The first-pass yield was data-driven. Resources were concentrated to improve top defective items. Test failures were reduced through product structure optimization and the application of test models. Big data loading enabled real-time warning and greatly reduced time of response to exceptions. The first-pass yield of core products increased by 1.5%, and the two-year repair rate of domestic products was reduced by 0.13%.

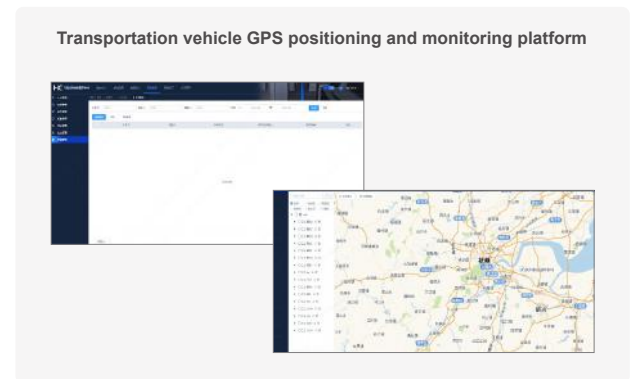


## Green Logistics

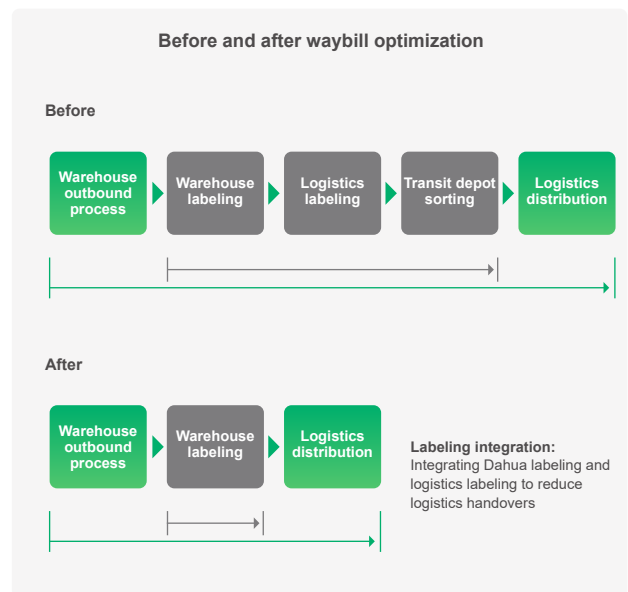
Under the "carbon peaking and carbon neutrality" goals, the transportation industry, as a key field of carbon emission reduction, is in urgent need of green transformation. Based on the strategic requirements of green transportation and sustainable resource allocation, in 2022, Dahua planned the green development of logistics, linking suppliers, factories, and customers, comprehensively promoting green transportation and green warehousing, helping the whole industry chain improve quality and efficiency and reduce low carbon emissions, and leading partners to build a green intelligent logistics system.

## Green Transportation

Transportation is a key link in green logistics. Dahua monitored and analyzed the GPS trajectory, electronic fence positioning, fuel consumption, and other data of transporting vehicles, and used big data analysis and cloud computing to optimize transport routes, reduce transport transfers, and improve transport efficiency. On this basis, the waybill and integrated logistics sorting and network logistics labeling are optimized. Through the WMS and TMS system data



interaction, the order information is pushed directly to a logistics company, eliminating the need for secondary labeling by the logistics company. Dahua managed to shorten the delivery time, speed up the efficiency of logistics transfer and improve the overall logistics timeliness.



# Green Operation

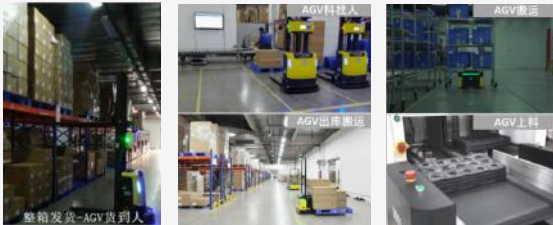
## Green Storage

Taking "digital intelligence" and "energy saving and consumption reduction" as the starting point, in the reporting year, Dahua completed the construction of the phase II intelligent distribution center. The center created algorithm models for inventory distribution, wave formation, AGV scheduling, etc. The center used automated transmission lines, AGVs, elevators, automated measurement, thermoplastic packaging, RFID, and other automation equipment. The raw material and finished product warehouses had a total of 210 hand hydraulic carrier AGVs and 62 latent lifting AGVs, realizing unmanned operations in the warehouse area. Fully automated areas reached 100,000 square meters. Dahua realized the efficient operation of automated diversion of incoming materials into storage, separation of storage and sorting, intelligent transfer of storage, intelligent scheduling, wave-balanced production scheduling, automated measurement of finished products, and automated outbound scanning. The on-site operation mode changed from "people looking for materials" to "materials looking for people", which improved operation efficiency by 10% and saved 3.13 million kWh of electricity annually.

### Automated racking of finished products by AGVs



### AGV workflow



## Green Circulation

In response to the advocacy for a circular economy, Dahua continued to promote the material circulation system. It focused on shared packaging and material recycling, forming a positive cycle of material reuse between suppliers and customers and reducing the use of packaging materials and solid waste.

### Shared packaging

**With suppliers:** Dahua continued to promote the recycling of turnover boxes between suppliers and the park. At present, 70% of the commonly used materials purchased by Dahua are delivered with turnover boxes, a year-on-year increase of 20%, achieving a win-win situation between Dahua and suppliers while protecting the environment.

**With customers:** Intelligent merging and packaging of orders, goods-to-person AGVs, and put walls allowed for the merging and packaging of multiple SKUs under the same order and the same handling order, thus reducing the usage of cartons. In November 2022 alone, Dahua saved 12,477 cartons. It was estimated that Dahua saved 149,000 cartons throughout the year.

### Statistics of incoming turnover boxes



## Recycle and reuse

Dahua followed the concept of "ecological development". It vigorously developed reverse logistics and accurate sorting and recycling to reduce environmental pollution.

**Construction of an integrated platform for domestic returned goods:** The platform connected all the business links, such as the in-and-out management of returned goods, the disassembling process of scrap materials, and the sale and recycling of scrap products. It enhanced data transparency and traceability, enabling sophisticated and compliant business management. During the reporting period, returned products were collected and processed. There were mainly 13 kinds of recycled scrap, and the recycled weight was 1,700 tons.

### 2022 scrap recycling data (supply chain only)

Recovery classification (2022)	Unit	Quantity
Wave soldering slag	KG	29916.46
Manual solder slag	KG	2403.855
Waste solder paste	KG	108.275
Stainless steel	KG	41971
Power supply	KG	9707
Waste tray	KG	220526
Plastics	KG	57287
Aluminum	KG	86363
Iron	KG	18318
Copper wire	KG	2271
Cable	Piece	33858
Zinc alloy	KG	16772
Carton	KG	1181297

## Safe Production

Dahua continued to strengthen the input of production resources in safety management. During the reporting period, it identified 32 new major hazards, formulated corresponding control measures, and implemented strict risk level-based management. According to the effectiveness of risk control measures, the Safety Management Department conducted routine investigations, treatment, and regular analysis of hidden hazards. The rate of timely hidden hazard rectification was 100%. Focusing on the characteristics of business risks, Dahua established a comprehensive level 3 emergency plan and organized employees to carry out regular on-site drills. Dahua's incident response mechanism and employees' emergency response capabilities have been continuously improved.

Taking the China Safety Production Month as an opportunity, Dahua Safety Committee and the Dahua Fuyang production base jointly organized a series of relevant activities. Under the theme of "Be Responsible and Abide by the Safety Production Law", various activities were organized, such as safety knowledge contest, fire emergency drills, safety knowledge promotion, all-staff safety knowledge tests, and work meetings of the safety committee. The safety awareness of employees was further enhanced, and the initiative of all staff to participate in safety management was continuously enhanced.

## Green Operation

### Taking the China Safety Production Month as an opportunity to promote the construction of a safe production culture



Safety pledge signing

Safety advisory day

Safety quizzes with prizes

Dahua used its security technologies to facilitate safe production. Safety management covered every employee. The number of serious or large production safety accidents in the year was 0. Dahua promoted the construction of green and safe factories: It integrated traditional fire protection to construct an integrated platform for safety and fire protection. High-risk areas such as the packaging material warehouse, charging area, and nitrogen tank area had automated real-time monitoring in place: fire warning in the packaging material warehouse for timely detection and handling of fire dangers; 72 positions for intelligent identification of abnormal situations in the charging area; monitoring and warning of temperature, pressure, level, and gas leakage in the nitrogen tank area.



The safety and fire protection platform dynamically monitoring the high-risk areas of the parks

Real-time monitoring of abnormal temperature in the charging area and firefighting

### Environmental Protection Assurance and Certification for Products

Dahua adhered to stable and effective system management and control, continuously optimized management and control mechanisms and processes, and dynamically updated and introduced new compliance requirements. Based on the HSPM system and compliance requirements, Dahua used the Green Product Management (GPM) platform to continuously improve operational efficiencies, such as improving the overall environmental protection data management and control mechanism, developing multiple material library functions, adding compliance checks for test reports, and combining green manufacturer identification rules for more efficient environmental management and control.

During the reporting period, the Hazardous Substances Process Management System (HSPM) was working well. There were no noticeable non-conformance items. All relevant processes and management measures operated effectively, and there were no recalls or customer complaints caused by abnormal product environmental compliance.

All of the over 40,000 types of raw materials used by Dahua had RoHS test reports. Dahua realized the normalization of RoHS certification updates in the supply chain. More than 8,000 RoHS reports were updated in 2022. More than 30,000 reports were updated in total. These reports covered more than 97% of production materials. At the same time, based on existing sampling inspection rules, of more than 1,600 types of production materials in 2021-2022, the RoHS sampling inspection pass rate of self-developed products exceeded 99%. The coverage rate and pass rate continued to increase. The REACH declaration coverage of various material types reached 100%. The SCIP declaration for thousands of product models sold in Europe was completed. The overall recovery rate of WEEE (*Waste Electrical & Electronic Equipment of the European Union*) products reached 80%, exceeding the standard requirements by more than 10%.

### Green environmental protection certifications

In 2022, Dahua obtained a number of green enterprise and green product certifications at home and abroad. In terms of environmental compliance management, it received green product certifications such as China Environmental Labeling Certification (Type I), and the title of "China Environmental Labeling Outstanding Enterprise". Some certificates are displayed as follows:



China Environmental Labeling Certification (Type I)



China Environmental Labeling Certification (Type II)



China Certification of Environmental Products (CCEP)



China Environmental Labeling Outstanding Enterprises

### Energy Management

Dahua takes energy saving and consumption reduction, and maximization of benefits as its core objectives, adheres to the sustainable development concept of low energy consumption, low emission, and recycling, comprehensively plans and implements energy saving and emission reduction from a strategic perspective of long-term development. Through the improvement of management, technology progress, and industrial structure adjustment, Dahua has achieved continuous and reasonable reduction of overall energy consumption, provided comprehensive benefits of energy saving and emission reduction, and recycling economy, and maintained continuous improvement. Dahua has established a favorable social image of observing laws and disciplines and became the benchmark of energy consumption. The Company is dedicated to making greater contribution to promote the development of the enterprise and the common development of local economy. During the reporting period, Dahua has always insisted on the sustainable development concept, and energy saving and consumption reduction to promote intelligent production aiming to build the green and intelligent factory. To better follow the principle of continuous improvement of energy performance and the systematization of the energy management system, Dahua has established an energy management system and formulated the *Energy Review Management Procedures*. All departments shall compile the *Identification Table of Energy Management Factors* according to the actual situation, implement the responsibility system for energy consumption reduction, and regularly invite qualified third parties to identify and check energy management factors. We propose to post energy saving and consumption reduction signs in the park, advocating "Achieve multiple use of water to reduce waste from the source", "Save energy by turning off lights to reduce residential electricity consumption", "Promote double-sided printing to reduce waste from the source", and "We are in action for low carbon service". In addition, the Company also proposes to carry out multiple energy saving and consumption reduction projects, aiming to build a green and intelligent park.

Dahua Technology has adopted a series of energy management measures to define energy-saving controls over the entire consumption of energy such as electricity and natural gas in the main production process, supporting production process and auxiliary production process. A decision system based on objective data is established to comprehensively and meticulously improve energy efficiency from the macro to the micro, management to implementation. Refined energy management is practiced to further enhance energy management and reduce production and operation energy consumption.

## Green Operation

### Energy reservation and consumption reduction

#### Power and Environment Supervision System

In addition to the basic functions of electricity and gas consumption metering, billing, and statement analysis, the system also provides online real-time monitoring of energy consumption, energy consumption diagnosis and analysis, and other functions to offer comprehensive energy consumption management to managers, improve the efficiency and level of energy consumption management, and reduce operation cost.

#### Energy Control Center

It includes the functions used by the energy consumption detection system and facilitates the reduction of energy cost and the establishment of a decision-making system based on objective data, and provides users with more in-depth functions and services from energy saving control and energy consumption management.

The Company enables functions such as electricity and gas energy consumption metering and billing, report analysis, constant online monitoring of energy consumption, and energy diagnosis and analysis, providing managers with comprehensive energy management services, to improve their efficiency and level of energy management and reduce operation and maintenance costs. The monitoring and measuring equipment required for energy management are calibrated and maintained in accordance with the *Monitoring and Measuring Equipment Control Procedures*, and relevant records shall be saved, to ensure that the data provided by these equipment for monitoring key features is accurate and reproducible. As an industrial enterprise, the company accounts a relatively large proportion in energy consumption. Dahua shall focus on strengthening energy management, fully tap into enterprise's potential in energy-saving and emission-reduction, and effectively improve resource utilization, so as to put energy saving and emission reduction into practice. Dahua has conducted a thorough investigation of the public electrical devices and facilities in the parks, and formulated energy-saving renovation plans or suggestions to gradually carry out the renovation, which has made outstanding achievements.

1. Street lamp renovation: The street lamps in Park 1187 were changed from 48W energy-saving lamps to 26W LED lamps, providing lighting for twelve hours a day and saving 3083.5 kWh (32 lamps) a year. The street lamps in Park 1199 were changed from 55W fluorescent lamps to 26W LED lamps (85 lamps), providing lighting for 12 hours a day and saving 10796.7 kWh each year. Total: 13880.2 kWh

2. The lighting was changed from 54W fluorescent lamps to 122 sets of 24W LED lamps. Assuming they provide lighting for 16 hours a day, they could save 21374.4 kWh each year. The fluorescent lamps on two floors were changed to 500 pcs of 18W LED lamps (intelligent sensor control). Assuming they provide lighting for 10 hours a day, they could save 32,850 kWh each year. Total: 542244 kWh

3. Energy-saving printing: The rated power of a printer is 1300W. The park printers enter energy-saving mode if there is no operation for half an hour. Energy consumption is only 0.9W for each printer. A built-in motion sensor detects when someone is nearby and automatically exits sleep mode, reducing the wait time before the operation begins.

4. The new park uses intelligent lighting, including dimmable lamps with human-body sensors. In public spaces such as elevator halls, tea room aisles, and conference rooms, the illumination of lamps is adjustable according to the ambient light, so that the lights are on when people are around and out when people are absent. In underground garages, when people or vehicles are detected, the lamps within the visible range (30-50 meters) will automatically turn on. When people or vehicles have left, the lamps will return to the sleep mode brightness. Light follows the people or vehicles to ensure the traffic lighting in garages.

5. More than 140 KW photovoltaic panels are installed on the roofs of the buildings in Dahua's new park and are connected to the park microgrids. Based on the peak-valley electricity difference, transformer capacity, and electricity demand forecast, they enable energy data visualization, flexible energy scheduling, energy cost optimization, and carbon emissions reduction according to the national "carbon peaking and carbon neutrality" strategy.

6. A total of 1,389,800 kWh was saved through smart air-conditioning, lamp replacement, basketball court/football field light source renovation, and underground garage light source adjustment. A total of 6,000 tons of water was saved thanks to the precision air conditioner renovation.

### Photovoltaic Power Station Construction

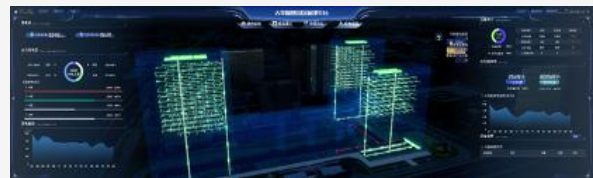
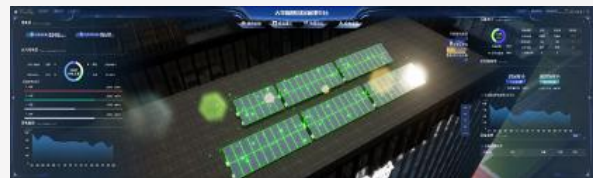
Dahua fully embraced green energy in 2022, installing solar photovoltaic panels on the roofs of the buildings in its new park.

Fuyang Phase II Park plans to install a rooftop photovoltaic area of 60,000 square meters. The photovoltaic power generation system will be connected to the power grid, which can eliminate the need for storage batteries, greatly reduce construction costs, and improve power generation efficiency and environmental protection. The new park is expected to come into use in 2023.



Solar photovoltaic panels have been widely used in building construction due to their inherent advantages: clean, pollution-free, convenient, stable, and renewable. In response to the call of the government, Dahua fully embraces green electricity based on energy-saving and consumption-reducing renovation. The panels are connected to the park's microgrids. Based on the peak-valley electricity difference, transformer capacity, and electricity demand forecast, they enable energy data visualization, flexible energy scheduling, energy cost optimization, and carbon emissions reduction in line with the national "carbon peaking and carbon neutrality" strategy.

#### Installation of solar photovoltaic panels in the Dahua's new park



# Green Operation

## Emission Management

Dahua is a high-tech research and development enterprise, and uses international advanced equipment and technology for production. Its workshops are equipped with exhaust systems to collect waste gas uniformly. Testing agencies regularly conduct on-site inspections and output the *Industrial Exhaust Gas Inspection Report*, showing that all indicators have met national relevant standards. Dahua has installed fume purification devices certified by the environmental protection department to deal with oil fumes from canteens, which is fully processed before being discharged. The measures adopted by Dahua to eliminate pollution sources are in accord with industrial policies, and clean production requirements. The pollutant emission meets the corresponding national standard. Therefore, the quality of the environment is not affected, and the ecological environment will not be changed.

Exhaust gas detection:



Wastewater and noise detection:



## Solid Waste Management

Dahua has specifically formulated the exclusive site management system for hazardous wastes and account management system according to *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste* to ensure the reasonable, standardized, and effective management of hazardous wastes.

Hazardous Wastes	Unit	Total in 2021	Total in 2022
Total disposal amount of hazardous waste	Ton	52.4	50.63

## Water Management

Dahua Technology has established a strict water management system in accordance with the production process and relevant local laws, regulations and standards, to use water in a scientific and rational way, and improve the efficiency of water utilization comprehensively. The Company actively adopts advanced water-saving technologies, selects water-saving equipment and appliances, installs water-saving and spill-proof devices, to reduce water consumption and increase the reuse rate of water resources. Meanwhile, the Company also actively advocates the water-saving culture and creates the water-saving atmosphere, to further strengthen the conservation of water resources. Dahua starts with staff awareness by training all its new and old employees on water-saving awareness and methods, and continuously promoting energy saving and emission reduction within Dahua. Meanwhile, designated persons are assigned for patrol so that any problem once found can be rectified in a timely manner. The wastewater of Dahua is mainly domestic sewage and the canteen oily wastewater is discharged to the municipal water pipe network after being treated in oil separation tanks according to the *Integrated Sewage Discharge Standard*. The discharged water body is annually detected and analyzed by the Binjiang Water Quality Analysis and Monitoring Station, and all indicators turn out to meet the relevant national standards. The automatic flushing mode in bathrooms is changed to manual flushing mode due to the waste of water caused by repeated flushing.

Type of Water Resource	Unit	Total in 2021	Total in 2022
Municipal water	Ton	790857	807292

# Awareness of Green Development

## Environmental Compliance Promotion

Dahua strives to create a green, safe, and harmonious environment, since the corporate sustainable development is inseparable from the enhancement of employees' environmental protection awareness. An energy-saving and emission-reduction atmosphere is created through ways such as announcing its environmental management strategy through the corporate portal, setting up office computer screen savers to publicize its pro-environment policy, releasing energy conservation and consumption reduction initiatives, optimizing equipment operating parameters, and setting up energy-saving and consumption-reduction administrators, to help employees improve their awareness of environmental protection in a subtle way, and enable employees to work in a robust and sound environment.

In the reporting period, Dahua has established a highly professional library of environmental protection laws and regulations, a universal library of internal standard cases and a document library of related external suppliers. At the same time, based on Dahua's annual Green Seedling Plan, Green Pine Plan, and other new employee training plans, Dahua learning platform pushed learning plans and examinations for more than 6,000 employees in environmental compliance-related posts, forming a systematic publicity channel fully covered by the multi-dimensional closed-loop of "three libraries and one examination", so as to convey the rigorous concept of environmental compliance of Dahua internally and externally and further improve the business skills and environmental awareness of relevant parties.

Dahua supply chain solicited suggestions for better management and control of consumables, generating an economic benefit of RMB 1.68 million. A total of 160 improvement suggestions were collected, including 17 excellent cases, generating an economic benefit of RMB 460,000. The promotion of excellent cases generated an economic benefit of RMB 1.22 million. Dahua's environmental protection training for suppliers included live streaming and offline training camps, covering more than 400 suppliers with an attendance of 800. It sets up an environmental protection column on the suppliers' portals and occasionally published management and control experience, Dahua regulations interpretations, and compliance programs.

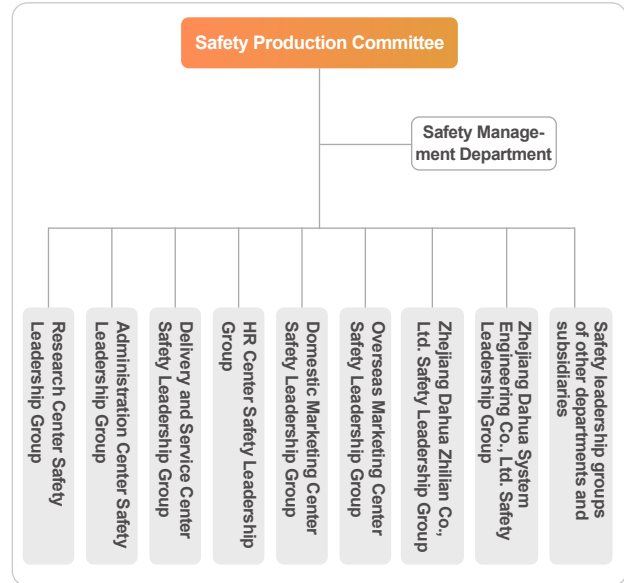
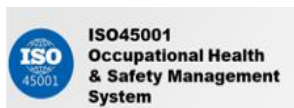
Environmental compliance promotion journal					
EU RoHS core control requirements	EU RoHS exemption mechanism	EU RoHS identification and self-declaration	Dahua Green Manufacturer certification	The ABC of EU REACH	Consumables control improvement

# Social Management Systems

## Occupational Health and Safety Management System

Dahua strictly complies with the *Work Safety Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases*, and the *Environmental Protection Law of the People's Republic of China*, among other national and local laws and regulations on occupational health in its operations. Dahua has built a top-down systematic prevention management mechanism to minimize the occurrence of accidents in production, environmental pollution and occupational diseases.

Dahua has established a certified **ISO45001:2018 Occupational Health and Safety Management System**, and conducts internal and external audits on a regular basis, to effectively control the risk factors to the occupational health & safety and the environment as well as running activities relating thereto, so as to fundamentally eliminate or lower the risks to the occupational health & safety and the environment, and ensure compliance with the policies and objectives for occupational health & safety and environmental protection.



### Medium- and long-term plan for safety management

2022-2023:	Improvement of the safety management system
2023-2024:	In-depth management of safety risks
2024-2025:	Safe production informatization construction

### Main indicators of safety management

Accidents with serious injuries or higher severity:	0
Occupational diseases:	0
Hidden danger rectification rate:	100%
Safety education and training coverage:	100%
Three simultaneities:	100%
Emergency drills:	100%

## Safety Management Organization and Operation Mechanism

Dahua has established a safe production management committee to coordinate its safety management efforts. Each business unit is responsible for the implementation of specific tasks according to its internal functions. Dahua follows the requirements of "a safe production responsibility system for all staff" and "no business management without safety management". Its documents specify that the business leaders of each department are the first person responsible for safety management, the overall coordination of safety management in their business scopes and the allocation of responsibilities based on job levels. During regular safety committee meetings, Dahua analyzes the safe production situation in the industry and within Dahua and evaluates the safety risks of equipment, operation activities, and production sites. Dahua uses a level-based hazard control and prevention mechanism to achieve safety management goals and indicators.

## Supply Chain Security Management System

To better guarantee supply chain security and reduce potential risks in the trade process, Dahua has passed the **ISO28000:2007 supply chain security management system certification**, established a supply chain security management system framework, identified and evaluated the security threats and risks related to supply chain security management, formulated necessary management control measures, and created a *Supply Chain Security Risk Identification Report Form* for security risks including natural environment incidents, failure of externally supplied equipment and services, design and installation of security equipment, information, data management. Dahua adopts effective security management control measures to monitor security threats and risks to ensure that they are controlled in a timely and effective manner, ensuring the healthy and orderly development of the industry.



## Business Continuity Management System

To better guarantee business continuity and reduce business interruption risks, Dahua has passed the **ISO22301:2019 business continuity management system certification**, established a business continuity management system framework, and carried out risk evaluations for the activities of each business link. It formulates countermeasures for the key issues of risk evaluations, establishes corresponding emergency plans, and carries out regular exercise activities to ensure business continuity.

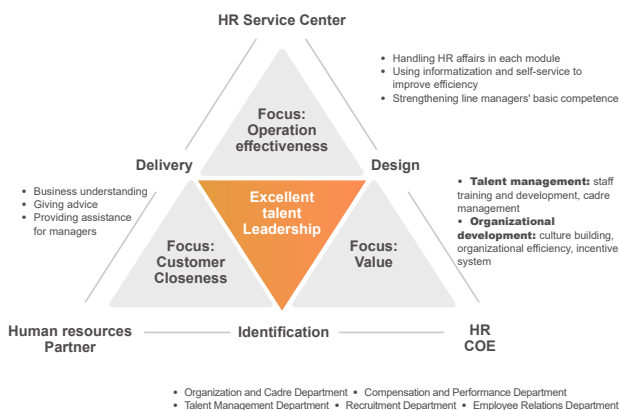


# Employee

## Organizational Structure

### A Business-Oriented Three-Pillar Model

Modeled on the Three-Pillar Model from the HRM master David Ulrich, Dahua has designed the structure of COE, HRBP and SSC, which emphasizes the concept of satisfactory business and customer demand orientation. During the daily operation, business customers are classified into different kinds of objects, and the "Three-Pillar" working operation mode is formed by combining the standardized personnel service and HR system with the characteristic requirements of business departments, so as to better support the business. More attention is paid to the import of customer demands and the speed of achieving and responding to customer demands, which is in line with the requirements for HR in the VUCA era.



## Human Rights Management

As of December 31, 2022, Dahua had a total of 23,000+ employees worldwide. In business practice, Dahua values principles of human rights as stipulated in *Universal Declaration of Human Rights*, *International Conventions on Economic, Social, and Cultural Rights*, *International Conventions on Civil and Political Rights*, and *United Nations Guiding Principles for Business and Human Rights*. The internal *Social Responsibility Management Manual* is developed according to policies and objectives listed in SA8000 International Standard and Social Accountability, and efforts are made to incorporate these regulations into daily workflow and policies, so as to improve the value of Dahua's overall business activities. The company respects employees' rights of freedom of association and collective bargaining that are in accordance with national laws and under voluntary conditions, protects employees' personal information and privacy, and clearly prohibits all possible illegal employment practices such as employment of child labor, forced labor, and restraint of freedom.

In order to maintain the harmonious and stable development and protect the rights and interests of employees, Dahua has established the Dahua Labor Union, to actively organize activities to motivate the employees, and to act as a bridge between Dahua and the employees, to listen to their opinions and protect their rights and interests. The company continues to innovate format of democratic management, provide employees with relevant information through more channels, and enable immediate interactions and feedbacks. When setting up rules and regulations related to attendance appraisal, performance appraisal, employee rewards and punishments, salary payment, social insurance, welfare treatment, labor contract, and safety production, the company will seek inputs from labor union and employee representatives by making information public on company office system or in written format. An employee forum has been launched, enabling employees to express their views, and participate in online communications and discussions. And also the company culture are promoted to employees in ways that are welcomed by them. The Company has also launched the project of "Reporting Once at Most", set up a suggestion box for employees, and opened a message board in its WeChat public account "FangHua Club" to listen to employees' suggestions.

### The overall responsibilities of Dahua's Human Resources Center include:

- Formulating and implementing various strategic plans for HR, medium and long-term HR development plans;
- Establishing and improving HR-related policies, systems and processes;
- Deepening core HR imperatives such as organizational management, job qualification management, talent pipeline construction, cadre management, recruitment management, corporate culture, performance management, employee care, and training management.
- Promoting organizational transformation and innovation to boost organizational performance.
- Other corporate HR-related special tasks.

Based on the Three-Pillar Model and overall responsibilities, Dahua's Human Resources Center is divided into seven divisions according to functions: HRBP Management Division, SSC Shared Services Division, Organization and Cadre Division, Talent Management Division, Employee Relations Division, Recruitment Division, and Compensation and Performance Division, to undertake corresponding responsibilities.

Goals for employee rights and interests protection	
Child labor	0 throughout the year
Forced or compulsory labor	0 throughout the year
Wages of workers for regular shifts	100% of the regular pay for statutory workers with full attendance $\geq$ the minimum wage set by the government

## Employment Overview

Dahua always believes that employees are one of the most valuable assets, respects and pays attention to the hard work of every employee, protects their rights and interests, clarifies the goal and vision, and strives to create a comfortable and inviting working environment for employees so that they can grow together with Dahua.

## Employee Recruitment

With its commitment to "Customer-oriented, Employee-based" principle, Dahua has been actively attracting external talents, so as to provide strategic support for its development.

In 2022, Dahua launched the Top Talents Program for doctoral candidates, the Starburst Program for high-potential fresh graduates, and the StarForce (Global Campus Recruitment) Program. Dahua established the Dahua Scholarship in many universities and organized a series of activities themed Coming from Campus and Going to Campus, including Open Day events, University-Enterprise Forums, and Alumni and Experts into Campus.



Dahua has joined hands with several universities to set up the Dahua Scholarship and carry out in-depth cooperation in talent cultivation, scientific research cooperation, joint project filing, student competitions and experts into campus, so as to nurture talents together.



# Employee

## Open Day



Dahua Open Day is open to students and teaching staff worldwide. Through in-depth visits and communications in Dahua, visitors can get hands-on experience of Dahua's first-class high-tech atmosphere, comfortable working environment and dynamic corporate culture.

## Alumni and Experts into Campus



In order to enable students to understand the prospects and trends of enterprises and industries earlier, and also to better clarify their career choices, Dahua regularly organizes alumni and experts into campus for communications with students.

Dahua also carried out large-scale and standardized cloud campus recruitment activities, adopting a full contactless process from cloud presentation, cloud written test, to cloud interview and cloud offer, ensuring the efficient and orderly progress of the overall recruitment process. During the campus recruitment for students who would graduate in 2023, we attracted students from more than 1,400 universities in more than 30 countries, with over 75% of them holding master's or doctoral degrees.

## Global Campus Recruitment



Dahua provides an excellent career development platform and career choice plans for all job seekers, and won the honors such as King's Ark Employer with the Most Love for Talents (awarded by BOSS Direct Recruitment) and the Most Popular Employer among Graduates (Zhejiang University of Technology) in 2022, realizing a virtuous cycle of talent management while reaching a win-win situation with employees.



## Compensation and Welfare

Dahua always dedicates itself to constant improvement of the comprehensive incentive system that takes full consideration of employees' material and spiritual needs, as well as short-term and long-term needs, providing them with competitive salaries and comprehensive welfare guarantees. Dahua advocates "strivers-orientation", and encourages resources to be directed to hard-working people. Some of the outstanding key employees are also entitled to stock option incentives and innovative business follow-on investment plans. In accordance with relevant national and local laws and regulations, Dahua pays employees' labor compensation in full and on time, and provides them with legal benefits such as "five social insurances and one housing fund", as well as additional work benefits including supplementary holidays, supplementary medical insurance, meals, communications, and interest-free loan for house purchase. In terms of talent incentive, we strive to share the fruits of the Company's development with employees who grow with and continue to contribute to the Company by creating a continuous material incentive system through stock option incentives, year-end bonus and venture capital platform. For employees with excellent performance, the Star of Endeavor award is also set up for them, together with written publicity and experience sharing, to continuously create a motivated and upbeat organizational atmosphere.

In addition, the Company continues to improve the quality of life of its employees through interest-free loan for house purchase, annual health check-up, meal allowance, high temperature allowance and communication allowance.

The Company has allocated special funds for team building and set up commemorative awards for employees according to their time of joining the Company. The headquarters zone has opened leisure facilities such as physical therapy rooms, coffee bars, gymnasiums, badminton hall, billiards room, and sky running tracks, and regularly holds various featured activities and club activities to enrich the spare time of employees.



Physiotherapy room



Cafeteria



Gymnasium



Sky running track

In 2022, Dahua's in-the-park kindergarten officially started enrolling children. Focusing on "friendly environments, friendly courses, friendly services, and friendly mechanisms", Dahua Kindergarten capitalizes on Dahua's technological advantages to create a template of smart classrooms, promote the digital and intelligent management mechanism of kindergartens, and constantly explore new forms of high-quality education in an embedded kindergarten. The kindergarten is useful in the "introduction, cultivation, retention, and employment" of talents and is the perfect combination of "technology, talents, and innovation".

The kindergarten is located in the new park of Dahua Headquarters, with an indoor area of 7,000 square meters and an outdoor activity area of 3,600 square meters. Currently, there are four nursery classes and three classes for children aged 3 to 4 years old. It is an embedded kindergarten jointly organized by families, the kindergarten, the society, and Dahua. The kindergarten has an open

# Employee



Lego area, immersive experience classrooms, 3D naked-eye spaces, a creative playhouse, a wood playhouse, an everyday life room, a science discovery room, and other function rooms. It has a role-playing space for children, a parent-child reading space, and other large shared spaces. The outdoor area includes a planting area, an ecological area, and a physical challenge area with diverse terrains and functions. The kindergarten "hides" 19 high technologies. For example, classroom lighting is eye-friendly and can intelligently adjust brightness according to the ambient light. The kindergarten has also introduced high-level expert projects. Its outstanding teacher workshop has been licensed. Dahua will fully support the development of the kindergarten, present a perfect combination of technology, talents, and innovation, and provide an environment for the growth of the children of Dahua employees.

## Enhancing team cohesion through exciting activities

With concern for the physical and mental health of every employee, Dahua creates a good working environment for its employees, respects them, encourages them to actively participate in all aspects of Dahua's operation, maintains good communication channels, and inspires them to recognize the mission and value of work.

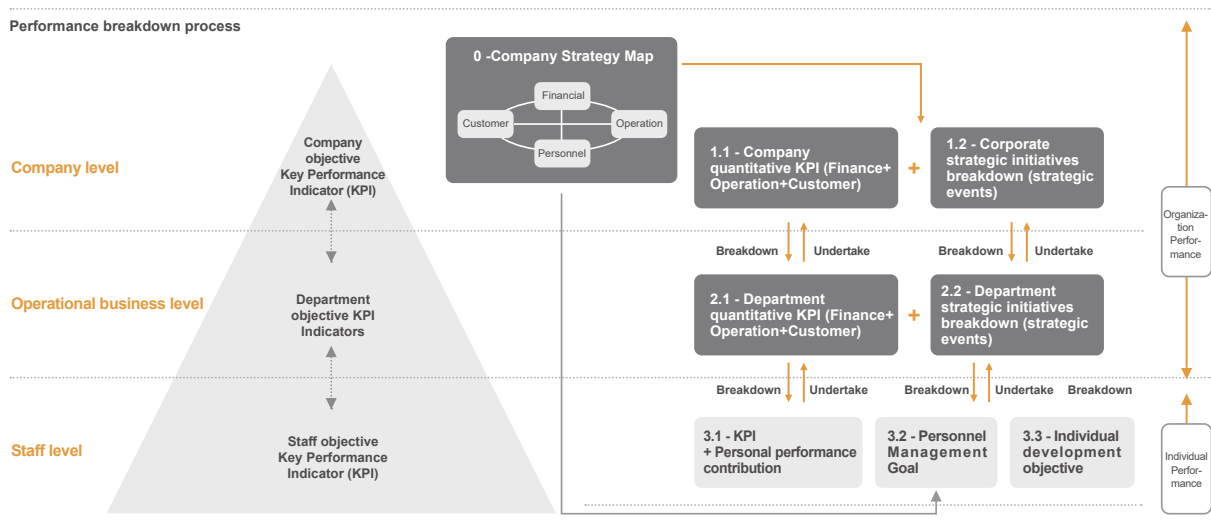
In 2022, Dahua continued to explore the themes of "The Road Ahead Five+" (happiness+, health+, achievement+, security+, mission+) to enrich the spare time of employees.

In 2022, Dahua created the "Hua Xiao Zhi" cultural IP and launched related products online and offline such as emoticons, stickers, and backpacks, which were popular among employees.



## Performance Management

The Company has established a reasonable and comprehensive performance management system, which closely integrates strategic planning with performance management and forms a closed virtuous cycle system through several processes, such as assessment plan formulation, process counseling, performance evaluation, assessment result application, and performance improvement cycle. Through scientific management methods, the individual performance of employees and the overall performance of the Company are organically combined to closely follow Dahua's strategic development direction.



The Company carries out performance appraisal based on the principles of fairness, openness, impartiality, scientification, clarity and objectivity, and evaluates the actual achievement of the performance target of the appraised based on key results and performance by a combination of absolute and relative evaluation. The absolute evaluation is the "ratio to targets", scored by direct superiors and project managers, while the relative evaluation is the "ratio to others", in which employees of the same position and rank are compared and ranked together on the basis of the absolute evaluation, to generate a certain proportion of normal distribution and evaluate the performance level, so as to inspire employees to catch up with each other and strive to become best performers.

# Employee

## Employee Growth

Dahua regards talent as valuable assets. Talent strategy is an integral part of the Company's strategy, and also a key cornerstone and guarantee for the long-term development of the Company. "Breaking the boundary of ability and cultivating more talent" is the main keynote of staff training and development in Dahua. The development of Dahua is inseparable from the efforts and contributions of all Dahua employees. While growing, Dahua strives to improve the platform and mechanism for talent development, so that employees can develop faster and create more values for Dahua and also for themselves, achieving a state where stars gather and talents emerge.

### Career Development

The company has established a sophisticated mechanism for talent training and development, a qualification management system, guiding employees on career planning.

In terms of the career development of employees, Dahua provides dual channels of management and expertise, and constantly develops a qualification system with "ability" as the core, a job appointment and removal procedure with "responsibility" as the core, and a job matching procedure with "contribution" as the core. Dahua also provides timely incentives through the salary system, so as to fully enable employees to develop their abilities, undertake responsibilities and realize values, and obtain continuous improvement.

**• Give full play to employees' potential and initiatives**

In order to establish itself as a learning-based organization, the Company has built an employee qualification mechanism to prompt employees to continuously learn and take the initiative to exert their strengths. With explicit job responsibilities and full authorization, employees are guided to work creatively and independently to give full play to their potential.

**• Establish a multi-channel talent training system to provide employees with opportunities for learning and development**

According to employee capabilities, occupational interests, and the characteristics of various positions, Dahua provides two channels for their career development: the channel of technology, and the channel of management, so as to get them fully motivated. Based on the dual channels of development, Dahua sets up posting standards and learning resources to enhance the competence of employees. Meanwhile, Dahua adopts the mode of separated evaluation and employment, and provides sustainable development possibilities and opportunities for employees on the basis of their abilities shown through job performance, in the form of organizational nomination, competitive recruitment, internal recruitment, and various resource pools.

**• Differentiated employee development program**

During the reporting period, through multiple talent development solutions, Dahua launched a number of differentiated development programs for different employees to help them with career development and fully support their development needs. For example, the "Cadre Reserve Plan", "General Plan", and "Spark Project", aiming at the development and training of excellent managers; the "Leader Plan", supporting the breakthrough development of experts in various fields; the "Starburst Program", aiming at high-potential employees; the "Dandelion Plan", based on the will of employees, aiming at the mobility and rotation practice of technical staff; the HTTP Program, targeted at the training of fresh graduates; the "Morning Star Mentor Training" and "Inspiration Lecturer Training" for the development of internal trainers; internal talent markets.

**• Employee career development guidance**

The Company conducts career development planning and design for employees, jointly formulates career development goals and action plans for employees, and provides corresponding support. For example, individual development plans, on-the-job training programs, performance-based development, and open competitive employment.

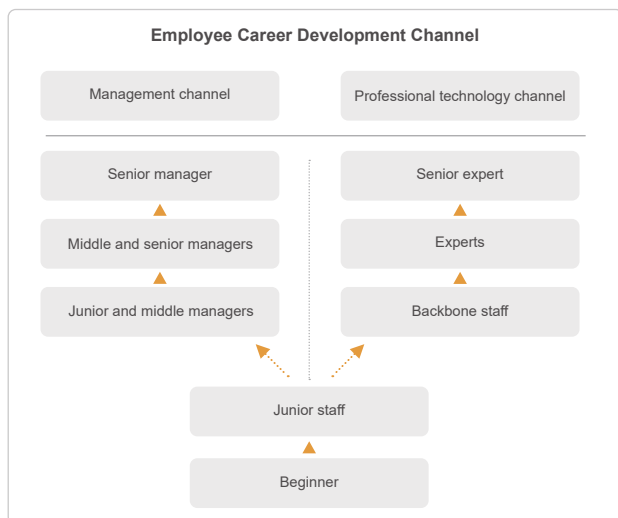
**• Building a professional atmosphere**

Through the establishment and operation of Professional Committee/Technical Committee, Dahua plans for the development of its professional/technical system, precipitates its knowledge and experience, and provides employees with clear professional competence standards and learning resources, so as to continuously and comprehensively improve the professional/technical competence of employees, and lay a solid foundation for them to undertake "responsibility" and continue to "contribute" on their posts.

Dahua also attaches great importance to the cultivation and incentive of the expert team, defining experts as an important guarantee for the sustainable development of the business. Leading experts in each professional field are encouraged to break the boundaries, focus on core technology breakthroughs, and guide more excellent professionals through subject research, practice, application, and knowledge and experience accumulation. In addition, external training, expert allowance, subject bonus, expert conference, and exclusive car parking incentive plan are provided to them for their development and incentives.

## Training

Dahua has established a complete training system with the concept of "business success as the orientation, organizational development as the focus, and personal growth as the foundation". It has carried out various management training, professional training, new employee training, general training, internal trainer and mentor training, etc., covering cultural values, professionalism and skills, management capability, business capability, skills transfer capability, etc. Its goal is to enhance the capabilities of employees from multiple aspects.



# Employee

During the reporting period, Dahua's managers and business backbones at all levels actively participated in the development and teaching of training programs as well as on-the-job mentoring, thus "cultivating better employees with the best employees". There were 2,737 lecturers in the year with a total of 15,500 teaching hours. A total of 3114 mentors also joined in training.

The Company employs a combination of "learning, training, practice and examination" to develop employees' ability and experience in a multi-dimensional manner. Dahua builds learning resources based on the qualification system and business development. During the reporting period, employee training attendance reached 571,000 with 600,000 class hours combined. Trained employees accounted for 96% of the total number of employees. The total training cost was RMB 4.947 million.

### Special training for new managers



### Special Training for Fresh Graduates

**Culture Building**

- Advance learning: Boost work efficiency through acquiring work fundamentals.
- Corporate culture: Strengthen Dahua's development tradition and legacy, to build up employees' sense of identification with corporate culture.
- Cases on professionalization: Learn about workplace codes of conduct to facilitate graduates' transformation from students to professionals.
- Production line visit: Visit frontend and storage factories for firsthand knowledge of the manufacturing process.

**Quality Development**

Organize opening course reactions, oral photos, orientation, investigation, speech contests, and debate competitions as a way to showcase students' styles.

**Product knowledge hands-on training**

Learn about Dahua's ten maintenance products, five industry business and solutions in-depth in courses, along with hands-on training covering three major scenarios and maintenance products, comprehensively comprehending Dahua's comprehensive learning system for products and technologies.

## Employee Care

Dahua attaches great importance to the physical and mental health of employees and regularly organizes activities such as free weekend medical consultations and door-to-door medical consultations. In 2022, Dahua introduced EAP counseling and established a mental health workshop to offer free mental health counseling to employees. Dahua builds a mental health team and formulates employee mental health crisis intervention manuals to further protect the mental health of employees.



For employees who have been working in Dahua for one, three, five, ten, fifteen, and twenty years, Dahua rewards them with commemorative prizes to enhance their sense of belonging and enhance the atmosphere of mutual development and prosperity between employees and Dahua.

### Anniversary employee care



Dahua cares about its employees. Dahua labor union provides help for employees in need and addresses their difficulties. The labor union visits employees in need, express appreciation to the families of employees working abroad during the Spring Festival and to employees on duty during the Spring Festival, and writes letters to the families of outstanding employees.

### Visiting employees in need



## Occupational Health Management

To ensure that employees work happily and healthily, Dahua put in efforts to ensure occupational health from multiple dimensions:

- ① According to relevant laws and regulations as well as system standards, Dahua regularly commissions third-party institutions to check all occupational disease hazards, equips relevant employees with labor protection supplies and organizes regular occupational health checks.

# Employee

③ Through publicity and education, Dahua has actively taken a number of occupational health prevention and protection measures, carried out corresponding operation guidance for all employees exposed to and using chemicals, posted occupational hazard and safety notification cards and safety instruction signs at production sites to clarify the protection requirements and emergency handling requirements.

No.	Indicator	Actual value
1	The coverage percentage of safety education for on-the-job personnel	100%
2	The percentage of special operators holding certificates	100%
3	The percentage of occupational hazard factor detection	100%

③ Dahua continues to optimize the production processes and reduce or avoid employees' direct exposure to occupational disease hazards through intelligent transformation.

④ Dahua pays close attention to social developments and adopts corresponding control measures according to national policies to provide employees with a safe and healthy working environment.

During the reporting period, no cases of occupational accidents were reported in Dahua.



## Safety Management Monitoring System

Safety management system is an important branch of safety governance. Based on the "five elements" of people, machine, material, environment, and management, a safety management system for park safety is established in compliance with requirements such as safety standardization and EHS, offering real-time, highly integrated, and classified management and enabling timely warning of dangers to quickly locate the exception and reduce the scope and level of dangers.

**Intelligent elevator control system:**

The system can realize online subject identification management, active identification of trailing and blacklist alarm, background log query and anomaly monitoring.

**Smart apartment management system**

Combined with the characteristics of the park, the system can handle check-in and check-out online in batches, and delicately manage dormitories and beds. Through the linkage of all-in-one human-ID card machine and entrance and exit gate machine, the safety of employees is ensured.

**Integrated security and fire protection management system:**

Nearly 8,000 points in the park, including detection points, water tanks and liquid levels, are effectively monitored. Abnormal power consumption is effectively monitored to eliminate the potential safety hazards of power consumption. Through the cooperation with ICC, visual monitoring on the key fire control areas is achieved.

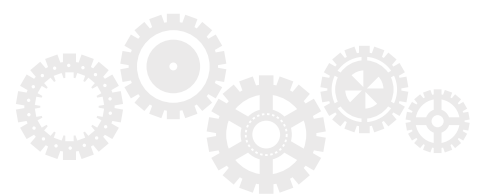
**Smart park integrated management platform:**

Elevator control, apartment management, integrated security and fire protection management, energy management, access control, gate, vehicle management, perimeter management and other systems are integrated to protect the safety of personnel and property in the park.

## Security Practices

In order to effectively maintain normal operation order of the park, and ensure property interests, personnel safety and R&D safety at the park, Dahua Technology has established *Security rules and regulations* based on *Regulations on the Supervision and Inspection of the Internal Security and Safeguard for Enterprises and Public Institutions by Public Security Organizations*, *Regulation on Internal Security and Safeguard for Enterprises and Public Institutions*, and others. The main contents include:

1. Regulations: Security guard responsibility, duty system, handover system, and rewards and punishments system;
2. Security guard manual;
3. Emergency response of security guard;
4. Service courtesies and more.



# Internal management

## Innovation and Research

Technology propels innovation and innovation drives development. In the process of rapid enterprise development, Dahua insists on scientific and technological innovation as the strategic support for high-quality enterprise development, and about 10% of Dahua's annual sales revenue is invested in research and development. In 2022, Dahua continued to allocate research and development resources. It has developed a global R&D system covering Hangzhou (the headquarters), Xi'an, Chengdu, Poland, Mexico, etc. Dahua has built six provincial development centers across the country. Dahua continues to improve its technological innovation capabilities, competitive advantages, and IoT technology capabilities. Following the philosophy of "creating business value based on customer demands", Dahua continues to energize itself with digital intelligence and focus on digital intelligence transformation.

### R&D Innovation System

Dahua follows the strategy of "Dahua Think#: A Future of IoT Cloud and Digital Intelligence" and bases its development on an intelligent IoT technology system with AIoT and IoT digital intelligence platforms as the core. Dahua continues to focus on areas that are closer to user needs. It has built five research institutes of advanced technology, big data, central government, cyber security, and smart city, two product R&D centers of software and hardware, and a comprehensive R&D system of solutions for cities and enterprises. Markets and technologies jointly drive forward Dahua's high-quality development.



### Innovative Talent Strategy

Dahua never stops innovation. Dahua attaches great importance to its talent strategy, insists on building an innovation system with a strong engineering culture, and encourages employees to participate in and contribute to innovations. Dahua continues to cultivate high-quality innovative talents through teaching and practicing activities of innovation methods (TRIZ, for example). In 2022, Dahua won the first prize in the National China Innovation Methods Competition, and the first prize in the Zhejiang Region of China Innovation Methods Competition for six consecutive years. Dahua has launched the Leader Plan to break through core technologies and enhance its industry competitiveness and leading position.

Dahua believes that craftsmanship is the future. It adheres to innovation-driven, quality-oriented development, and advocates a culture of science and technology craftsmanship with dedication and pursuit of excellence. In 2022, Dahua employees were awarded the honorary titles of "Zhejiang Craftsman" and "Hangzhou Craftsman". Dahua holds internal competitions such as the software

OJ league and technology contests by field to create a favorable atmosphere of daring to break through and innovate, and constantly stimulates the innovation vitality of talents, so as to always keep competent talents in place to guarantee Dahua's high-quality development.



### Engineering Experiment Center

Dahua strives for innovation-based research and development. Dahua Engineering Experiment Center provides strong support for in-depth technology research and development and mass innovation. The center has more than 30 laboratories, including a fusion simulation laboratory, acoustic laboratory, electromagnetic compatibility laboratory, wireless laboratory, device laboratory, and reliability laboratory. This enables Dahua to be capable of conducting nearly 200 experiments and carrying out basic research on raw materials, devices, single boards, and complete machines, laying the foundation for a system of multiple capabilities. In 2022, Dahua's laboratories focused on enhancing their capabilities in millimeter-wave radar and 5G application technologies. For example, measures such as the addition of a millimeter-wave radar test system and the upgrade of the OTA system have further strengthened the basic technology research of perception and connectivity in the IoT field. This innovation chain planning is closely based on the industrial chain and supply chain.

As an important part of Dahua's research and development, the center continues to deepen basic technology research, break through industry challenges, and build technical competitiveness of products. The CNAS-certified center has won important honors and qualifications such as National Industrial Design Center, Zhejiang Province Key Laboratory. Adhering to the strategy of innovation-driven industrialization development, the center continues to expand industrial development channels, promotes the plans to strengthen Dahua through technological innovation, enhances technological support capabilities, and provides a solid guarantee for the realization of high-quality development.



### Standard Development and Intellectual Property Rights

Dahua implements the national standardization strategy and continuously deepens standardization cooperation. It integrates new-generation information technologies such as the Internet of Things and artificial intelligence to expand the internationalization of standards and promote the coordinated development of domestic and international standardization. During the reporting period, Dahua led and participated in the preparation of 22 standards.

Dahua attaches great importance to the protection of intellectual property rights and constantly improves the intellectual property management mechanism. It provides a strong guarantee for R&D innovation through strategic patent planning of core technologies and in-depth exploration of high-quality patents.

# Internal management

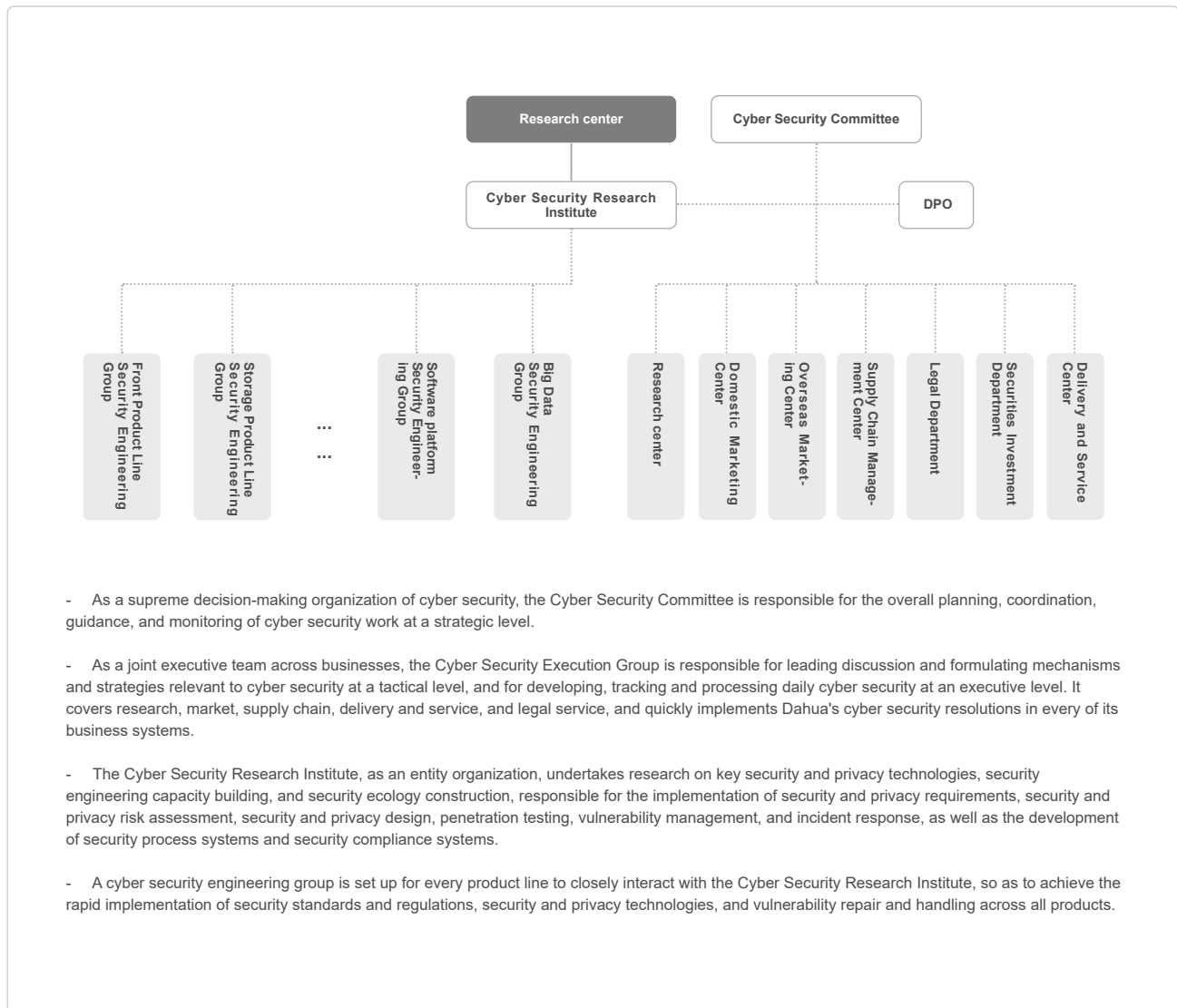
## Cyber Security

The integrated development of such technologies as cloud computing, big data, IoT, AI and 5G, pushes human society into the era of AIoT. While emerging technologies are driving human progress, the open and heterogeneous network architecture also poses new threats and challenges. In order to cope with cyber security threats and challenges, Dahua has established the Cyber Security Research Institute, which focuses on the continuous development of core security technologies, emerging privacy technologies, security engineering capabilities, and security ecological cooperation, and is committed to providing customers with more secure products and solutions, and rapid security emergency services.



## Security Organization and Structure

Dahua has established a systematic professional security team to secure cyber security in all execution units through the hierarchical organization structure, covering R&D, market, supply chain, and delivery and service.

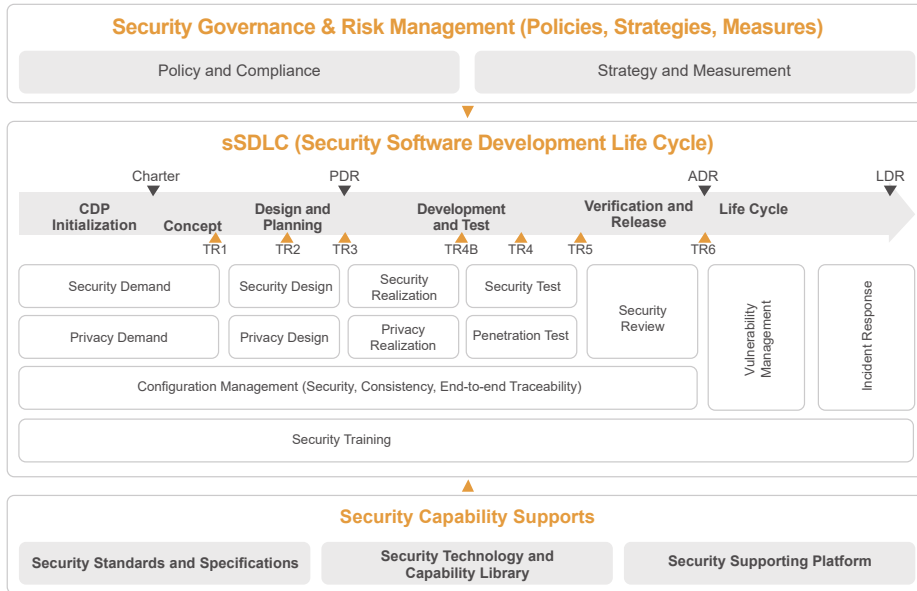


- As a supreme decision-making organization of cyber security, the Cyber Security Committee is responsible for the overall planning, coordination, guidance, and monitoring of cyber security work at a strategic level.
- As a joint executive team across businesses, the Cyber Security Execution Group is responsible for leading discussion and formulating mechanisms and strategies relevant to cyber security at a tactical level, and for developing, tracking and processing daily cyber security at an executive level. It covers research, market, supply chain, delivery and service, and legal service, and quickly implements Dahua's cyber security resolutions in every of its business systems.
- The Cyber Security Research Institute, as an entity organization, undertakes research on key security and privacy technologies, security engineering capacity building, and security ecology construction, responsible for the implementation of security and privacy requirements, security and privacy risk assessment, security and privacy design, penetration testing, vulnerability management, and incident response, as well as the development of security process systems and security compliance systems.
- A cyber security engineering group is set up for every product line to closely interact with the Cyber Security Research Institute, so as to achieve the rapid implementation of security standards and regulations, security and privacy technologies, and vulnerability repair and handling across all products.

# Internal management

## Security Engineering

With introduction of the best security practices in the industry, Dahua has established a full set of sSDLC security software development processes, and fully implemented them in the R&D center. Through efforts of the professional security team, the capabilities on the whole process of security management covering the security and privacy demand, assessment, design, coding and testing of products and solutions are realized and the security strategies are implemented, to ensure that all products are developed in compliance with high-standard security requirements and pass rigorous offensive and defensive testing and verification.

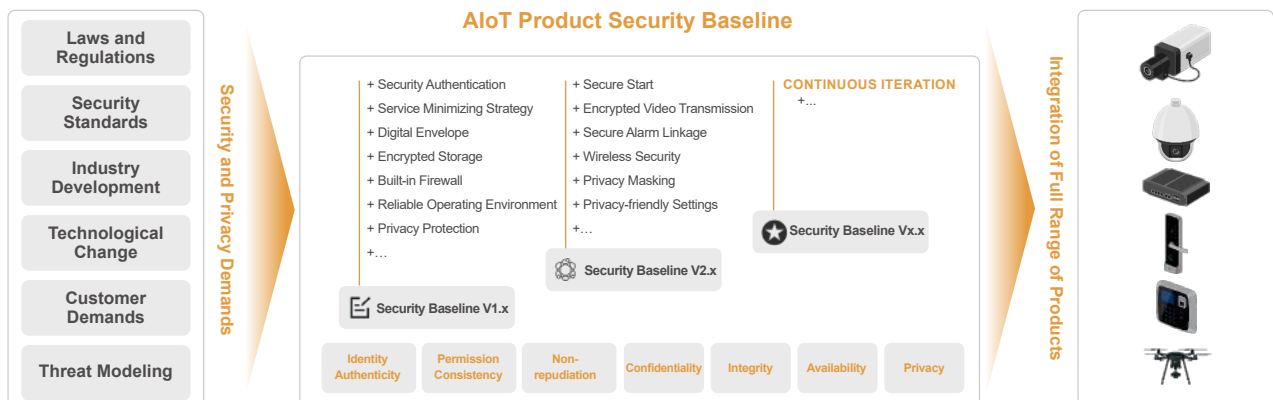


## Security Baseline

Since the launch of the "Security Baseline" plan in 2016, Dahua has been adhering to the core principles of "Security by Design" and "Security by Default", digging deep into product security technologies, and dedicating to providing comprehensive security guarantee for users. Based on the Security Baseline and practicing the design principle centering on security and privacy, Dahua has designed an architecture that takes identity authenticity, authorization consistency, non-repudiation, confidentiality, integrity, availability, and privacy as security elements, forming a systematic AIoT product security framework covering physical security, system security, application security, data security, cyber security, and privacy protection.

Dahua has carried out a series of activities such as "Compliance with Laws and Regulations", "Standards and Specifications Study", "Tracking Industry Dynamics", "Threat Modeling Analysis", "Key Technology Pre-research", and "Security Demand Survey" to continuously update the Security Baseline standards, upgrade the AIoT product security framework, and ensure adequate and cutting-edge security protection. During the reporting period, the Security Baseline was iterated to V2.3.

As one of the important corporate standards of Dahua, the Security Baseline has been an integral part of Dahua's life-cycle management process of security software development, and deeply integrated into the product quality assurance system to make sure default security technology guarantee for the full series of products.





## Internal management

### Security Culture

During the reporting period, Dahua actively responded to the national call and held the 2nd Dahua Cyber Security Promotion Month in September 2022 with the theme of "Cyber Security for the People, Cyber Security by the People, and Dahua Cyber Security by You and Me". This Cyber Security Promotion Month adopted both online and offline posters and on-site interactions to convey global cyber security laws and regulations, standards, and policies to all employees of Dahua, and to enhance their awareness and vision of cyber security through Q&A, suggestion collection, lectures, and other activities.



### Security Talent Cultivation

Dahua attaches great importance to the cultivation of cyber security talents and continues to step up investment in cyber security development. In 2022, Dahua's anti-infiltration team was approved as a "Xie Zhihe Network and Information Security Administrator Specialist Studio" in Binjiang District, Hangzhou. In August of the same year, the person in charge of the studio was selected as "New Era Zhejiang Craftsman", and in December, the core members of the studio were selected as "Zhejiang Young Craftsmen".



### Security Incident Response

Dahua Product Security Incident Response Team (PSIRT) is responsible for receiving, processing, and publicly disclosing security vulnerabilities related to Dahua products and solutions. It is Dahua's only channel for the disclosure of vulnerability information.

Dahua PSIRT handles security vulnerabilities according to ISO/IEC 30111:2019 and other standards, strictly controlling the scope of the vulnerability information, restricting it to be passed only between relevant personnel who handle vulnerabilities, and requiring the vulnerability reporter to keep the vulnerability information confidential until the vulnerability is publicly disclosed.

#### 1. Reception

It proactively monitors and receives vulnerabilities and security issues, initiates the vulnerability handling process, and identifies the vulnerability reporters.

#### 2. Verification

It coordinates with the product line to verify whether it is a vulnerability or a security problem and evaluates the risk level.

#### 3. Solution

It conducts vulnerability analysis and fixes design defects. After the repair of the pilot product is verified, it applies the solution to the vulnerabilities.

#### 4. Disclosure

When a vulnerability fix or patch is available, it discloses the vulnerability information as required by the vulnerability disclosure mechanism.

#### 5. Summary

It conducts vulnerability reviews, includes them in security requirements, draws lessons from past events, and continuously improves the vulnerability management process.

Dahua PSIRT discloses vulnerabilities according to ISO/IEC 29147:2018 and other standards. Disclosure methods include the following:

- Security notices: Used to publish security vulnerability information related to Dahua products and solutions, including but not limited to vulnerability descriptions, repair patches, etc.
- Security notice: Used to respond to security topics related to Dahua products and solutions, including but not limited to vulnerabilities, security incidents, etc.

Dahua PSIRT actively participates in industry and public activities and has joined several authoritative vulnerability management and technical organizations, including the China National Vulnerability Database (CNVD), China National Vulnerability Database of Information Security (CNNVD), and China Industrial Control System Vulnerability Database (CICSVD), etc. It plays an active role in organizations to help establish a collaborative and sharing mechanism for cyber security threat information. During the reporting period, Dahua was awarded the title of "Advanced Enterprise in Vulnerability Management Practice in 2022" by the MIIT Cyber Security Threat Information Sharing Platform.

Dahua PSIRT provides global users with security notice and 7-24 security incident response services to better protect the security rights of users. Dahua

encourages end users, partners, suppliers, government agencies, industry organizations, and independent researchers to proactively communicate with Dahua if they discover potential risks or vulnerabilities.



# Internal management

## Quality Control

Dahua will carry forward the "customer-oriented and striver-based" core value, fulfill the mission of "enabling a safer society and smarter living", and keep a foothold in the market with outstanding quality and services.

### End-to-end Whole Process Quality Control System

Dahua has established a whole process quality management system, covering five core processes (LTC, IPD, ISC, ISD, and ITR) and other supporting processes. Driven by customer demands, Dahua integrates quality requirements and standards into business process management and promotes a quality improvement culture among all employees and across the entire value chain. It continuously optimizes the quality of research and development, manufacturing, service, etc., forming eight core capabilities of quality management. And it constantly improves its quality management to boost customer satisfaction.



### Quality Management Organizational Structure

Dahua Quality Management Center coordinates quality management according to the requirements of ISO 9001 and IATF 16949 and carries out quality management on R&D, supply chain, and delivery services.



### Digital Intelligence-based Quality Management Mode

Based on the complete end-to-end process system and the whole process business digitalization, Dahua adopts the intelligent "operation command platform" for operation analysis and decision-making, and has established a digital intelligence-based quality management mode driven by demand and innovation as well as the pursuit of "four perfections".

- **Quality philosophy:** Dahua pursues technology perfection, product perfection, service perfection, and process perfection, insisting on doing things right in one attempt.
- **Demand-driven:** Based on customer demands, Dahua establishes a process system that focuses on the realization of customer demands, covering the whole process from market demand research to providing products and services that meet customer demands.
- **Innovation-driven:** Dahua promotes core technology innovation and management innovation to create values for customers.
- **Digital intelligence-based quality management:** Dahua promotes the digitalization of whole business processes. It uses the quality management platform to connect the quality data of various businesses, create quality reports, and carry out quality alerts, analyses, and decision-making. It realizes the digital intelligence-based quality management of "process online, results online, personnel online, management online", improving quality and efficiency and continuously creating values for customers.

# Internal Management

## Quality Culture

Taking the excellent performance management model as the starting point, Dahua has formulated the quality policy of "listening to customers, building quality into products, providing satisfactory services, creating values for customers", creating an atmosphere of "all-staff participation and continuous improvement".



Dahua uses multi-channel publicity and various quality activities to promote a quality culture and enhance the quality awareness of all employees.

- Dahua has established quality culture promotion platforms. Quality knowledge and activity information are shared on the "Dahua Quality" WeChat official account and the "Quality Site" website.
- Dahua carries out a variety of quality activities, such as quality essay contests, quality knowledge contests, quality keynote speeches, quality skills competitions, etc.
- Dahua carries out monthly/quarterly quality activities every year. In 2022, the quarterly quality improvement activities had one focus (customer) and three major themes. The three major themes were "Doing It Right in One attempt", "Better Quality and Efficiency", "Risk Prediction, Problem Prevention, and Customer Protection".
- Dahua develops Green Belt, Yellow Belt, and QC courses. In 2022, Dahua trained 26 green belt-titled employees, 41 yellow belt-titled employees, and 52 QC experts.



Operation Efficiency Competition



Manager Product Experience



R&D Improvement Project



Essays on Quality



Knowledge Contest



Speech Contest



Delivery Competition



IQC Measurement Contest



Case Sharing on Customer Complaints



Forum on Advanced Practices

No.	Certificate name	Awarded on	Awarded by
1	Asia Quality Improvement and Innovation Case First Prize	2022	Asia Quality Function Deployment and Innovation Committee
2	Asia Quality Improvement and Innovation Case Second Prize (3)	2022	Asia Quality Function Deployment and Innovation Committee
3	National Quality Benchmark	2022	China Association for Quality
4	China User Experience Competition Second Prize	November, 2022	China Quality Management Association for Electronics Industry
5	National Quality Technology Award Second Prize (2)	November, 2022	China Association for Quality

No.	Certificate name	Awarded on	Awarded by
6	National Quality Technology Award Excellence Award	November, 2022	China Association for Quality
7	National Manufacturing Key Process Capability Improvement Excellent Cases (2)	December, 2022	The Fifth Electronics Research Institute of the Ministry of Industry and Information Technology
8	Zhejiang Excellent QC Achievement Release Award	September, 2022	Zhejiang Quality Association
9	Zhejiang Excellent QC Achievement First Prize	September, 2022	Zhejiang Quality Association
10	Zhejiang Excellent QC Achievement Second Prize	September, 2022	Zhejiang Quality Association

# Customer

## Service Support

With the customer-oriented service concept, Dahua has been gradually building four service systems covering the whole market and the full business, including the integrated delivery system, technical support system, operation and maintenance management system, and training and certification system; meanwhile, by integrating its corporate resources and pooling the power of the ecology, Dahua provides full life-cycle services of products and solutions to the market. Our vision is to build a world-class efficient and professional delivery platform and become a superb service value creator.



## Service Network Coverage

Dahua has formed a three-tier service network to provide technical services to customers worldwide, with 51 branches worldwide and a service network covering 180 countries. It has 9 spare parts distribution centers and 173 spare parts stations (46 spare parts stations in China), with 4,000+ project managers and technical service personnel, and over 1,000 service partners, offering efficient service support for customers and markets.

## Service Capacity Building

### Internal technical capacity building:

Continuously build and improve the technical service company platform, and accomplish project service delivery support through 400 hotline service, online service and on-site support for customers with rapid response and closed-loop solutions. For internal staff capacity building, we set up different skill levels according to business scenarios and products, and define corresponding knowledge, ability map, empowerment and certification for each level to continuously enhance their technical capabilities.

### External cooperation ecosystem empowerment:

In addition to a scenario-based field training facility at the headquarters, Dahua has established field training centers in 32 Chinese provinces and 5 overseas regions to create a "doorstep" field training setting for customers and partners, facilitating training and certification. By combining theories with practice, Dahua provides the best talent training schemes supported by its training and certification system, and continuously improves its own service capacity as well as that of its partners and customers.



### Digital platform support:

We have built a multi-channel, multi-touch, efficient and convenient digital platform for service delivery around project delivery management, technical support, problem solving, empowerment training, and service ecology construction, realizing the upgrade from service informatization to digitalization. During the reporting period, we completed the construction of Dahua Delivery APP and the upgrade of the technical support website, providing customers with a more convenient service portal and swift service support, and realizing the real-time sharing of technical service resources between Dahua and its partners through the online digital platform.

# Customer

## Service Quality Improvement

**Efficient service process:** We have built the Integrated Service Delivery (ISD) full-process management process and the Issue-to-Resolution (ITR) process. By upgrading and refining these processes during the reporting period, we achieved normalized and standardized management of customers' delivery requirements, high-quality and rapid delivery, and closed-loop management of end-to-end quick response, processing and feedback of customers' issues to promote their efficient resolution.

**Professional service team:** Through sound technical training, assessment and on-boarding management mechanisms, we have set up professional technical service teams for different industries and products, with empowerment and competence level certification for service technical capabilities, to ensure that technicians are qualified to provide customers with standardized professional technical services. In addition, we have established an end-to-end problem solving process, and set SLA (response time) and service specifications, operation rules and customer feedback mechanisms to boost problem processing timelines and customer satisfaction.

**Reliable service guarantee:** We provide 7X24H service hotline support and multi-format and multi-lingual online support. Our hardware maintenance service includes maintenance appointment and door-to-door maintenance. We ensure the fastest and most comprehensive response to customers' service needs.

## Customer Satisfaction

With great emphasis on customers' satisfactory experience, Dahua has crafted an all-round and all-process end-to-end process experience, and adopted different assessment components and methods for different customers, with regular and irregular customer satisfaction surveys conducted every year. We have formulated the *Customer Satisfaction Survey Methods*, and formed a cross-departmental satisfaction survey team to organize questionnaire surveys every year, distributed at the specified time. For the collected satisfaction questionnaires, we conduct the scores and analyze them specifically for various problems, to form customer satisfaction survey reports, which summarize the problems fed back by customers and urge relevant departments to draw up corresponding improvement measures and follow up the improvement results, so as to continuously improve customer satisfaction.

Dahua has established major channels to engage with customers, including the website, exhibitions, door-to-door visits, 400 call center, e-commerce, hotline, and fax, to facilitate customers' information inquiries, transactions, and complaints.

After learning about customers' requirements for consultation and complaints, we provide both conventional and special channels for customer complaints and consultation. Conventional channels are mainly to facilitate the inquiries, consultations and complaints of general customers; special channels are to meet the requirements of important customers for communication and complaints, which are directly negotiated and solved by the functional departments and relevant personnel of both sides, with fewer steps, higher response and processing speed, so as to improve the satisfaction of important customers. We obtain customer complaint information timely through our service hotline, email, fax and website comments, and standardize the customer complaint handling process through the "Customer Complaint Management Platform" to ensure effective and rapid resolution of complaints.

According to the customer complaint records and processing results, we have established and improved the "Customer Complaint Processing Archives", so that their contents can be traced. Within three months after the processing of customer complaints, the 400 call center will make customer-specific return visits and fill out the *Customer Revisit Form* to better understand their feelings. The Company conducts regular general analysis and evaluation of the handling of customer complaints, and analyzes the causes of common problems with proposed improvement methods in order to continuously improve the quality of products and services.

The Company keeps building its customer interaction platforms, including the channel marketing platform, WeChat, and mobile phone APP, as well as its service feedback mechanism. The Company's 400 call center provides 7X24 service, and divides received customer problems into consultation problems, failure problems, and complaint problems. It provides response within 30 minutes, and the

responsible department gives handling suggestions within 2 hours. Our customer complaint rate has been decreasing year by year for the past three years, indicating our good relationship with our customers.

Meanwhile, the WeChat public accounts of Dahua, Dahua Customer Service and Dahua SME Business have set up service modules to facilitate customers' fast and convenient consultation and problem feedback.



## Growth of Distributors

The Company takes "joint construction and sharing" as the concept for the cooperation with distributors and always takes mutual growth with distributors as a strategic focus.

In China, we have established a comprehensive empowerment mechanism for our distributor partners in the areas of vocational and technical certification, contract management and common development. In terms of vocational and technical certification, with video surveillance technologies as the primary focus, and relying on Dahua's training and certification system, we completed a total of 5,600+ training sessions in 2022, with about 2,500+ engineers certified nationwide, covering 1,000+ primary distributors and 50,000+ secondary distributors, thus effectively boosting customer satisfaction and market sales. Meanwhile, 200+ online live-streaming and online courses were held in 2022 relying on the Dahua Cloud-e-commerce Platform, with a total of 460+ sessions and 210,000+ participants, covering such topics as products, SMB solutions, technical empowerment, technical certification, delivery, and after-sales.

In terms of contract operation and common development, the Company regularly organized its distributor partners to conduct five major empowerment systems, namely business strategy benchmarking, organization benchmarking, purchase, sales and inventory benchmarking and resource input benchmarking, and product structure benchmarking. Meanwhile, we conducted training and seminars on finance, legal affairs, contract business and sales management to continuously improve the overall management and risk control ability of distributors, and build a collaborative ecosystem of distributors to achieve sustainable, high-quality and steady development.

For overseas markets, a total of 80,000+ training sessions were held in 1,900+ medium and large cities around the world in 2022 with the purpose of building distributors' product and solution capacities, with a year-on-year increase of 90%+ in the training sessions, covering primary distributors, secondary distributors, and small and medium-sized engineering contractors, with a 150%+ year-on-year increase in the number of customers covered at each level. Besides, via channels including the distributor conferences, promotion meetings, workshops, exhibition vehicles, and online live steaming, the course covered topics of products, SMB solutions, technical empowerment, technical certification, delivery, and after-sales. The total number of participants in training exceeded 150,000 in 2022, an increase of 100%+ year-on-year. In terms of joint operation and common development, the Company actively carried out five empowering systems of strategic benchmarking, organization benchmarking, purchase, sales and inventory benchmarking, resource investment benchmarking and product structure benchmarking, so as to jointly build the cooperation ecology with suppliers and achieve a sustainable, high-quality and steady development.

# Supplier

## Supplier Management

Following the principle of "win-win cooperation, transparency and compliance", Dahua has established and continuously maintained good partnerships with suppliers, banks and other stakeholders by adopting a contract-based business model. It insists on standardizing and continuously optimizing the supplier incorporation process system, with the establishment of a sound contract system to ensure the stable, compliant and efficient operation of the supply system. In the selection of suppliers, we enforce the incorporation threshold requirements and strictly require suppliers to sign key agreements such as *Material Procurement Framework Agreement*, *Supplier Social Responsibility Agreement*, *Supplier Compliance Commitment Letter*, *Supplier Commitment Letter on Environmental Protection and Integrity Commitment Letter*, with ongoing review of relevant agreements to ensure the sound and sustainable development of both parties.

## Intensive Exploration and Responsible Procurement

As an international listed company, Dahua has been adhering to the concept of "Fostering, Accompanying, Growing" in the management and cultivation of suppliers, realizing online visual management of the whole business across the entire supplier management. With great efforts from supplier identification and selection, collaboration, management, and support, we have formulated business standards and rules, to build a supply chain ecosystem through collaboration between upstream and downstream supply chain systems.

### Supplier Development

- Customize supplier development strategies by category, and establish a hierarchical management mechanism based on category, defining the incorporation threshold standard and the red line one vote
- Form a team of procurement, quality control and R&D to conduct on-site inspection and evaluation for new suppliers, covering ROHS/REACH compliance, hazardous substances control, EHS and social responsibility, among others
- Clarify environmental protection qualifications, social responsibility, integrity, and confidentiality requirements, and sign environmental protection, integrity, and confidentiality commitments and social responsibility agreements

### Supplier Management

- Conduct monthly and quarterly performance evaluations of suppliers. Develop red and black lists on performance, as well as reward and punishment mechanisms to motivate suppliers
- Develop an annual audit plan and conduct routine audits accordingly, including but not limited to ROHS/REACH compliance, hazardous substances control, EHS and social responsibility, to ensure that risks of cooperative suppliers are controllable
- Implement a strict supplier phase-out mechanism, that replaces or phases out suppliers who violate the red line or remain incompetent after guidance in time, to optimize the supply resource pool

### Supplier Collaboration

- Suppliers participate in the whole process from early development and verification to the certification of new components
- The supplier collaboration platform supports supplier incorporation and order tracking, to improve the fulfillment rate of delivery requirements
- IT system supports the key process parameters, production, delivery, and quality data of suppliers' devices
- Build a cost model to achieve cost coordination between suppliers and demanders

### Supplier Support

- Provide lean guidance for suppliers with poor performance, and incentives for suppliers with good performance, to motivate suppliers and achieve win-win results
- Leveraging Dahua's own automation development capability and Dahua's system integration capability, we set up dedicated support teams to provide targeted support to our main suppliers annually to enhance their information management.
- During the reporting period, we completed the system interfacing with EDI/SMES interfacing for 20 suppliers. We helped 2 companies to deploy automation and upgrade their automated manufacturing capabilities, and specially supported 4 companies in enhancing their management capabilities



## High-quality Development and Continuous Stable Procurement

Facing the complex and changing international landscape, it has been our core strategic policy to address the uncertainty of the supply chain and ensure the security of supply. Through continuous practice and exploration, we have established a complete supply security system, and a risk warning and risk coordination mechanism. By building and promoting Dahua's own supply security platform, we share risk information, identify risk items in time, and improve the risk prevention capability of the entire supply chain.

Build a supply security platform	Optimize the ecological layout of strategic collaboration	Enhance the anti-risk capability of supplies	Enforce strategies against risks
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# Supplier

## Proactive Common Progress and Harmonious Procurement

As a socially responsible enterprise, Dahua has been responding to the national call and advocating the harmonious development within the human group and between human and nature. In terms of the environment, Dahua requires all the incorporated suppliers to follow the requirements of the ISO14000 environment management system and strictly implement RoHS2.0 for all the materials, including process production. All suppliers shall sign the *Commitment Letter on Environmental Protection*. A red threshold is set for suppliers with no system management or not satisfying the basic terms on environmental protection. Training for improvement is also provided to help our partners improve their source allocation capacity.

In terms of humanity and social responsibility, Dahua emphasizes equality among people and races. Handicapped persons have the priority for humanistic care and suitable jobs to give play to their social value. While being self-disciplined, we also require all the partners to fulfill their responsibilities and sign the *Supplier Social Responsibility Agreement*. Taking safety as the starting point, Dahua requires all the partners to carry out safe production and operations, and sign the EHS commitment, avoid intentional delay of salary payment, and avoid harsh working environment, taking the lead to build a safe and stable social business environment.

### 1. Supplier development and qualification review

- Suppliers provide preliminary evaluation reports
- Review the environmental system, operating personnel and production process documents
- Conduct three-party review of manufacturing suppliers and secondary suppliers, with a focus on compliance of environmental, health and safety management with national requirements, in addition to their manufacturing capabilities

### 3. Regular and unannounced inspection

- Perform sampling inspections on materials provided by suppliers to see whether they meet the environmental requirements
- Build the Dahua RoHS testing lab and develop a materials lab testing plan in line with the EU directive to expand the coverage of RoHS testing
- Perform unannounced inspections on suppliers from time to time to see whether the working environment and on-site management meet the requirements of agreements



Social responsibility  
Harmonious  
procurement

### 2. Agreement signing and effectiveness management

- All suppliers are required to sign the ROHS/REACH Commitment Letter on Environmental Protection
- All suppliers are required to sign the Supplier Social Responsibility Agreement, with a signing rate of 100%
- Automatically remind suppliers to update their environmental RoHS reports in advance through the system, and audit the validity of the environmental RoHS reports

### 4. Regular review and summary for improvement

- Solve identified problems which can be improved
- Regularly review agreements for suitability and completeness, update agreements promptly and complete signings of new agreements
- In case of serious non-compliance, the supplier shall be punished accordingly

## Regional Coordination and Local Presence

As a forerunner for the concept of a world economic community, Dahua enhances cooperation with worldwide material suppliers and processing plants: With each manufacturing base as the center, we actively develop local resources, enhance the penetration rate of local resources, and promote the coordinated growth of enterprises and regional development through the reasonable layout of resources and suppliers in each region. Moreover, as a leading technology enterprise in Hangzhou, Dahua is also committed to promoting the surrounding economic ecosystem, so that the surrounding ecosystem can maximize economic benefits of resources and the highest efficiency of energy use. For example: Major suppliers for packing materials, injection-moulded materials, and die casting components are controlled within the 4-hour supply cycle and the Just-in-time (JIT) mode is effectively implemented.

## Control of Conflict Minerals

Dahua keeps fulfilling its social responsibility as an enterprise citizen, adheres to ethical sourcing, and promotes the sustainable development of the industry chain. Not purchasing and using conflict minerals is our corporate social responsibility. We will do our best to make sure that we only purchase and use conflict-free minerals in the supply chain in a commercially reasonable range. According to Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas issued by the Organization for Economic Cooperation and Development (OECD), Dahua continuously and comprehensively manages any potential risks in the supply chain, and assists the suppliers in purchasing and using conflict-free minerals with the help of

the "Responsible Minerals Initiative" and the relevant resources provided by Responsible Minerals Initiative organizations to jointly fulfill the corporate social responsibilities.

Meanwhile, we ask suppliers to:

- Sign the *Declaration of Minerals Conflict-Free* to make sure that products supplied to Dahua and its affiliates contain no conflict minerals or metals.
- Fill in the *Conflict Minerals Reporting Template* (CMRT) to disclose information about origins of minerals, used smelting plants, refineries, and their downstream supply chains.
- Develop their own due diligence plans and policies of conflict-free minerals purchasing.
- Provide conflict-free minerals compliance documents of the products as required by Dahua.

Dahua carries out periodic investigations on the suppliers. If any information provided by the suppliers fails to be verified or suppliers do not take effective measures to comply with the conflict minerals policy of Dahua, Dahua reserves the right to terminate cooperation with the suppliers. Dahua will continue to guarantee supply from conflict-free smelters. We also offer training and guidance on the supply chain to further raise their awareness on the conflict minerals laws and regulations, and effectively avoid any conflict minerals to be used in the supply chain through cooperation with customers, business partners and governments and by promoting smelters to join in Responsible Minerals Assurance Process (RMAP).

## Supplier

Conflict minerals management framework	
<b>Key control elements for conflict minerals</b>	<p><b>General Provisions:</b> Considering the possible product compliance risks or impacts caused by conflict minerals, Dahua has listed conflict minerals in the Company's Compliance Committee for overall management, formulated management and control strategies and monitored operational risks, and listed conflict metals in <i>Dahua General Hazardous Substances Control Requirements</i> at the same time. Identify and follow up the dynamic updates of conflict minerals initiatives and review internal control requirements regularly.</p> <ul style="list-style-type: none"> <li>• <i>Due Diligence Guidance for Responsible Supply Chain of Minerals from Conflict-Affected and High-Risk Regions</i> - Organization for Economic Co-operation and Development (OECD)</li> <li>• Dodd-Frank Wall Street Reform and Consumer Protection Act (Section 1502: Conflict Minerals) - Securities and Exchange Commission (SEC)</li> <li>• Supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas (entering into force on January 1, 2021) - European Union (EU) 2017/821</li> <li>• Responsible Minerals Initiative (RMI) - Responsible Business Alliance (RBA)</li> </ul> <p><b>Supplier import:</b> The management and control of conflict minerals is listed in the <i>Supplier Approval Management Process</i> as one of the baselines for supplier introduction, and all production suppliers are required to sign and comply with the <i>Declaration of Conflict-Free Minerals in the Procurement Framework Agreement</i> to ensure that the products provided to Dahua and its affiliates do not contain conflict minerals or metals.</p> <p><b>Due diligence for the supply chain:</b> Dahua conducts due diligence on conflict minerals in the supply chain through the supplier portal on an annual basis, and requires its lower-level supply chain to effectively disclose the relevant information of the country of origin of the minerals, smelters and refineries used and their downstream supply chains according to the report template of the Responsible Minerals Initiative: <i>Conflict Minerals (Cobalt) Questionnaire (CRT)</i> and <i>Conflict Minerals (Gold, Tantalum, Tungsten, Tin) Questionnaire (CMRT)</i>.</p> <p><b>Supply chain collaboration:</b> Dahua has set up an environmental protection interface window on the supplier portal to further improve the understanding of regulations on conflict minerals through training and promotion of the supply chain, assist suppliers in completing Dahua's due diligence on conflict minerals quickly, and support the formulation of suppliers' internal conflict-free mineral procurement policies, carry out sub-level due diligence plans to jointly practice corporate social responsibilities.</p> <p><b>Supplier review:</b> During the supplier introduction review and regular annual quality review, the source or procurement channel of relevant mineral raw materials shall be verified and confirmed. If the information provided by the supplier can't be verified or the supplier fails to take effective measures to comply with Dahua's conflict minerals policies, Dahua reserves the right to stop the cooperation with the supplier.</p>
<b>Emergency plan</b>	<p>In order to cope with possible conflict minerals risks, Dahua has defined the responsible team and formulated the corresponding emergency plan, clarified the response mechanism and processing procedures for conflict minerals-related issues to further improve the emergency response capabilities of conflict minerals risks. Dahua has fully identified the conflict minerals risks in the supply chain, and continuously shares the results of supply chain due diligence with customers when necessary.</p> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <p><b>Risk warning in advance</b></p> <p>Interpret relevant regulations on conflict minerals for each supplier in advance, and publicize the impacts of using conflict minerals. If a supplier is found to have illegal use, immediately carry out the suspension investigation of its products and identify and warn early potential risks resulted.</p> </div> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <p><b>Emergency settlement in the middle of an event</b></p> <ol style="list-style-type: none"> <li>1. Stop using current materials of non-compliant suppliers, make rectifications, and adjust the quota of its new products;</li> <li>2. The illegal products shall be destroyed from the market and replaced by reliable products;</li> <li>3. In case of serious impacts on the Company or customers, suppliers should be held legally accountable.</li> </ol> </div> <div style="border: 1px solid #ccc; padding: 10px;"> <p><b>Summary and improvement afterwards</b></p> <p>Summarize the reasons and fundamental problems of illegal use of conflict minerals, and make adjustment to the relevant product design standards or supplier management regulations to avoid similar risks during new material selection or supplier selection in the future.</p> </div>

In the report period, the governance achievements of conflict minerals are as follows:

1. 100% signing rate of the *Declaration of Conflict Minerals* by new suppliers;
2. 100% response rate from production suppliers;
3. 0 complaints about violations of conflict minerals;

Dahua has released an updated the *Declaration of Metal Conflict-Free of Dahua Technology* (For more information, please visit: <https://www.dahuasecurity.com/newsEvents/DahuaNotice/847>)



# Open Ecosystem

The development of digital economy has been accelerated. Collaborative innovation and open development will become an important guarantee to promote the healthy development of the digital economy. Adhering to the concept of "Full Ecosystem", Dahua has anchored the realization of customer value, built a comprehensive opening capability from technology, business to service, joined hands with ecological partners to open up new fields, shape new dynamics, create and build infinite possibilities for industrial development, and empower the development of digital intelligence in thousands of industries.



## Software Openness and Cooperative Ecology

Focusing on the three core capabilities of AIoT, smart view and smart data, the Company's software ecological work has continuously optimized the opening strategy, deepened the degree of openness and improved the empowerment supporting facilities. We will make a breakthrough in the direction of deeper opening, wider adaptation and easier application of Dahua's core capabilities.

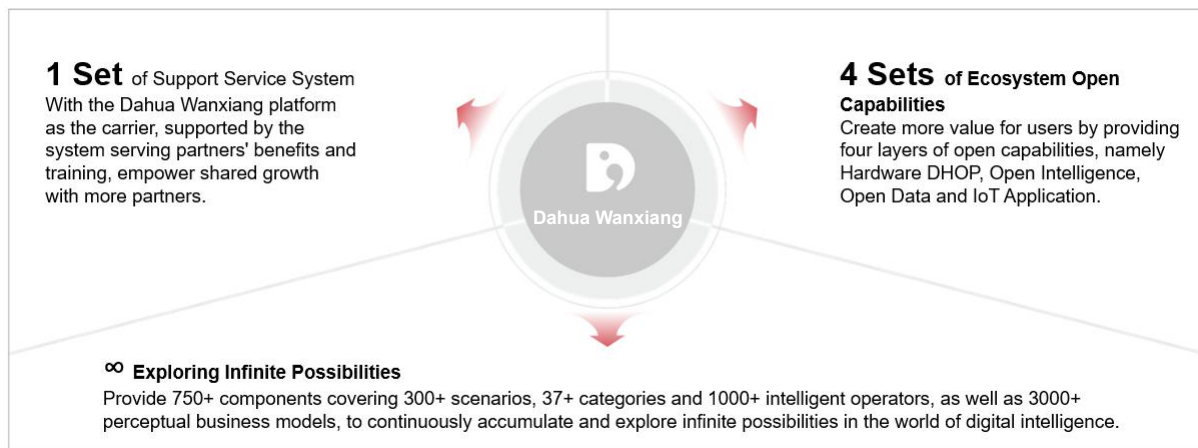
Based on the Genius Open Platform, Dahua provides closed-loop services from material introduction to algorithm output landing application to the outside world with AI training tools; Based on ICC Open Platform, Dahua has categorized various basic and industrial capabilities of AIoT according to application scenarios, and encapsulated the scenario-based capabilities into standard API interfaces; Based on the Big Data Open Platform, Dahua has encapsulated the view data into an interface in the form of data capability after collision processing and opened the data capability to the outside. At the same time, Dahua has organized the development of relevant technical courses, offline salons, online popular science, online lectures, capability certification and other ways for partners, provided rich technical empowerment and cultivated business opportunities for partners to help them grow rapidly as Dahua partners. Dahua has also develop industrial applications and completed project delivery to cover thousands of industries with view capabilities, so as to create more and wider view application scenarios.

## Service Ecosystem

Focusing on the Company's strategic development direction, Dahua has completed the construction of ecological delivery structure. From inclusion, training, dispatching, acceptance and settlement to end-to-end optimization of ecological management mechanism, Dahua has achieved domestic coverage at the level of municipality and the grid-based deployment overseas. With the deepening of ecological delivery business, Dahua has continuously consolidated the foundation of global service ecological capability and fully realized the localization of ecological delivery.

At present, Dahua has signed contracts with 600+ domestic companies and 300+ overseas companies to provide ecological services, with 100% coverage at the level of municipality in China and grid-based deployment overseas, and the global ecological delivery is gradually becoming mature. The service ecological resources have gradually developed from "available resources" to "excellent resources", the delivery capability has developed from "single service" to "comprehensive solution capability", and the coverage has been extended from local and municipal levels to district-and-county levels, so as to build a comprehensive domestic ecological delivery capability and improve customer satisfaction.

While improving the capability and quality of ecological delivery, the Company pays great attention to the construction of ecological occupational health and safety, delivery compliance and cyber security, so as to achieve healthy ecosystem, sustainable development and cooperation.



## Cooperation and Exchanges

Dahua continues to deepen technical cooperation with domestic well-known universities to deeply promote scientific and technological innovation and collaborative development of schools and enterprises. In 2022, the Company realized a strategic cooperation with Polytechnic Institute of Zhejiang University and College of Information Science & Electronic Engineering Zhejiang University to jointly build the Joint Innovation Center for Metaverse to promote major scientific research projects and engineering technology innovation in the fields of Metaverse; Dahua built two provincial engineering technology research centers, namely "Zhejiang Engineering Research Center of Building's Digital Carbon Neutral Technology" and "Zhejiang Engineering Research Center of Radio and Intelligent Perception Technology" with Zhejiang University City college and other universities, so as to comprehensively deepen the research cooperation in the fields of radio and perception technology and digital carbon neutral technology for public buildings; Dahua has cooperated with Zhejiang University City College, Hangzhou Dianzi University and other universities in talent training and joint innovation to jointly promote the high-quality development of "Industry-University-Research-Application".



## Public Welfare Activities

### Dahua Huayu Public Welfare Development Center

Since its establishment, Dahua Huayu Public Welfare Development Center has been a social organization dedicated to social services and public service activities. With the aim of "Giving Love, Helping Others and Serving the Society", it has cultivated Dahua people to establish the social fashion of unity and fraternity, willingness to help others, courage and selfless dedication. With the leadership of the Company and the help of the society, it has become a practical organization with emphasis on teamwork, full of volunteer service consciousness and strong will power.



### Delivering the light of life with love - Blood donation activities in public welfare season

In order to fully show the passion and love of Dahua people, Dahua has carried out blood donation activities for 6 consecutive years, which was carried out simultaneously in Dahua 1199 Park, 1181 Park and Fuyang Base on July 18, 2022, with more than 400 participants and a total blood donation volume of 94,040 ml. Dahua people have actively promoted the spirit of voluntary blood donation and supported public welfare activities with practical actions. Every blood donation is a relay of life. Every beat is a spark of hope.

### "Clothes for love. Books for warmth" - Clothing donation activities in public welfare season

Dahua has donated winter clothes to underdeveloped regions for 9 consecutive years. On October 24, 2022, Huayu Public Welfare Development Center and the Company carried out a clothing donation activity with the theme of "1+clothing, Clothing for Love, Clothing for Warmth" for 2 days, during which more than 750 pieces of clothing were received.



### Huayu Public Welfare has established special mechanisms around "Helping Farmers, Students, the Elderly and the Disabled".

Focusing on the purpose of the organization and combined with Dahua's business, Huayu Public Welfare launched special projects in helping farmers, students and the disabled, and started the Common Wealth Action Runner Project, Yongquan Student-Aid Project and Digital Intelligence in Helping the Disabled Project respectively, and continued to promote them, as well as exploring new models in helping smart home care.

**Helping farmers:** The "Common Wealth Action Runner Plan" has helped 26 counties in the mountainous areas, established channels with Zhejiang Federation of Industry and Commerce, Zhejiang Provincial Committee of the Chinese People's Political Consultative Conference, Binjiang District Government, Zhejiang Satellite TV Qianjiang Channel, etc., and helped Guangyuan in Sichuan, Lishui, Quzhou and Wenzhou in Zhejiang and other regions by means of donation and procurement of agricultural products.

**Student aid:** In September, 2022, Huayu Public Welfare launched Yongquan Student-Aid Project with the aim of supporting public welfare education, building dreams and fulfilling dreams. On November 23, 2022, Huayu Public Welfare teamed up with Jushuixiang Primary School and Jianggen Primary School in Qingyuan County, Lishui City, sent school supplies and winter clothes to the left-behind children in the school, and donated laptops, books and other materials to the school.

**Helping the disabled:** Huayu Public Welfare signed a framework agreement on digital intelligence in helping the disabled with Hangzhou Disabled Persons' Federation in 2022 to help upgrade the digital intelligence of 10 Homes for the Disabled in Hangzhou, and donate smart locks to 100 disabled families to help the disabled enjoy smart living, as well as cooperating with various disabled persons' federations to strengthen the integration of cultural and sports undertakings for the disabled. Dahua introduced the charity sale for the disabled on the company's family day and organized a New Year's barrier-free integration run.

**Helping the elderly:** Huayu Public Welfare explores a new model of smart home care. On the Mid-Autumn Festival in 2022, Dahua gave Dahua moon cakes representing blessings to the elderly in Sunshine Home Nursing Home in Binjiang District, and held follow-up cooperation negotiation with the nursing home.

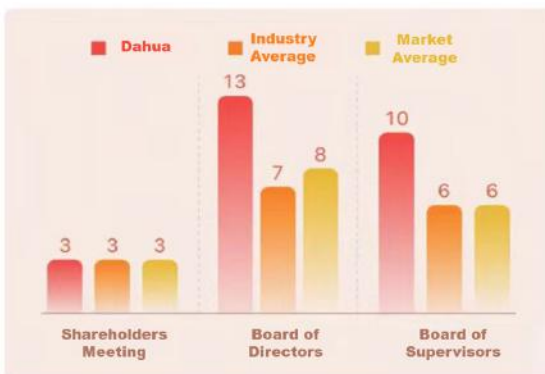
# Corporate Governance

## Corporate Governance Structure

The Company strictly abides by the requirements of laws, regulations, rules and normative documents such as *Company Law*, *Securities Law*, *Code of Corporate Governance for Listed Companies*, *Rules Governing the Listing of Shares on Shenzhen Stock Exchange* to continuously improve the corporate governance structure and regulate the operation of the company. The actual situation of corporate governance conforms to the requirements of normative documents such as *Code of Corporate Governance for Listed Companies* issued by China Securities Regulatory Commission (CSRC). In strict accordance with the requirements of the modern enterprise system, the Company has established a corporate governance structure consisting of the general meeting of shareholders, the Board of Directors, the Board of Supervisors and the management. The Board of Directors has set up special committees for strategies, nomination, audit, remuneration and appraisal, forming a governance mechanism with clear separation of authority and responsibilities, mutual coordination and checks and balances among the authority, decision-making body, supervisory body and executive body to effectively protect the legitimate rights and interests of the Company and its shareholders.

## Operation of the three Meetings in 2022

During the reporting period, the Company organized 3 general meetings of shareholders, 13 meetings of the Board of Directors, 10 meetings of the Board of Supervisors, 4 meetings of Audit Committee of the Board of Directors, 1 Nomination Committee meeting, 2 Remuneration and Appraisal Committee meetings and 1 Strategy Committee meeting. The convening and holding of successive general meetings of shareholders, the Board of Directors, and the Board of Supervisors, and the procedures for consideration of proposals are in compliance with the relevant laws, regulations, normative documents and the Articles of Association of the Company, and no violations of laws and regulations have occurred.



During the reporting period, the Company organized the updating and revision of various management systems and the drafting of new systems. The revised systems include *Rules of Procedure of Shareholders' Meeting*, *Rules of Procedure for Board of Directors*, *Rules of Procedure for the Audit Committee of the Board of Directors*, *Rules of Procedure for the Nomination Committee of the Board of Directors*, *Rules of Procedure of the Remuneration and Appraisal Committee of the Board of Directors*, *Rules of Procedure for the Strategy Committee of the Board of Directors*, *Working Rules for Independent Directors*, *Information Disclosure Management System*, *Insider Information Confidentiality System* and *Rules of Procedure for the Board of Supervisors*. The revision of the above systems ensures that the Company's various management systems are consistent with the current laws and regulations, and enhances the standardization of the Company's management system.

## Shareholders and Shareholders' Meeting

The responsibilities of the Company's general meeting of shareholders are clear, and the *Rules of Procedure of Shareholders' Meeting* have been formulated and

effectively implemented. The convening, holding and proposal procedures of the Company's general meeting of shareholders comply with the *Company Law*, the *Articles of Association* and the *Rules of Procedure of Shareholders' Meeting*, ensuring that all shareholders, especially small and medium shareholders, enjoy equal status, so as to ensure that all shareholders can fully exercise their rights, and hiring witness lawyers to attend the general meeting of shareholders to witness on the spot.

## Directors and the Board of Directors

The responsibilities of the Board of Directors of the Company are clear, and the convening and holding procedures comply with the *Company Law*, *Articles of Association*, *Rules of Procedure for Board of Directors* and other relevant laws, regulations and systems. During the reporting period, all directors performed their duties diligently, and were able to attend the Board of Directors in a serious and responsible manner, and fully exercised and fulfilled their rights, obligations and responsibilities as directors, thus safeguarding the legitimate rights and interests of the Company and all shareholders. The Board of Directors has a Strategy Committee, an Audit Committee, a Nomination Committee and a Remuneration and Appraisal Committee to ensure that the Company's decision-making is more efficient, standardized and scientific. The Company currently has seven directors, including three independent directors, all of whom are experts in the fields of industry, corporate management, finance and accounting; The number and composition of the Board of Directors comply with the requirements of laws, regulations, and the *Articles of Association*. The Board of Directors of the Company has formulated the *Rules of Procedure for Board of Directors*. All directors of the Company are able to attend the Board of Directors and the general meeting of shareholders in a conscientious and responsible manner, familiar with relevant laws and regulations, and have effectively performed their rights, obligations and responsibilities as directors.

## Supervisors and the Board of Supervisors

The Company currently has three supervisors, including two employee supervisors. The number and composition of the Board of Supervisors comply with the requirements of laws, regulations and the *Articles of Association*, etc. The board of supervisors convenes supervisor meetings in strict accordance with the *Articles of Association* and the *Rules of Procedure for the Board of Supervisors*. All the supervisors perform their duties conscientiously, and effectively supervise and express independent opinions on the legitimacy and compliance of the performance of the corporate finance, directors and senior managers in an integral, diligent and conscientious manner, to safeguard the legitimate rights and interests of Dahua and shareholders.

## Information Disclosure

In 2022, the Company diligently fulfilled its information disclosure obligations to ensure truthful, accurate, timely, complete and fair information disclosure without selective information disclosure or early disclosure of non-public information, thus safeguarding shareholders' right to know and to provide investors with sufficient basis for investment.

In the process of information disclosure management, Dahua has strictly implemented the regulations of China Securities Regulatory Commission (CSRC) and other national regulatory authorities, completed the information disclosure of the Company's regular reports and temporary announcements in a truthful, accurate, timely and complete manner, and delivered more effective information to the market from the perspective of investors. Dahua has been rated as A in the information disclosure assessment of Shenzhen Stock Exchange for 12 consecutive years.

In 2022, the overall difficulty and complexity of information disclosure increased. In the whole year, 176 announcements were disclosed, 87% more than other A-share listed companies in the same industry.

# Corporate Governance

## Investor Equity

Dahua has always been committed to being a truthful, compliant and transparent listed company for investors, actively setting up a good communication mechanism with investors and fully protecting investors' right to know. According to the relevant guidelines of Shenzhen Stock Exchange, Dahua has established a comprehensive Investor Management System to ensure that there are sufficient opportunities and ways to understand the operation of the Company with shareholders and potential investors.

In addition to the release of periodic reports, the Company has taken the initiative to hold 4 performance briefings and 1 on-site investor reception day, thus ensuring that investors can obtain the accurate, complete and timely interpretation of periodic reports from listed companies immediately. During the reporting period, the Company also actively participated in various types of communication activities, including daily research up to more than 40 batches; participated in more than 20 external brokerage strategy sessions to convey the company's performance highlights and strategic value to the capital market securities on the basis of compliance; Moreover, the Company answered more than 550 calls to the investor hotline and 420 responses to questions on interactive e-business, patiently answered the questions of shareholders' concerns.

The Company also implements a continuous and stable profit distribution policy and attaches importance to a reasonable return on investment for investors. Since its listing, Dahua has implemented cash dividends for 14 times, with a cumulative cash dividend of RMB 3.926 billion. During the reporting period, the Company formulated and implemented the profit distribution plan for 2021. Based on the total share capital of 2,994,550,730 shares, the Company distributed a cash dividend of RMB 2.7 (including tax) to all shareholders for every 10 shares, with a total cash dividend of RMB 808,528,697.10.



# Internal Control and Risk Management

Based on COSO-ERM framework and BCM business continuity management systems, the Company has established a "1-3-6" risk management system framework, which is "risk-oriented and system-based, with process as a bond, control as a tool, and IT as a support", to provide good support for the realization of corporate strategies. By identifying risks, evaluating risk levels in terms of severity, possibility and effectiveness of existing measures, improving the hierarchical decision-making authorization system according to the acceptable level of the company's risks, creating or optimizing systems and processes, and promoting the IT-based construction of processes and other control activities, the Company has established systems such as *Management Specification for Identification and Evaluation of Environmental Factors*, *Management System for Safety Training and Education*, and *Management Specification for Prevention and Control of Solid Waste Pollution*, so as to comprehensively deal with internal and external risks that may be foreseen in production and operation activities. In addition, the Company emphasizes the cultivation of risk awareness and regularly organizes risk management training for all departments, so as to strengthen the Company's risk warning and handling capabilities and develop the risk control awareness among all staff.



Table Risk Management Mechanism

Risk Category	Preventive Measures
<b>Organizational Guarantee</b>	<ul style="list-style-type: none"> <li>· The Company has established risk control groups such as Strategic Decision-making Committee, Audit Committee, Corporate Ethics Compliance Management Organization, Information Security Committee, Production Safety Committee and Compliance Committee;</li> <li>· The Company has established a three-line defense model for risks (business department, internal control department and internal audit department) to build a risk-oriented internal control framework;</li> <li>· The Company's major business functional departments, branches, and subsidiaries set up department-level internal control interface contacts.</li> </ul>

# Internal Control and Risk Management

Table Risk Management Mechanism

Risk Category	Preventive Measures
<b>Risk Identification</b>	· The Company has identified and reviewed the risks at the level of the Group, branches and subsidiaries through interviews, special internal audit reports, investigation and evaluation reports on ESG-related fields, and has built and continuously enriched the risk databases of various business sectors and departments. Meanwhile, constantly and dynamically identify the dynamic changes of risks according to the latest business adjustments and planning.
<b>Risk Assessment</b>	· Based on the risk database, by introducing various sources of risk information such as regulatory tips, industry risks, research, audit findings, manager feedback, the Company evaluates the risk level of the possibility of risk events, the degree of impact caused and the vulnerability of response measures, and then makes an overall evaluation in combination with the major risk categories to achieve comprehensive risk analysis and evaluation.
<b>Risk Response</b>	· The Company determines the risk response strategies based on the risk evaluation results, including risk reporting, risk taking, risk avoidance, risk mitigation and risk transfer, which include: <b>Risk response compliance:</b> Consolidate the support of internal control management according to the internal control requirements of regulatory authorities at all levels. <b>Scenario-based risk response:</b> Conduct in-depth evaluation on the process and internal control in ESG-related high-risk internal control fields, and adopt different risk management modes for different business scenarios; <b>Hierarchical risk response:</b> Promote the organization of high-risk issues in various fields of ESG, gradually establish a hierarchical authorization mechanism, and clarify the authorization contents at all levels; <b>Risk response specialization:</b> Establish special internal control projects at the company level and the department level for high-risk businesses to closely and effectively integrate internal control with business processes to avoid or reduce risks.
<b>Risk Monitoring</b>	· A risk monitoring mechanism is established to routinely monitor and check the response to risks and ensure that the outcomes of risk response are guaranteed both in the design of response plans and in their implementation.
<b>Information Communication</b>	· Risk awareness and competency training on a regular basis: Reinforce risk awareness through the sharing of classic cases, special training and examinations, so as to create an atmosphere of consistent attention from top to bottom. · Reporting mechanism: Establish a risk reporting mechanism in the form of regular routine reports, special risk reports and major risk/risk emergency reports to comprehensively, timely and objectively reflect the status of substantive risks faced by the management of subsidiaries and departments during the reporting period in order to better manage risks.

## Information Disclosure Compliance Risk Management and Control

### Improve information disclosure mechanism

The Company has carried out process construction and optimization specifically for information disclosure, striving to ensure the effectiveness and timeliness of the system, clarify responsibilities and strengthen internal process control.

The Company has comprehensively revised the existing relevant systems in accordance with the latest regulatory requirements, further improved the closed-loop management system of information disclosure process and investor relations management, and consolidated the management and internal control foundation of the company. Nearly 40 systems for corporate governance and internal control have been established, and more than 10 management systems have been revised. Dahua has further improved its internal management level and risk prevention awareness, and been awarded the "Best Office of Board of Directors Practice in 2022" by China Association for Public Companies.



### Build the securities compliance risk control system

After continuous attempts, the Company has established a compliance meeting mechanism, formed a regular meeting system with multi-department linkage, and established a communication mechanism on a regular basis. The professional functional departments have been empowered to buttress the functional management of risk, and each department clarifies the compliance management process and responsibilities to control the whole process of compliance management.

In the process of continuous efforts to improve the company's risk prevention and control capabilities, Dahua won the honor of "TOP 30 Best Internal Control Award of Zhejiang Listed Companies in 2022".

### Optimize special governance

For major issues, key business segments, key holding subsidiaries, etc., special communication and processing mechanisms have been established, special risk management has been carried out, risk monitoring system and identification system have been improved, and early warning mechanism has been built. Meanwhile, it has taken into account the development of different subjects and integrated resources to help the Company's business to develop continuously.

## Compliance with Law

As a global commercial entity, Dahua Technology has always practiced legal and compliant operations with strict adherence to the Code of Conduct, market discipline and international rules. In order to ensure the Company's standardized development and legal compliance operation, effectively prevent and respond to global compliance risks, further enhance the Company's competitiveness in global business development, and continuously guarantee the high-quality and steady growth of the Company's performance, Dahua has established an ethics compliance and compliance management organization, which specifically includes the Ethics Compliance and Compliance Management Committee, the Compliance Management Office and various Compliance and Compliance Groups. Among them, the Compliance Management Office is the executive body of the Ethics Compliance and Compliance Management Committee, and the Compliance and Compliance Group is divided into the Special Compliance and Compliance Group and the Business Compliance and Compliance Group.

### Ethics Compliance and Compliance Management Committee Responsibilities

- Formulate the overall requirements, management strategies and organizational forms of the Company's ethics compliance and compliance management;
- Review ethics compliance and compliance operations plan based on the Company's overall requirements for compliance management, and periodically review the implementation of the plan;
- Decision making for the company's ethics compliance and compliance related major issue.

### Responsibilities of Compliance Management Office

As the executive body of ethics compliance and compliance management, it shall perform the following duties:

- Track and observe the changes and impacts of external rules, analyze the ethics compliance and compliance obligations the Company is required to abide by based on the rules, and formulate and refresh specific compliance standards;
- According to the general requirements and instructions of the Company's Ethics Compliance and Compliance Management Committee, formulate the company's compliance policies, annual compliance objectives and plans, and annual compliance reports, and submit them to the Ethics Compliance and Compliance Management Committee for approval;
- Responsible for managing the implementation of the Company's compliance policies and requirements in each business unit;
- As the executive body of the Company's Ethics Compliance and Compliance Management Committee, it is responsible for organizing regular meetings of the Committee, coordinating the work of various working groups, organizing the Committee's decisions on major compliance issues in a timely manner, and implementing the corresponding compliance reward and punishment decisions.

### Responsibilities of the Compliance and Compliance Groups

#### 1. Special Compliance Group:

- Based on the Company's compliance management requirements, formulate the operation plan of the corresponding module and submit it to the Ethics Compliance and Compliance Management Committee for consideration;
- Focus on the compliance operation objectives of the corresponding modules, accumulate professional talents and capabilities in their fields, establish systematic management and control specifications, horizontally coordinate with various executive departments and Compliance and Compliance Groups, and promote the effective implementation of compliance and compliance plans in this special field;
- Conduct routine special audits in the field and promote the improvement;
- Regularly report the work progress to the Ethics Compliance and Compliance Management Committee;
- Collect and solve the compliance issues in this module in time, report the major issues or other issues which are required to be raised to the Company for decision making to the Company's Ethics Compliance and Compliance Management Committee for decision making after clarifying the handling suggestions.

#### 2. Business Compliance Group:

- Formulate the overall objectives and work plans of the business compliance and compliance in this business segment, and promote the implementation of the business compliance in this business segment;
- Collaborate with various special Compliance and Compliance Groups to achieve the operational objectives in this business segment, and ensure the effective implementation of various compliance plans and initiatives;
- Collect and solve the compliance issues in this business segment in time. For the issues that can't be solved, it is required to cooperate with various special compliance and compliance groups to promote the resolution. For the issues that still can't be solved, it is required to report them to the Company's Ethics Compliance and

Compliance Management Committee after clarifying the handling suggestions.

Note: Each regional organization has a compliance representative, who is authorized and managed by each Business Compliance and Compliance Group.

### Organizational Operation Mechanism of Ethics Compliance and Compliance Management

- Convene quarterly meetings of the Ethics Compliance and Compliance Management Committee, and special meetings as needed if temporary or unexpected issues are involved;
- Convene regular meetings of the Compliance Management Office on a monthly basis, and special meetings as needed if temporary or unexpected issues are involved;
- Convene the regular operation meetings of the special Compliance and Compliance Groups and the Business Compliance and Compliance Groups on a monthly basis, manage the periodic plan and execution of compliance and compliance operation management of each module, and report relevant matters to the Ethics Compliance and Compliance Management Committee for consideration and decision if it is beyond the scope of authority or unable to make judgments and decisions.

Dahua requires all employees to have a full sense of compliance, and has established mechanisms such as induction training for new employees, regular training and examinations for all employees, carried out irregular online and offline compliance publicity and various compliance-themed months to ensure that senior and junior employees are familiar with and abide by compliance requirements, and sign corresponding commitment documents. The Company regularly reviews the compliance of internal personnel, sets up a reporting channel for (suspected) violations, and seriously deals with violations found in accordance with regulations.

### Ethics and Integrity

Dahua upholds the tenet of "Clean Dahua, Righteous Success", adheres to the high standards of *Code of Conduct* and ethics, aiming at building a transparent, fair, just, clean and honest business cooperation environment for the Company's employees, suppliers and customers, and creating a clean, upright, happy and efficient atmosphere. For employees, suppliers and customers, Dahua continues to promote the culture of integrity and compliance, and designs targeted and audience-specific integrity training for the Group's employees, so as to create enough deterrence so that employees neither dare, can nor even think of being corrupt.

### Expand the Publicity Coverage

During the company's Clean Administration and Compliance Publicity Month in August, 2022, the company's Clean Administration Construction Committee and Compliance Management Office jointly created the English version of the Clean Administration and Compliance Publicity Poster, which was delivered to the overseas offices at all levels by e-mail to help build the business card of Dahua's global business behavior compliance; In addition, the Company made a small book of integrity cases over the years, which is also packaged and sent to each provincial and regional office in China, so as to facilitate the publicity of clean administration construction in provincial offices.



## Compliance with Law

On the basis of on-site lectures for employees in high-risk positions and online training examinations for all employees last year, the company's Clean Administration and Compliance Publicity Month also launched an online sunshine charity sale and a visit to the Zhejiang Discipline and Law Education Base to actively promote the culture construction of clean administration. The products of Sunshine Charity Sale mainly came from the gifts or card coupons of suppliers voluntarily returned by employees over the years, which successfully attracted the attention of colleagues from the headquarters and offices on the requirements of the company's integrity-oriented culture and business behavior compliance, the final proceeds from the charity sale were donated to Huayu Public Welfare Development Center in Binjiang District, Hangzhou.

### Integrity reminders keep up with the "times"

The publicity reminder of "Think twice during the festive season, keep in mind the integrity and discipline" has been delivered to employees at all levels of the Group through various publicity channels before the 7 important national public holidays are approaching to ensure "being in place on time".



### Regularly revise management regulations

Dahua regularly revised the *Eight Provisions on the Work Style of Dahua's Cadres*, the *Code of Conduct*, the *Anti-Fraud System*, *Administrative Measures for Reporting Corrupt Practices*, the *Measures for the Administration of Employees Receiving Gifts, Gifts and Other Vouchers (Cards)*, the *Measures for the Administration of Corporate Accountability and Punishment*, the *Measures for the Administration of Confidentiality*, the *Employee Manual*, and the *Notice on Rewards for Real-name Reporting* and other normative guidelines.

### The Company encourages real-name reporting of fraudulent behaviors.

The Company reiterates that corruption is a "high-voltage line" that the Company can't tolerate, and the Company will never be soft on corruption; Meanwhile, the Company will continue to improve the system process and build the internal accountability system, and work with everyone to defend the cornerstone of integrity, transparency and integrity.

- (1) If the complaint information is incorrect, the Company will clarify the issue and will not hold any party responsible;
- (2) Any real-name reporting, if the complaint information is verified, plays an important role in breaking the case, saves or reduces economic losses for the Company or has other outstanding contributions, the Company will give rewards according to the *Notice on Rewards for Real-name Reporting*.

The Company's complaint reporting channels:

- (1) WeChat official account: Fanghua Society - Clean Dahua - Letters and Calls Reporting Channels
- (2) Report email: jbrx@dahuatech.com
- (3) Report hotline: 86-0571-28816326

## Governance of Science and Technology Ethics

The new round of scientific and technological revolution and industrial transformation is profoundly changing the face and pattern of world development, and the issue of governance of science and technology ethics has become a common challenge for all mankind. The Company is committed to technology for social good and better benefit for the mankind, so that science and technology can develop within an ethical framework that is available, reliable, credible and controllable: The Company conducts technical research and application on the premise of complying with applicable laws and regulations, business ethics and cultural habits of the business location; The Company aims to realize the sustainable development and inclusive growth of human society and promote the innovative implementation of advanced technologies in relevant business fields; The Company has always been committed to achieving fairness, justice, security and stability, ensuring privacy, and ensuring that the products and solutions developed are helpful to individuals and beneficial to the society. During the reporting period, the Company set up a special Compliance and Compliance Group for Ethics in Science and Technology to further promote the improvement of its governance system of science and technology ethics and enhance the governance capability of science and technology ethics.

## Trade Compliance

The Company is committed to complying with the laws and regulations of China, the United Nations, the United States and the European Union regarding export control and economic sanctions. The Trade Compliance and Compliance Group is responsible for formulating the overall strategy of the Company's trade compliance, establishing and improving the compliance system and process, combining risk management preposition with management compliance, promoting the implementation of trade compliance requirements in all business fields, ensuring the comprehensive and effective implementation of trade compliance policies and control processes in the Company, and continuously updating and optimizing existing measures and systems according to the internal and external environment.

During the reporting period, the Company continuously improved the construction of its trade compliance system, tracked the trade compliance policies and enforcement dynamics of various countries in a timely manner, and updated the Dahua Export Control Compliance Manual and the supporting export control compliance operation guidelines of R&D, supply chain and sales departments in combination with the guidance of external resources such as relevant professional institutions, so as to further integrate compliance management requirements into every link of its production, operation and management. Based on items, end users, destination countries/regions, end uses and other factors, the Company embeds the compliance control points into the process through channels of informationization and digitalization, optimizes the identification and management of trade compliance risks in the whole process of R&D, procurement, sales, delivery and service, so as to realize informationization guarantee and automatic control. During the reporting period, the Company ensured the implementation of its trade compliance governance requirements and compliance control points by means of inspection by the Trade Compliance and Compliance Group, self-inspection by business departments and investigation and interview by external institutions, and optimized and refined the internal policies in a targeted manner to promote the continuous improvement of the trade compliance system.

At the same time, the Company actively carried out compliance training to strengthen employees' awareness of compliance through all-staff training and precise training of relevant departments. Through the empowerment of compliance contacts in various departments and the issuance of specific scenario-based guidelines, relevant positions can be familiar with compliance policy requirements, control measures and operations, and compliance work can be carried out more effectively.

## Compliance with Law

### Data Security and Privacy Protection

The Company attaches great importance to data security and privacy protection. Since the promulgation of the *Cyber Security Law of the People's Republic of China*, the *EU General Data Protection Regulation* and other laws and regulations, the Company has actively responded by setting up a special group on data security and privacy protection, paying close attention to the dynamics of global data protection laws and regulations, interpreting them in a timely manner, formulating pragmatic compliance strategies, conducting comprehensive compliance audits and strictly complying with legal requirements. In addition, the Company has actively cooperated with third-party authorities, introduced external evaluation and certification, and has passed ISO 27701 Privacy Information Management System Certification, IoT Service Privacy Protection Certification, ETSI EN 303645 Certification and Trusted AI Computing Platform Evaluation.

Qualification	ISO 27701	IoT Service Privacy Protection	ETSI EN 303645	Credible AI Computing Platform
Certification authority				

In order to further improve the data protection level of products and services and better help customers achieve compliance, the special group focused on optimizing the differentiated security requirements of China, the European Union, North America, Brazil, India and other countries or regions, and comprehensively upgraded the *Personal Data and Privacy Protection Specification* by combining the privacy design principles and the practical experience of privacy impact assessment. The Company introduced the privacy baseline in the product requirement and design stage, designed business-friendly protection measures around the whole life cycle of data collection, transmission, storage, use and deletion, and combined with privacy policies, privacy-friendly settings and other adaptations to provide comprehensive data security protection and ultimate user experience. At the same time, privacy protection technologies such as privacy masking, trusted computing, data desensitization and data encryption have been continuously integrated in the products to build privacy protection that reaches the entire scenario.

During the reporting period, the Company actively participated in organizations and activities related to data security and privacy protection, and has joined the Data Security Community Plan, Zhuoxin Big Data Plan and Hangzhou Data Security Alliance to further promote the development of industry data security standards.

### Tax Compliance

Tax compliance refers to the conformity of operation and management behaviors of enterprises and their employees to the laws, regulations and regulations on taxation. The Company's tax department focuses on establishing a standardized global tax compliance system for the Company's global business operations, and on the overall management of tax risks. In order to effectively achieve compliance with tax requirements, the Company has carried out corresponding process development, including the standardization and formation of a fixed process of tax calculation templates, and the documentation of daily tax work operation manuals and procedures. The relevant information system construction is also being continuously optimized, including the global tax platform, related transaction pricing system, reconciliation system, and invoicing system, to ensure the tax process implementation and continuous update are in place according to regulations.

Meanwhile, by establishing and improving our electronic file management system, the Company has effectively managed tax compliance-related documents to meet compliance requirements. In addition, the Company regularly examines tax risks and continuously follows up on their resolution. The Company effectively responds to and manages all kinds of tax disputes that may occur globally.

In response to the complexity and distinctiveness of compliance in each country and region, the Company has set up a special team to build the top-level compliance framework in a dedicated form so as to gradually realize the improvement of the global tax compliance system.

### Fair Competition

Advocating fair competition and fair trade, Dahua always seeks fair and honest competition, and persists in developing its competitive edge through quality products and services rather than unethical or illegal business practices. The Company pays continuous attention to the development of competition compliance legislation, law enforcement and the administration of justice in the jurisdictions involved in the business, and regularly examines and evaluates its own competition behaviors and business operation compliance.

During the reporting period, the Company updated and published the *Code of Conduct*, formulated and published a model text of common competition compliance scenarios of distribution business, defined the red line benchmark of competition compliance, and communicated its competition compliance requirements to business partners through the agreement text. In foreign investment projects, the Company has fulfilled its compliance review and reporting obligations in strict accordance with local laws and regulations. The Company has continuously introduced high-quality external resources both domestically and internationally, organized various departments to carry out study and training on competition compliance according to the opinions and guidance of professional organizations, so as to continuously enhance employees' compliance awareness of fair and honest competition, create a stronger competition compliance culture, and continuously strengthen the organization's systematic capability to prevent and respond to relevant compliance risks. During the Clean Administration and Compliance Publicity Month in August 2022, the Company publicized its position of compliance competition through offline poster promotion, email blasts, online training and examinations, and clearly put an end to violations of fair trade including commercial bribery.



# Secure and Reliable IT Architecture

## Hardware Network System

In order to build a safe, stable and sustainable information system environment, Dahua has established multiple data centers: the data center of Hangzhou headquarters, the data centers of major third-party operators, and the data centers with multiple nodes and multiple available areas on domestic and overseas clouds. The office network has realized a global ring and redundant architecture network to ensure the reliability of the data center network. Based on the design of links and hardware redundancy architecture, automatic switching of failed single link to standby link is realized, enabling backbone services to be fully online and no perception of automatic switching by users; based on the deployment of the software management system, full coverage of business scenarios is realized; based on the construction of data lake and data warehouse, full connection of data and timely access to information is achieved; through the ITSM hotline service, 7\*24 services and self-service for internal users are provided, and through applications such as the portal/App, information inquiry self-service is provided for external customers, suppliers and partners. The Company continues to invest in hardware every year to support the growth and stable operation of global business.

## Software Management System

At present and in the future, the IT architecture of Dahua belongs to the IT hybrid architecture mode: traditional integrated architecture+micro-service/data middle platform architecture+cloud computing base +AI/IoT application. From the application system level, all kinds of shared service centers are formed through the business middle platform to realize the digital precipitation of business capabilities; Through the construction of data center and data lake, the Company has built a Group data sharing platform to realize centralized management of data at most once, so as to improve the reuse rate of data, and provide basis for management decision making. The technical architecture of the data mid-platform adopts a convergence structure to realize the unified management and implementation of data standards, data governance and data directory, while providing data services in the form of microservices to ensure the data consistency of each application system.

## Ensure the Reliability and Security of Software and Hardware

Dahua has formulated *DHIS009 Information Asset Confidentiality Management System*, *DHIS017 Anti-virus and Malware Management Regulations*, *DHIS022 Data Backup Management Regulations* and other related system documents to manage data and information to realize the management of data and information and hardware and software, and improve the reliability and security of data and information management software and hardware, and ensure that the information system infrastructure meets the needs of the company's strategic development (see the table below). According to the networking construction requirements of the Group's global branches and data centers, relying on the resources of operators and public cloud networks, a fully-linked and highly reliable global network is established, and technical solutions such as SDWAN network acceleration are used to realize the classified service guarantee of business traffic and high-bandwidth cross-border exchange performance, and enhance users' access experience to core business systems.

## Information Security Capability Building

Since the establishment of information security system, Dahua has formed a comprehensive three-dimensional security defense architecture for network, public cloud, data center host, application development, data and office terminals. Based on the zero-trust security strategy, the daily office efficiency of employees is balanced under the premise of ensuring the prevention of information security threats and the controllable risk of data leakage. Through standardized guidance, process management and control, and technical management and control, the Company has constantly optimized its defense strategy and formed an active defense line. By subdividing business scenarios, the Company has continuously improved and optimized the more refined security operation and maintenance support capabilities.

1. Through continuous construction and optimization of security defense, an adaptive security network architecture has been established, and the heterogeneous deployment of different brands of products is linked to accelerate the security response process.

2. Through the construction of safety development capacity, the Company has realized the safe left shift and achieved the continuous delivery safety.

3. By establishing a sound data compliance system, the Company regularly conducts comprehensive privacy protection and data compliance related audits, attaches importance to audit results, analyzes, processes and takes action in time, so as to build a data security defense line.

4. Through the normalization of information security audit compliance operation guarantee, with business as the core and risk management and control as the guide, the Company builds a closed-loop operation mechanism of defense-detection-response-eradication.

**Table Reliability, Security and Ease of Use of Information Systems**

Category	Description
Reliability	<ul style="list-style-type: none"> <li>The Company adopts dual primary and backup outlets of different carriers for Internet access to ensure the security and reliability of link access; multiple data centers are established in the same city for reciprocal data backup, with dual utility and highly reliable UPS power supply for the server room to ensure the stability of the Company's network infrastructure and business systems.</li> <li>All key business systems are designed with disaster response solutions to ensure stable operation of information systems and data security at any time and under any circumstances. In case of emergency, the application system can be switched and restored quickly.</li> <li>A reliable data backup and recovery plan is adopted for other business systems, with all data kept in off-site storage backups; regular drills are performed to check the reliability and recoverability of backups.</li> <li>By building such infrastructure as redundancy, high availability and backup recovery, the high availability of performance, and smooth and reliable continuous operation of data centers, network links, and computing storage of system applications are ensured.</li> </ul>
Security	<ul style="list-style-type: none"> <li>Dahua has obtained the ISO/IEC27001 Information Security Management System Certification and ISO/IEC27701 Privacy Information Management System Certification, as well as the Level 2 and Level 3 Certification of Cyber Security Protection.</li> <li>Security devices such as firewalls and WAFs are deployed at the borders of the Internet and data centers, to shield high-risk ports, and turn on security modules such as IPS, AV, and WAF, as guarantee of secure and controllable business.</li> <li>Security baseline for terminal device access: Through ID access, anti-virus, anti-leakage, and watermarking, ensure that terminals that access Dahua's network meet security requirements; key positions work through virtual desktops to ensure that data does not reach local terminals.</li> <li>By building an information security system architecture, defend against external risks, prevent internal vulnerabilities, and sustain security operations, so as to ensure the security and solidity of Dahua's business.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>General policy of information security: Strengthen internal and external security risk management to meet the requirements of rapid corporate development; enable continuous improvement to ensure solid business operation.</b></p> <p>The diagram illustrates the Information Security Management System. At the top is 'Information Security', which oversees the 'Management System' (including Security Organization, Personnel Plan, Process, Procedures and Tools, Risk Assessment, and Safety Support). Below this are 'Technical Systems' (Physical Security, Other Security, System Security, File Security, Terminal Security, Application Security) and 'Operating System' (Physical Access Control, Remote Security, Access Authorization Management, Password Policy, Risk and Incident Response, Social Media Management). The diagram is flanked by 'Third-Party Audit &amp; Compliance Testing' on the left and 'Information Security Operations By Department' on the right. At the bottom, three strategic goals are listed: Preventing Internal Vulnerabilities, Defending Against External Risks, and Consolidating Platform Stability and Compliance.</p> </div>

## Appendix 1 Enterprise Honor of Dahua

Name	Awarding unit
Golden Bull Award for Social Responsibility	China Securities Journal
2022 Best Practices for Board of Directors of Public Companies	China Association for Public Companies
2022 Green Sustainable Development Contribution Award	2022 International Green Zero-Carbon Festival
2022 Top 30 Zhejiang Listed Company Best Internal Control Award	School of Management of Zhejiang University, the Listed Company Association of Zhejiang
2022 China Top 500 Manufacturing Enterprises	China Enterprise Confederation China Enterprise Directors Association
2022 Top 100 Enterprises in China's Strategic Emerging Industries	China Enterprise Confederation China Enterprise Directors Association
2022 China Top 100 Innovation Enterprises	China Enterprise Confederation China Enterprise Directors Association
National Quality and Credit Benchmarking Enterprise	China Association for Quality Inspection
National Product and Service Quality Integrity Demonstration Enterprise	China Association for Quality Inspection
National Product and Service Quality Integrity Brand	China Association for Quality Inspection
National Quality Inspection Integrity Enterprise	China Association for Quality Inspection
National Security Industry Quality Leading Brand	China Association for Quality Inspection
National Security Industry Quality Leading Enterprise	China Association for Quality Inspection
Sixth Vice-Chair of China Security and Protection Industry Association	China Security and Protection Industry Association
Zhejiang Top 100 Enterprises	Zhejiang Enterprise Federation, Zhejiang Enterprise Directors Association and Zhejiang Federation of Industrial Economics
2022 Top 100 Zhejiang Private Enterprises	Zhejiang Administration for Market Regulation Zhejiang Federation of Industry and Commerce
2021 AI Leader in the Software Industry (issued in May, 2022)	China Software Industry Association
2021 Typical Demo Case in the Software Industry - Visualized Emergency Command and Dispatch Platform (issued in May, 2022)	China Software Industry Association
Top 100 Brand Software Enterprises in the Yangtze River Delta	2022 China Software Industry Innovation and Development Conference
Zhejiang Red Cross Fraternity Contribution Award Advanced Group	Zhejiang Red Cross Society

## Appendix 2 Key Performance Indicators for Sustainable Development

### Key Performance Indicators for Annual Operations

	Unit	2020	2021	2022
Direct economic value	RMB 100 million	264.66	328.35	305.65
Cash dividends	RMB 100 million	8.03	8.09	8.02
Tax revenue	RMB 100 million	11.96	12.04	20.69*

\*Note: The 2022 statistical caliber includes the contribution factors of software tax rebate and offshore tax revenue.

### Key Performance Indicators for Environmental Protection

	Unit	2020	2021	2022
Comprehensive Energy Consumption	kg standard coal	7680545	10440394	13730087
Direct Energy Consumption	kg standard coal	1340994	1529811	2053365
Indirect Energy Consumption	kg standard coal	6339551	8910584	11676721
Purchased power	10,000 kWh	5158	7250	9501
Natural gas	Liter	919163	1040392	1088363
Gasoline	Liter	42551	34316	36004
Diesel oil	Liter	24741	42955	55142
Total Greenhouse Gas Emissions (including Scope 1 and Scope 2)	Tons of CO2	38473	53489	69505
Scope 1	Tons of CO2	2184	2483	2665
Scope 2	Tons of CO2	36289	51006	66840
Municipal water supply	Ton	545530	790857	807292
Number of accidents involving excessive emissions of waste water, waste gas and noise	Cases	0	0	0
Number of accidents involving chemical spills	Cases	0	0	0
Number of accidents involving excessive emissions and chemical spills	Times	0	0	0
Number of products with China Energy Conservation Certification	pcs	20	60	56
Number of new RoHS compliant production materials	pcs	19544	18697	42759
Materials REACH SVHC Coverage of material information declaration confirmation	%	70%	75%	90%
Total recyclable waste	Ton	/	/	1524
Total non-recyclable waste	Ton	/	568	1228
Total disposal amount of hazardous waste	Ton	/	52	51
Legal transfer rate of hazardous waste	%	100%	100%	100%
Controlled rate of hazardous wastes	%	100%	100%	100%

## Appendix 2 Key Performance Indicators for Sustainable Development

### Key Social Performance Indicators

	Unit	2020	2021	2022
Number of employees worldwide	People	17251	22864	23587
Total staff training hours	10000 hours	58	97.5	60
Average staff training hours	10000 hours	33.6	42.6	25.4
Child labor	%	0	0	0
Forced or compulsory labor	Cases	0	0	0
Wages of workers for regular shifts	%	100	100	100
Deaths in Service	Cases	0	0	0
Occupational disease cases	Cases	0	0	0
Safety education coverage	%	100	100	100
Number of people covered by domestic distributor training	People	2023	2600+	5600+
R&D investment	RMB 100 million	29.98	34.52	38.83
Coverage rate of new suppliers screened by environmental standards	%	/	95	95.75
Number of new patents during the reporting period	pcs	610	762	1322
Number of new software copyrights during the reporting period	pcs	99	61	83
Number of new trademarks during the reporting period	pcs	80	35	53
Cumulative number of patents and software copyrights	pcs	2751	3574	4979

## Appendix 3 GRI Standards Index

Standards	Disclosure Topics/ Disclosure Items	Disclosure Item	Chapter index	Page index
<b>GRI 2: General Disclosures 2021</b>				
The organization and its reporting practices	2-1	Organizational details	Introduction to Dahua	6-9
	2-2	Entities included in the organization's sustainability reporting	About This Report	4
	2-3	Reporting period, frequency and contact point	About This Report	4
	2-4	Restatements of information	Appendix 2: Key Performance Indicators for Sustainable Development	59-60
Activities and workers	2-6	Activities, value chain and other business relationships	Innovation and Research	38
			Supplier	46-48
			Open ecosystem	49
	2-7	Employee	Employee	32-37
			Appendix 2: Key Performance Indicators for Sustainable Development	59-60
Governance	2-9	Governance structure and composition	Corporate governance structure	51
	2-10	Nomination and selection of the highest governance body	Corporate governance structure	51
	2-12	Role of the highest governance body in overseeing the management of impacts	Corporate governance structure	51
	2-13	Delegation of responsibility for managing impacts	Corporate governance structure	51
	2-14	Role of the highest governance body in sustainability reporting	Corporate governance structure	51
			About This Report	4
Strategy, policies and practices	2-22	Statement on sustainable development strategy	Statement from the Chairman	5
			ESG Management	10-12
	2-23	Policy commitments	Compliance with Law	54-56
			Corporate Governance	51-52
			Employee	32-37
			Supplier	46-48
	2-24	Embedding policy commitments	Compliance with Law	54-56
			Corporate Governance	51-52
			Employee	32-37
			Supplier	46-48
	2-25	Processes to remediate negative impacts	Compliance with Law	54-56
	2-26	Mechanisms for seeking advice and raising concerns	Compliance with Law	54-56
	2-27	Compliance with laws and regulations	No major violations occurred	
2-28	Membership of the Association	Appendix 1: Enterprise Honor	58	
Interested Party Participation	2-29	Approach to stakeholder engagement	Interested Party Participation	11
	2-30	Collective Bargaining Agreement	Human Rights Management	32

## Appendix 3 GRI Standards Index

Standards	Disclosure Topics/ Disclosure Items	Disclosure Item	Chapter index	Page index
<b>GRI 3: Material Topics 2021</b>				
Material Topics	3-1	Process to determine material topics	Focus on Substantive Issues	12
	3-2	List of material topics	Focus on Substantive Issues	12
<b>Economy</b>				
GRI 201: Economic Performance 2016	3-3	Management of material topics	Compliance with Law	54-56
			Supplier	46-48
	201-1	Economic value directly generated and distributed	Appendix 2: Key Performance Indicators for Sustainable Development	59-60
	201-3	Defined benefit plan obligations and other retirement plans	Compensation and welfare	31
GRI 203: Indirect Economic Impacts 2016	3-3	Management of material topics	Empowerment by Digital Intelligence	15-21
			Public Welfare Activities	50
	203-1	Infrastructure investments and services supported	Empowerment by Digital Intelligence	15-21
			Public Welfare Activities	50
203-2	Significant indirect economic impacts	Empowerment by Digital Intelligence	15-21	
		Public Welfare Activities	50	
GRI 204: Procurement Practices 2016	3-3	Management of material topics	Supplier	46-48
GRI 205: Anti-corruption 2016	3-3	Management of material topics	Compliance with Law	54-56
	205-2	Communication and training of the policies and procedures of anti-corruption and anti-commercial bribery	Compliance with Law	54-56
GRI 206: Anti-competitive Behavior 2016	3-3	Management of material topics	Compliance with Law	54-56
GRI 207: Tax 2019	3-3	Management of material topics	Compliance with Law	54-56
	207-1	Approach to tax	Compliance with Law	54-56
	207-2	Tax governance, control, and risk management	Compliance with Law	54-56
	207-4	Country-by-country reporting	Compliance with Law	54-56
<b>Environment</b>				
GRI 301: Materials 2016	3-3	Management of material topics	Environmental Management Systems	13-15
			Green Operation	23-30
	301-3	Reclaimed products and their packaging materials	Green Operation	23-30
Appendix 2: Key Performance Indicators for Sustainable Development			59-60	
GRI 302: Energy 2016	3-3	Management of material topics	Energy Management	28-29
	302-1	Energy consumption within the organization	Appendix 2: Key Performance Indicators for Sustainable Development	59-60
	302-4	Reduction of energy consumption	Energy Management	28-29
	302-5	Reduction of energy demand for products and services	Environment-friendly and Low-carbon Products	22
GRI 303: Water and Effluents 2018	3-3	Management of material topics	Water Management	30
	303-1	Interactions with water as a shared resource	Water Management	30
	303-4	Water discharge	Water Management	30

## Appendix 3 GRI Standards Index

Standards	Disclosure Topics/ Disclosure Items	Disclosure Item	Chapter index	Page index
GRI 305: Emissions 2016	3-3	Management of material topics	Emission Management	30
	305-1	Direct (Scope 1) GHG emissions	Appendix 2: Key Performance Indicators for Sustainable Development	59-60
	305-2	Energy indirect (Scope 2) GHG emissions	Appendix 2: Key Performance Indicators for Sustainable Development	59-60
	305-5	Reduction of GHG emissions	Environment-friendly and Low-carbon Products	22
Energy Management			28-29	
GRI 306: Waste 2020	3-3	Management of material topics	Solid Waste Management	30
			Green circulation	27
	306-1	Waste generation and significant waste-related impacts	Solid Waste Management	30
			Green circulation	27
	306-2	Management of significant waste-related impacts	Solid Waste Management	30
			Green circulation	27
306-3	Waste generated	Appendix 2: Key Performance Indicators for Sustainable Development	59-60	
306-5	Waste directed to disposal	Appendix 2: Key Performance Indicators for Sustainable Development	59-60	
GRI 308: Supplier Environmental Assessment 2016	3-3	Management of material topics	Supplier	46-48
	308-1	New suppliers that were screened using environmental criteria	Supplier	46-48
	308-2	Negative environmental impacts in the supply chain and actions taken	Supplier	46-48
<b>Social</b>				
GRI 401: Employment 2016	3-3	Management of material topics	Employee	32-37
	401-1	New employee hires and employee turnover	Employee	32-37
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee	32-37
	401-3	Parental leave	Employee	32-37
GRI 402: Labor/Management Relations 2016	3-3	Management of material topics	Employee	32-37
GRI 403: Occupational Health and Safety 2018	3-3	Management of material topics	Occupational health management	36-37
	403-1	Occupational health and safety management system	Occupational health and safety management system	31
	403-2	Hazard identification, risk assessment, and incident investigation	Occupational health management	36-37
	403-3	Occupational health services	Occupational health management	36-37
	403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational health management	36-37
	403-5	Worker training on occupational health and safety	Occupational health management	36-37
	403-6	Promotion of worker health	Occupational health management	36-37
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health management	36-37
	403-8	Workers covered by an occupational health and safety management system	Occupational health management	36-37
	403-9	Work-related injuries	Occupational health management	36-37
403-10	Work-related ill health	Occupational health management	36-37	

## Appendix 3 GRI Standards Index

Standards	Disclosure Topics/ Disclosure Items	Disclosure Item	Chapter index	Page index
GRI 404: Training and Education 2016	3-3	Management of material topics	Employee	32-37
	404-1	Average hours of training per year per employee	Employee	32-37
	404-2	Programs for upgrading employee skills and transition assistance programs	Employee	32-37
	404-3	Percentage of employees receiving regular performance and career development reviews	Employee	32-37
GRI 405: Diversity and Equal Opportunity 2016	3-3	Management of material topics	Employee	32-37
	405-1	Diversity of governance bodies and employees	Employee	32-37
GRI 406: Non-discrimination 2016	3-3	Management of material topics	Employee	32-37
GRI 407: Freedom of Association and Collective Bargaining 2016	3-3	Management of material topics	Employee	32-37
GRI 408: Child Labor 2016	3-3	Management of material topics	Employee	32-37
GRI 409: Forced or Compulsory Labor 2016	3-3	Management of material topics	Employee	32-37
	3-3	Management of material topics	Security Practices	37
GRI 410: Security Practices 2016	3-3	Management of material topics	Security Practices	37
	410-1	Security personnel trained in human rights policies or procedures	Security Practices	37
GRI 413: Local Communities 2016	3-3	Management of material topics	Cooperation and Exchanges	50
			Public Welfare Activities	50
	413-1	Operations with local community engagement, impact assessments, and development programs	Cooperation and Exchanges	50
			Public Welfare Activities	50
GRI 414: Supplier Social Assessment 2016	3-3	Management of material topics	Supplier	46-48
	414-1	New suppliers that were screened using social criteria	Supplier	46-48
	414-2	Negative social impacts in the supply chain and actions taken	Supplier	46-48
GRI 416: Customer Health and Safety 2016	3-3	Management of material topics	Innovation and Research	38
			Cyber Security	39-41
			Quality control	42-43
			Customer satisfaction	45
	416-1	Assessment of the health and safety impacts of product and service categories	Innovation and Research	38
			Cyber Security	39-41
			Quality control	42-43
			Customer satisfaction	45
GRI 417: Marketing and Labeling 2016	3-3	Management of material topics	Customer	44-45
			Open ecosystem	49
	417-1	Information and identification requirements of products and services	Customer	44-45
			Open ecosystem	49
GRI 418: Customer Privacy 2016	3-3	Management of material topics	Cyber Security	39-41



## ENABLING A SAFER SOCIETY AND SMARTED LIVING

This document is a translated version of the Chinese version 2022 Environmental, Social and Governance Report (“2022 年度环境、社会及管治报告”), and the published ESG report in the Chinese version shall prevail.

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