

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Hangzhou Hikvision Digital Technology Co., Ltd.



Table of Contents	
About This Report	
Letter from the Management	
Letter from Chief Compliance Officer	
Chapter 1 Our Company at A Glance.	
<u>1.1 Company Profile</u>	<u>9</u>
1.2 Operational Performance	<u> 15</u>
1.3 Corporate Governance.	<u> 15</u>
1.4 ESG Management	<u></u>
Chapter 2 Innovative Development for Excellence	26
2.1 Committed to Innovation and R&D	
2.2 Quality Assurance	29
2.3 Cybersecurity.	34
Chapter 3 Empowering Customers' Success for Win-Win Results	39
3.1 Provide Quality Services	39
3.2 Protect User Privacy	42
3.3 Listen to Customer Feedback	43
3.4 Contribute to Industrial Ecosystem	45
3.5 Supply Chain Development.	46
Chapter 4 Serve the Society to Create a Better Future	49
4.1 Dedicated to Public Welfare	49
4.2 Help to Build Harmonious Ecology	51
4.3 Build a Smart City Together	56
4.4 Embrace Intelligent Manufacturing	61
Chapter 5 Talent-Focused, Growing Together	63
5.1 Protect the Rights and Interests of Employees	63
5.2 Talent Training	65
5.3 Safeguard Health and Safety	

5.4 Empathize Employees' Well-being	71
Chapter 6 Pursue Green Operation, Empower Sustainable Ecosystem	76
6.1 Build Management System 7	76
6.2 Practice Green Operation	78
6.3 Reasonably Reduce Emissions	31
6.4 Create Environmental-friendly Culture	<u>35</u>
Appendix Report index: GRI Standards	38

#### **About This Report**

This report is the first Environmental, Social and Governance (hereinafter referred to as "ESG") Report of Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as "Hikvision", "we" or "the Company"). This report covers Hikvision's performance and guidelines on ESG issues with a focus on the concerns of stakeholders and how the Company could achieve sustainable development in the environmental, social and economic aspects.

#### Scope

This report covers the data and information of the Company from January 1 to December 31, 2018 (hereinafter referred to as the "reporting period"). Some information covers in or prior to 2017. This report covers Hikvision and its subsidiaries.

#### **Basis of Preparation**

This report is made reference to *GRI Standards* issued by the Global Reporting Initiative (GRI) (hereinafter referred to as "GRI Standards") in 2016, and *Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies*. This report is in line with a set of established procedures, including identifying and ranking relevant stakeholders, identifying and ranking material ESG issues, determining the scope of reporting, collecting relevant data, preparing the report based on the data, and viewing the data.

#### **Data Source and Reliability Assurance**

Information and cases included in this report are mainly from the Company's statistical reports and relevant documents. The Company promises that this report does not contain any false or misleading statement and is responsible for the authenticity, accuracy, and completeness of its contents.

#### Access and Feedback

This report is available in Simplified Chinese and English. For download, please visit www.cninfo.com.cn

#### **Confirmation and Approval**

After confirmation by management, this report was approved by the Board of Directors on April 18<sup>th</sup> 2019.

We highly value the opinions from stakeholders and appreciate your feedback us through the following contact methods. Your comments will help us further improve this report and our ESG performance.

Contact: 0571-88075998

Website: www.hikvision.com

Board Office: hikvision@hikvision.com

Investor Relations: ir@hikvision.com

Address: No. 518 WuLianWang Street, Binjiang District, Hangzhou

#### Letter from the Management

Throughout history, no matter how science and technology progressed, business models updated, society, economy and culture evolved, pursuing security, innovation and sustainable development has always been the eternal theme of the world, and as well, the social responsibility and mission that the Company should undertake. In 2018, the explosive development and integration of new technologies such as artificial intelligence, Internet of Things, cloud computing, and big data has improved our production and life, prompting the whole society to enter a new cycle of revolution. The Company continues to increase investment in technology R&D, and develops intelligent Internet of Things technology with video as its core, keeps promoting social security and intelligence development to enhance the ability to understand the world and make rational decisions for the public. At the same time, while striving for business success, the Company is also pursuing the harmony between the Company and society, between people and nature. Committed to the philosophy of sustainable development, we have been taking into account the macro-planning and implementation of corporate environmental, social and governance management, and combine corporate values with social progress and improvement of people's livelihood to deepen the integration of corporate business and social responsibility.

For a long time, the Company has been practicing the core values of "dedication to clients' success, value oriented, integrity and down-to-earth, pursuit of excellence".

The first is centered on customer needs. We adhere to the engineering culture and the spirit of artisans, continue to promote the R&D of technology and products, and improve product quality. Meanwhile, we regard open integration as a new business pattern in the era of intelligence, and establish a complete open system covering products, services and technologies, and work together with partners including suppliers to promote industrial development.

The second is highly focused on the social responsibility value for products and solutions. As an important technology, product and solution provider for "smart city" establishment, the Company continues to explore innovative intelligent solutions in the areas of public security, transportation, finance, education, manufacturing and other related aspects of social economy and people's lives. We will create a safe, efficient, convenient and happy life for the public with intelligent methods, and strive to make more people feel the support of science and technology for society and environment.

The third is to build a harmonious team. The Company attaches great importance to employee rights and care, and has established a series of employee training and development management systems to help employees improve their knowledge and skills to meet current and future job requirements, thereby enhancing the overall operational efficiency and competitiveness of the Company. We advocate rewarding employees based on their contributions, providing employees with competitive pay package and perfect welfare guarantees, establish long-term incentive policies for sustainable development, and achieve a win-win situation for both employees and the Company.

The fourth is to practice the concept of green development and help build a sustainable ecosystem. The Company not only conserves energy and reduces emissions in daily operation, but also seeks clean technology opportunities in its own products to improve the comprehensive utilization efficiency of resources, protect the natural ecological environment, and cope with climate change.

The fifth is caring and giving back to the society. In the process of development, we never forget our social responsibilities, treat people with sincerity, and develop businesses with integrity. We always combine corporate social responsibility with our own business development. We are always grateful and strive to give back to the society. The Company continues to practice social welfare and promotes ecological protection and harmonious development of the society through the strengths of science and technology.

In the future, the Company will continue to promote diversified development by virtue of video technology and artificial intelligence, enable individuals and families to control real-time security and empower innovators to discover deep insights, provide multi-dimensional information for decision makers, and lay the foundation for building and developing smart society. We will conduct business operations in a more responsible way, motivate talents and management teams more effectively, strengthen communication with stakeholders more sincerely and transparently, and continue to enhance the Company's core capabilities in sustainable development.

Hikvision empowers visionaries to see the future. See far, go further!

April 2019

#### Letter from Chief Compliance Officer

Hikvision is committed to being a respected, global company that contributes to the secure and sustainable development of society.

Complying with local, national and international laws is the hallmark of our global business strategy. We constantly work to deepen our understanding of statutes and regulations – particularly, but without limitation, rules applying to data protection, export controls, fair competition and anti-commercial bribery. In December 2018, the Company created a new Compliance Department to promote the establishment of standardized approach to compliance.

Over the past year, there have been numerous reports about ways that video surveillance products have been involved in human rights violations. We read every report seriously and are listening to voices from outside the Company. We are taking a hard look at our products and business. As part of this process, we have recently commissioned an internal review of our operations by the U.S. law firm, Arent Fox LLP, mandating it to look into relevant transactions so the Company can enhance its screening standards to better protect human rights. Arent Fox will also help us improve the policies that will help ensure human rights compliance going forward. As part of this effort, a high-level team from Arent Fox has already traveled to China twice.

Technological innovation is the driving force of our Company. We provide high quality products and services to create value for customers. Video technology plays an increasingly important role in nearly all aspects of life today, from national security, law enforcement, business, education, art, culture, personal and property protection, and social networking. Our company has made an important contribution to the safety and development of humankind. At the same time, the Company is also keenly aware of the sensitivity of video technology. Through the joint efforts with external consultants, we hope to stick to original aspiration for the benefits of humankind and to deliver the goodwill that technology can provide to our valued partners.

See far, go further!

Huang Fanghong

April 2019

# 2018 Performance Summary »»



#### Chapter 1 Our Company at A Glance

As an Internet of Thing (IoT) solution and big data service provider with video as its core competence, Hikvision advances the core technologies of video and audio encoding, video image processing, and related data storage, as well as cutting-edge technologies such as cloud computing, big data, and deep learning. We provide professional solutions and big data services for various sectors, including public security, transportation, judiciary, financial services as well as intelligent buildings. Hikvision extended its business to various industries such as smart home, industrial automation, and automotive electronics based on accumulation of video technologies to explore channels for sustainable long-term development. Thanks to effective corporate governance, Hikvision not only made breakthrough in business performance, but also won extensive recognitions from all sectors of society. Looking forward to the future, we are committed to become a well-respected world-class company.

#### **1.1 Company Profile**

First established as an audio-video compression board provider in November 2001, Hikvision has gradually developed into a provider of a board range of products and solutions covering the demands of security and visualized management of the entire video surveillance industry. Hikvision is a witness, practitioner and important promoter of video surveillance in digitalization, HD networking, and intelligence. We provide global clients with integrated high-quality security, data intelligent management and AI (artificial intelligence) empowered solutions based on a client satisfaction-oriented management system.

According to an IHS report, Hikvision has been ranked as global No. 1 in the video surveillance industry for seven consecutive years, with 22.6 percent<sup>1</sup> of the global video surveillance market share. Furthermore, in the "A&S Security 50" list published by A&S Security Automation, Hikvision has been ranked No.1 in the world for three consecutive years.

<sup>&</sup>lt;sup>1</sup> Based on the global video surveillance market report published by IHS Markit in June 2018, with the 2017 data as the statistical basis.



#### **Business Layout**

Video, the most informative type of perception, has become an important bridge connecting the physical world to the digital world supported by AI technologies. It promotes the Internet of Everything and helps industry clients to achieve intelligent industrial upgrading with AIOT (AI+IoT) as the core. Hikvision combines AI, video technology and the multi-scenario business demands together to expand the use of video technology from security to many other vertical markets, so as to help more clients to improve business efficiency and management capbility, and facilitate the transformation and upgrading of traditional industries.

As of the end of the reporting period, the Company has established 32 provincial business centers/level one branches in Mainland China and 44 branches overseas. Hikvision's products and solutions have been applied in more than 150 countries and regions, significantly facilitating major projects such as G20 Hangzhou Summit, Beijing Olympics, Expo 2010, APEC Summit, Nuremberg High-speed Rail Station in Germany, and Seoul Safe City in South Korea.

32 provincial operation centers /First-level branches in Mainland China 44 overseas branches

#### **Corporate Philosophy**

Faced with opportunities and challenges arising from technological revolution, industrial integration and globalization, we have always been committed to "empower vision for the security and growth of the world." In order to achieve our sustainable development goals, we are ready to work with our clients, partners and professional organizations to improve the ability of mankind in understanding the world and making scientific decisions. We will provide new vision, new insights and new wisdom to stakeholders to collaboratively safeguard public security, promote sustainable development, and create a safer and better future.

Looking ahead, we will continue to unleash the potential of computer vision to empower smart security, smart transportation, smart manufacturing, smart education, smart business, smart tourism, smart home, etc. We will provide brand new solutions to lay the foundation for a smart society.



#### **Corporate Honors**

As we create economic value, we also strive to undertake social responsibilities, act as a good corporate citizen and earn public respect. During the reporting period, we continued to optimize management in terms of product quality, collaborative business relationship, social welfare, employee development and environmental protection with our own businesses competence and development. We actively communicate with various stakeholders, further improve corporate governance, and strive for sustainable development of economy, society and environment.

Quality Awards

The Awards	From
National Quality Benchmark	China Association for Quality
National Quality Inspection Stable Qualified	China Association for Quality Inspection
Products	
National Typical Quality Integrity	China Association for Quality Inspection
Benchmark Enterprise	
National Leading Brand in Quality	China Association for Quality Inspection

## Awards for Security Products

The Awards	From
a&s Top 10 Security Brands in China	a&s magzine
2018-Ranked Top 10 in Access Control	
a&s Top 10 Security Brands in China	a&s magzine
2018-Ranked Top 10 in Alarm	
a&s Top 10 Security Brands in China	a&s magzine
2018-Ranked Top 10 in AI Application	
a&s Top 10 Security Brands in China	a&s magzine
2018-Ranked Top 10 in Intercom/ Smart	
Home	

# > Awards in Recognition of Industrial Position

The Awards	From
2018 Top 10 Contribution to Innovation in	China Information Technology Industry
Chinese Electronic Information Industry	Federation
2018 Top 50 Social Contribution in Chinese	China Information Technology Industry
Electronic Information Industry	Federation
2018 Top 100 Chinese Electronic	China Information Technology Industry
Information Company	Federation
2018 Top 100 Chinese Enterprises in	China Information Taskuslassy Industry
Software and Electronic Information	China Information Technology Industry Federation
Services	reactation

# > <u>Awards for Science and Technology Innovation</u>

The Awards	From
Second Prize of State Technological	State Council of the People's Republic of
Invention Award	China
Second Prize of Zhejiang Science and	The People's Government of Zhejiang
Technology Awards	Province
Zhejiang Patent Gold Award	Science Technology Department of Zhejiang
	Province
Top 100 High-tech Enterprise of Innovation	71
Capacities	Zhejiang High-tech Enterprise Association

# > <u>Awards for Manufacturing Capacities and Services</u>

The Awards	From
	Ministry of Industry and Information
National Individual Champion	Technology of the People's Republic of
Manufacturing Enterprise	China
	China Federation of Industrial Information
a&s Top 100 Integrators Award	a&s magzine
	National Commodity After-service
Five-Star Certificate for After-Sales Services	Evaluation Compliance Certification
	Committee
	Beijing Sky Certification

# > <u>Awards for Environmental Protection</u>

The Awards	From
CEC 024-2018 Five-Star Rating on Green	Alliance of Green Consumption and Green
Supply Chain Assessment for Security	Supply Chain
Camera	
CEC 022-2018 Five-Star Rating on Green	Alliance of Green Consumption and Green
Supply Chain Assessment for Disk Storage	Supply Chain

# Awards for Social Responsibility

The Awards	From
National "Value the Contract, Define the	State Administration for Industry and

Credit" Enterprise	Commerce of the People's Republic of China
Zhejiang Province "Value the Contract,	Zhejiang Administration for Industry and
Define the Credit" Enterprise	Commerce
Enterprise of Responsibility and Valuable Innovation in Electronic Information Industry	Chinese Electronics Standardization Association
	Quality and Technology Supervision of
Zhejiang Quality Education Social Practice	Zhejiang Province
Base for Primary and Middle School Student	Department of Education of Zhejiang
	Province

## Capital Market Awards

The Awards	From
A-level Evaluation on Information	
Disclosure Assessment of Listed Companies	Shenzhen Stock Exchange
in Small and Medium Enterprise Board	
Golden Horse Award for Listed Innovation	Security Deily
Tech Company	Security Daily
Top 50 Chinese Company Listed on the	
SME Board by Value / Top 10 Management	Security Times
Team of Chinese Company Listed on the	New Fortune
SME Board	
Tors 10 Doord of Directors in China	Fortune (China)
Top 10 Board of Directors in China	Aon Hewitt Investment Consulting

# Other Awards

The Awards	From
First Prize in the 2018 Video Behaviour	CVPR (International Conference on
Recognition Challenge "Full Track" category	Computer Vision and Pattern Recognition)
National Top 100 Quality Integrity	General Administration of Quality
Benchmarking Demonstration Enterprises	Supervision, Inspection and Quarantine
2018 China Top 50 Big Data Enterprises	China Electronics Information Industry
	Development Research Institute
	China Big Data Industry Ecology Alliance
Silver Award for Innovation in China	
International Industry Fair	China International Industry Fair

#### **1.2 Operational Performance**

During the reporting period, we continued to penetrate the market, focus on client value, and seek innovation-powered development. According to our medium and long-term strategic plan, we increased our inputs in R&D to promote video-centered businesses. Moreover, we continuously improved our management capabilities and adhered to sustainable development strategies to further increase our business volume as well as profitability. With solid development of operational businesses and improving economic performance, the Company continues to create sustainable returns to investors and society as it develops itself.



\* Payment to government includes Hikvision's total tax payment in each country/region excluding deferred taxes.

#### **1.3 Corporate Governance**

Sound corporate governance and strict risk management are important pillars for the healthy development of a company. We are committed to creating a transparent, honest and compliant operating atmosphere. We aim to establish an effective accountability mechanism and conform to regulations against corruption, monopoly, and unfair competition to protect the fair interests of the Company as well as our clients and shareholders.

In strict accordance with *Company Law of the People's Republic of China, Securities Law of the People's Republic of China, Code of Corporate Governance of Listed Companies, Stock Listing Rules of the Shenzhen Stock Exchange, Guidelines of the Shenzhen Stock Exchange for the Standard Operation of Listed Companies on the Small and Medium-sized Enterprise Board,* and other relevant laws and regulations as well as regulatory requirements of supervision departments, we aim to create an efficient corporate governance structure in order to protect the interests of shareholders and other stakeholders with our management system, and continuously enhance the Company's value and management transparency.



During the reporting period, independent directors of the Company followed our operation and performed their duties independently in accordance with relevant laws and regulations, offering professional opinions on our systems and routine operational decision-making, in order to improve our supervision mechanism and to protect the interests of the Company, its shareholders, and public shareholders in particular.

The Company held three general meetings of shareholders during the reporting period. All general meetings adopted a combination of on-site voting and online voting to ensure that shareholders are able to exercise their rights. In 2018, the general meetings considered and approved the appointment and removal of members of the fourth Board of Directors and Board of Supervisors as well as 20 proposals, including *Proposal on the Amendment to the Authorization Management System*, 2018 Incentive Restricted Stocks Plan (Revised Draft) and Summary, and Measures for the Implementation of Restricted Stocks in 2018, etc. In 2018, the Company held 10 board meetings and considered and approved 56 proposals in total.

For more information on corporate governance, please refer to the Corporate Governance section of the Company's 2018 Annual Report.

#### **Integrity and Compliance Operation**

To operate with integrity and compliance is the foundation for the survival of a company and the cornerstone of its sound and sustainable development. Hikvision unswervingly pursues the concept of integrity and compliance management, abides by business ethics, strictly complies with the applicable laws and regulations as well as related provisions in different countries and regions, and learns from international rules and industry leading practice to ensure solid global operation. We have a professional legal team to investigate, identify and track laws and regulations applicable to our operation, and to organize and assist various departments of the Company to perform compliance risk assessments, implement compliance initiatives and optimize compliance mechanisms. Furthermore, we work actively to establish long-term cooperation with well-known, experienced domestic and foreign law firms.

In order to further regulate employee business behavior, and strengthen professional ethics education, we have established Integrity and Ethical Compliance Committee. The committee is directed by the head of the internal control department, the head of the human resources department, the employee supervisor, and the manager of the internal audit department as members. They are mainly responsible for dealing with employees violating laws and regulations, internal rules and regulations of the Company, and the Company's moral standards and committing corruption.

In order to enhance the level of compliance in a more systematical way and cater for our global expansion, during the reporting period, we improved our organizational structure, established a dedicated compliance department, and appointed the Company's Chief Compliance Officer.

#### **Code of Business Conduct**

Integrity and trustworthiness is the core value of Hikvision. We require employees to comply with relevant laws and regulations and high ethical standards in business activities. In 2012, we issued the Hikvision Code of Business Conduct, requiring employees to comply with the laws in business activities and act in an ethical way conforming to principles of integrity, fair competition, and incorruptibility. In 2014, in light of the changes to our business environment and refined management, we thoroughly revised the 2014 Hikvision Code of Business Conduct to form Hikvision Code of Business Conduct for Employees (hereinafter referred to as the "Code of Business Conduct") and further revised it respectively on March 2017 and November 2017. The Code of Business Conduct stipulates the general rules Hikvision employees need to follow in business activities and requires employees to always comply with laws and regulations, work honestly, devote themselves to their duties, and be honest in performing their duties. The Code of Business Conduct covers more than 10 aspects, including working environment, corporate assets, intellectual property rights, fair competition, impartiality and integrity, gift and hospitality, conflict of interest, and insider trading. At the same time, we ask employees to sign, learn, master and comply with the requirements of our Code of Business Conduct. We made the Code of Business Conduct one of the documents that new employees need to learn and sign, and asked employees to check and review how they are following it as they perform their duties.

#### **Banning Corruption and Commercial Bribery**

Hikvision takes active steps to create a business environment and working atmosphere of honesty and integrity, and performs "transparent sales" and "transparent procurement". The *Code of Business Conduct* requires employees to be honest and self-disciplined in business

activities and personal lives. It specifies that employees should comply with laws and regulations as well as ethical standards and common business practices when dealing with clients, partners, or suppliers and as well as gifts or hospitality. Employees shall not give or accept any gift or hospitality that exceeds reasonable extents or violate the Company's policies. Employees shall not engage in bribery or anything reasonably suspected to be bribery. Moreover, the Company performs financial procedures in accordance with applicable accounting laws and regulations and accounting standards. The Company supervises business conducts through financial systems and control processes on a regular basis. As for violation of the Code of Business Conduct, the Company has established mechanisms for complaint/reporting, investigation and so on, and formulated Management Measures for Complaint and Reporting, which identifies procedures for handling complaints and measures to protect whistleblowers. We encourage employees and relevant parties to report violations of laws, regulations or rules, frauds and conducts that damage the interests and image of the Company to promote transparency and steady development. Once a violation is confirmed, we will hold relevant parties accountable according to internal rules, or report the case to judicial authorities in accordance with relevant legal procedures. Furthermore, we will demand the responsible person to be responsible for rectification of the exposed internal control issues to promote management improvement.

Hikvision demands that all suppliers and distributors sign an Honesty and Integrity Agreement, and incorporate anti-corruption and anti-commercial bribery clauses into contracts with other clients and partners. We have set up complaint/reporting channels on our website and placed a *Letter to Suppliers* in the reception halls of our office buildings to show our attitude and determination to eliminate corruption and commercial bribery to all our suppliers.

Hikvision continues to foster a culture of integrity in order to enhance the ethical awareness of employees and internalize Company values and business ethics into employee personal code of conduct. We stress the importance of honesty and trustworthiness to new employees since their very first day. Moreover, we offer new employees a dedicated anti-corruption course as part of their orientation training. In 2018, we provided corporate culture training on anti-corruption for 9,326 new employees. In 2018, we held a dedicated meeting on incorruptibility for middle-level managerial personnel and above, employees assuming key posts, and their family members. Representatives of employees' family members issued an "*Integrity Family Proposal*" at the meeting. All employee family members attending the meeting signed a *Letter of Commitment on Integrity*. We aim to build a more incorruptible atmosphere through corporate-family interaction. In 2018, a special story titled "*Integrity: Anti-corruption Efforts*" was published on *View*, our internal magazine. Besides, we conducted various forms of integrity education and publicity including making anti-corruption posters, asking employees to do self-examination on a wide scale, and

organizing key employees to attend court trials on economic crimes as a lecture, to enhance the awareness of integrity.



#### **Fair Competition**

Hikvision advocates fair and equal competition and abides by applicable laws and regulations on fair competition and anti-monopoly. As required by the *Code of Business Conduct*, all employees should participate in market competition in a legal and ethical manner. We actively carry out research on anti-monopoly legislation, law enforcement and judicial practice at home and abroad, and conduct anti-monopoly compliance training for key personnel to achieve more effective management of employee business behavior. In the reporting period, we established a selective distribution system in the UK and implemented a Minimum Advertised Price (MAP) policy in the US to comply with local laws and regulations and to optimize the distribution channel management mechanism in a more open and transparent way, in order to sustain normal, productive market competition orders.

#### **Export Control**

Hikvision attaches great importance to export control requirements related to our global operation. We follow laws and regulations on export control at home and abroad, and conduct compliance construction in various aspects including policy, organization, process, and execution. We have developed an internal management system for export control and

established export examination procedures covering classification and identification of raw materials and finished products, customer review, end-use examination, and risk elimination, etc. We ensure the effectiveness of our internal control mechanism by developing and continuously optimizing the information management method. We also conduct promotion and training on departments and personnel related to export controls. In addition, we corporate with internationally renowned external law firms regarding export control compliance to continuously improve our compliance and management capabilities.

#### **Human Rights Governance**

Hikvision respects the human rights as set forth in the Universal Declaration of Human Rights, International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights in commercial practice. Meanwhile, we will incorporate these provisions into our business procedures and policies in accordance with the UN Guiding Principles on Business and Human Rights Framework to enhance the value of our business activities.

In 2018, the Company has appointed the Chief Compliance Officer, responsible for promoting the compliance construction covering areas of human rights protection, data security and privacy protection as well as social responsibility, etc. We have a professional legal team conducting investigating, recognition and tracking the laws and regulations applicable to global operation of the Company and carrying out the construction of human rights compliance with the situation of the company.

#### **1.4 ESG Management**

The Company always regards ESG management as an important part of its daily operation and management. We continuously integrate the concept of ESG responsibility into our business strategy, adhere to honest management and scientific development, and execute corporate social responsibility and sustainable development ideas in all aspects of operation to take on more social responsibilities with a high sense of mission and responsibility.

#### **Stakeholder Identification and Communication**

The Company always seeks to have diverse communication and contacts with all stakeholders, share ideas and experiences under bilateral, transparent and regular communication mechanisms, and discuss issues closely related to our development. We hope that all stakeholders can achieve win-win results based on mutual trust and respect.

In the reporting period, we identified the following six categories of stakeholders who have decision-making power and influence on the Company:



Through communication with stakeholders, we came to understand their concerns, and examined the results of relevant actions on a regular basis. Also, we improved communication channels to better listen to stakeholders. The following table lists the topics of interest of different stakeholder groups in the reporting period.

Stakeholder	Issues	Way of	Frequency
	Concerned	Communication/Response	
Shareholder	Economic growth	Regular report/temporary	Regular/Irregular
/Investor	Sustainable	announcement	Regular/Irregular
	operation	Site inspection	Irregular
	R&D	Telephone	Irregular
		E-mail	Regular/Irregular
		Information session/roadshow	
Government	Tax payment	Regular report/temporary	Regular/Irregular
and Regulatory	Employment	announcement/letter	Irregular
	promotion	Site inspection	Regular/Irregular
	Environmental		
	protection		

Client	R&D	Hotline	Irregular
	Product safety	Information feedback	Irregular
	and quality	Satisfaction survey	Regular/Irregular
	Privacy and information		
	security		
Employee	Wages and	Health check-up	Regular
	benefits	Professional training	Regular/Irregular
	Professional development	Activities	Regular/Irregular
	Benefits		
Partner	Good faith	Public tendering	Irregular
	Supplier	Site inspection	Regular/Irregular
	management	Suppliers' meeting	Regular/Irregular
	Privacy and		
	information security		
Community	Community	Community activities	Irregular
	communication	Media coverage	Regular/Irregular
	Environmental protection	Interview and investigation	Irregular
	Product safety		
	and quality		

The Company attaches great importance to the opinions and feedback of stakeholders and is committed to establishing open and transparent communication channels for stakeholders. The Company has maintained long-term effective communication with regulatory bodies, actively cooperating with and responding to relevant work. Moreover, in the reporting period, the Company carried out a number of investor relations activities, and had in-depth communications with investors in One-on-One, One-on-multi, small group Meetings, and other ways, and formed good interactions.



#### **Materiality Assessment**

During the reporting period, Hikvision conducted stakeholder surveys including in-depth interviews in order to understand stakeholders' opinions and expectations of the Company's response to and disclosure of economic, environmental, social and governance issues. The surveys provide a strong basis for our long-term ESG strategy.

We perform materiality assessments in four steps. As shown in the figure below, we firstly identify material economic, environmental, social, and governance issues that may affect our business or stakeholders, rank the potential material issues in order of importance, after which we verify from the management perspective. Lastly, we review the materiality assessment procedures closely.



Through the assessment procedures above, we identified 8 issues of high importance, 14 topics of moderate importance, and 3 topics of relatively low importance to the Company. The material ESG issues constitute the key parts of this report and are disclosed in later sections.

#### Matrix of Materiality of Hikvision 2018



Co	Corporate Management		
1	Economic growth		
2	Sustainable operation		
3	Anti-corruption		
4	Fair business practice		
5	Factory automation		

Environment		
11	Energy management	
12	Greenhouse gas emission reduction	
13	Reduction and management of toxic materials	

Employment			
6	Occupational health and		
0	safety		
7	Talent acquisition and		
7	development		
8	Diversification and		
	inclusiveness		
9	Employee benefits		
10	Respect for human rights		
10	and labor practice		

	<b>Operation Practices</b>
19	Product safety and quality
20	Management of clean technology opportunities
21	Privacy and information security

14	Chemicals management
15	Environmental protection
	management
16	Water resource
10	management
17	Disposal management
10	Influence of climate
18	change

22	Supply chain management
23	Shared development with
25	partners

Community				
24	Public charity activities			
25	Influence on local economy			

# **Chapter 2 Innovative Development for Excellence**

Hikvision adheres to the business philosophy of "professionalism, honesty, and integrity" and refers to the core corporate value of "dedication to clients' success, value oriented, integrity and down-to-earth, pursuit of excellence" as the code of practice to continuously advance video technology and serve the society. As for R&D and innovation, Hikvision continued to increase R&D investment and dedicated resources to the development and application of intelligent technologies. As for quality assurance, Hikvision upheld the principle of quality and integrity, and aimed to foster a quality culture. As for cybersecurity, Hikvision improved its management and control structure and conducted a number of explorations and inspections on the existing structure.

#### 2.1 Committed to Innovation and R&D

Strong R&D capability is one of the principal competitive edges we have maintained for a long time. It has also firmly guaranteed the continuing steady growth of our core business. Years of R&D practice not only provided us with a number of cutting-edge core technologies and patented technologies, but also a high-quality R&D team with rich experience in R&D and patent registration and ability to efficiently manage R&D process. These advantages have been successfully applied to our R&D practices which laid a solid foundation for sustainable development in the long run and become the core competitiveness of the Company. During the reporting period, the Company invested RMB 4,482.78 million in R&D, which accounted for 8.99% of the total operating income.



#### **R&D** Strategies and Strategic Objectives

In terms of technological innovation and product development, the Company follows a four-in-one operation mechanism integrating strategic planning, business planning, action planning and performance assessment, and focused on the layered decomposition of strategic objectives to achieve implementation.

To ensure the competency of our products and technologies, we strengthen control of the product development processes, and clarify the specifications and requirements of each link.



#### **Intellectual Property**

As we make progress in R&D, we are also committed to protecting intellectual property. We have a professional team to manage our intellectual properties including trademark, patent, and copyright, and deal with disputes in this regard. In accordance with applicable laws and regulations, we issued and implemented *Measures for the Management of Trademarks*, *Measures for the Management of Patent Awards*, and other internal rules and regulations.

		Number
New patents	Patent for invention	116
	Patent for utility model	270
	Design patent	464
	Total	850
New software copyrights		112
Newly registered trademan	ʻks	230
All patents	Patent for invention	513
	Patent for utility model	741
	Design patent	1,555
	Total	2,809
All software copyrights		881
All registered trademarks		1,070

During the reporting period, we reached a number of achievements concerning patent and software copyright:

Hikvision respects the intellectual property rights of others, abides by and applies international intellectual property rules, and takes a friendly approach to resolve intellectual property issues through negotiation, cross-licensing, business cooperation or other methods. In the event of malicious infringement, we will take legal actions to protect our intellectual property rights, such as complaint, civil litigation, or file the case to the judiciary divisions and ensuring criminal responsibility.

#### **R&D** Cooperation

Hikvision not only attaches importance to its own innovation and R&D but also extends collaboration in R&D with various institutions to seek intelligent solutions in various fields.



### 2.2 Quality Assurance

While seeking innovation in intelligent manufacturing R&D, we are deeply aware that managing and improving quality integrity is the cornerstone for the Company to be positioned well in the industry and society. To this end, we incorporate "integrity and pragmatism" into our corporate culture and core values, include quality integrity into our quality management system, and ensure product quality by virtue of rules and regulations. Our philosophy and core value on quality is to "contribute to clients' success and deliver the right products at the first time". Not only have we improved the quality of our own products through a well-established management and control system, we have also facilitated the formulation of national, industry and local standards to actively promote the industry development. During the reporting period, the Company contributed to the preparation of 17 national standards, 44 industry standards, and 15 local standards.

#### **Quality Management Architecture**

In the light of the guideline of "Leading Technology, Quality First, Customer Satisfaction, Continuous Innovation", the Company has established quality management goals (including quality integrity management goals, such as products failed in spot checks, customer satisfaction, rate of unpacking defective products, annual repair rate, etc.) for various departments. We analyze the achievement of quality management goals and the operation of the system each year to identify problems and make improvements. The Company established a Quality Management Committee as the highest division to guide and promote the Company's quality works. Its principal responsibility is to initiate, coordinate and institutionalize measures aimed at breakthrough quality improvement. Normal operation of the Quality Management Committee is a top-down approach to systematic quality improvement. Under the leadership of the Quality Management Committee, the Company has established a hierarchical quality management system that involves product development, implementation and after-sales. The quality management system is responsible for the execution of quality management functions.



In addition, the Company has established a quality accountability system, identifying the quality red line and quality standards to integrate quality responsibilities and requirements into daily work and engage all employees in quality management process.

#### **Quality Management System**

The Company have been developing its own quality management system in accordance with the requirements of ISO 9001 certification and quality management system since its establishment. We obtained the ISO 9001 certification in 2005 and remain it till now. In addition, we established a more comprehensive management system for specific processes and products to effectively satisfy the needs of customers. For example, the R&D process is certified by CMMI (Capability Maturity Model Integration)-Maturity Level 5 (the highest level). The measurement process is certified by ISO10012 Measurement Management System (AAA level). We have gradually formed a quality management system that covers cultural awareness, code of practice, institutional guarantee, and technical support due to relentless efforts.



ISO 9001 Certification

ISO 10012 Certification

CMS

测量管理体系认证证书

京都男性学校化が高素量、営営管理、等量得差、学校生活 管理技巧符合 GBY 1002-3003490 10012、2003(創屋営理 影響現社会各内球水)を用地全部様本、特定には、

anon months a server bibl

中启计量体系认证中则

E-1 - 24 - 2423 - 45 - 42 - 1

AAA

机用路線重整整字技术委员有联合司 展示市能行区目期時 555 55

#### **Quality Control Procedures**

Assurance and improvement of product quality rely on the efforts of all employees and strict control of all procedures. In order to improve the traceability of the entire process, and the comprehensive competitiveness of the Company's products and solutions, the Company clarifies the processes of various aspects including quality control, quality improvement, quality monitoring and measurement, and control of non-conforming products, sets restrictions on operation methods, and aims to standardize the Company's products and solutions.



#### **Product Quality and Safety**

We strictly control harmful substances in products, especially harmful substances mentioned in the RoHS (Restriction of Hazardous Substances, short for *Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment*) in the designing stage. As a part of our social responsibility for environmental protection, we take strict measures to ensure that there is no harmful substance in product design and production processes and that our products conform to the requirements of RoHS. During the reporting period, more than 7,000 Hikvision specifications and models have been RoHS certified. Moreover, around 5,000 Hikvision specifications and models have been REACH SVHC (Registration, Evaluation, Authorization and Restriction of Chemicals) certified.

					G	TÜVRheinland*
Verification Report	Te 2-450160084701	Dem 13 Mar 2018	Page 1 of 21	Tatal Report No.	1160044953a 001	Page 11/24
tangether Privater Digite				Clean	Hanazhou Hindaian Diaital Te	charing Co. 144
is 800 Gamme Fload, Bro	ang Grainet, Hangphov 3/(2002), Okna				No. 555 Quahno Road Binjang Statist Hangzhou315062 Otera	
				Fault Immediat	NETHORK CAMERA	
Ontoine Hanter	Shock & Dissiscement Detector 11	i americana i		Text Woder Ma(a):	06-202762806-46	
103 John Ten	3P16-004011 - 5H			Automatica Style Mala	05-300/109608	
Sand Ball, Model He.	DS-PD1-PTS DS-PD1-BHH			Sangte Reading date	2018-05-15	
late of Densile Received				Delivery condition:	Appartent goost, Samples texted on a	tophed
Witcose Period :	02 Feb 3818 - 08 Mar 2018			Test assortington:		Test county
le fonin Reparted	With reference to Point Directive (Rul 2010/003 animating 2011/00/004			Teat apecification: Teat Doesn't results according to tests performed		
te funite Vallesi	Plasse whe to real pagetti		1. Califolium, Least, Chronolam 201, Marcury, Publichowinated higherate (700)			
Avification Result : Avification Construction	Feater which need page (3)			and Polyterenizated diplenet ethers (PEDD) Beneryfordyl philariate (DBP), Discht philariate (DBP), Bisch ethyrhearyl) Passa		
	Date of the well-failers weary of the automatic assesses for except for the Automatic Section (Cardinan Annual Cardinan Section (Cardinan Annual Cardinan Section (Cardinan Annual Annual Cardinan Section (Cardinan Annual Annual Cardinan C		penning (blin) Thiosophy penning (1997) PAS Anomoly on the Towards, Penning the Origin of China (China) anomoly of the Towards). Penning the Origin of China anomoly (2013) 2015 (Data Shirotophy), China (China) The Intelling States of the open area science and the Intelling of China The Intelling States of the open area science and the Intelling of China The Intelling States of the open area science and the Intelling States of China States and States and States and States and States and States and States States and States and States and States and States and States and States and States and States and States and States and States a			
Hele- Im	r Innoat Genunes (Shanghai) Co., 138 -			The second s	e fa. int Desember Marger	
New Liv Approved Signatory				han Annufalter		
-					e too aad weled of tests performed het sample. Althout permanen of the test some this of samp secondly is only are safely can't at the of the same secondly is only are safely can't at the of	ni apri su posterio a alle pitato

**RoHS Certification Report** 

SGS				Products	4	TÜVRheinland* Precisely Right.		
				Report No.	0164115262a 002	Hage 1 of 15		
Test Report (SVHC)	No. HOBEL PRODUCTION	Des: 18 Jan 2018	Page 1 of 13	Client	HANGZHOU HIKVISION DIGITAL TECH Na 666 Ganno Roet, Binging Dates, I			
	0741 780401001 00.170 10446 207407 HK162400			Advertification' Mindel Royat: Generate Researching dealer	Color cameres THC-0240-06,THC-02460-9,THC-02460-06 2047-123-2018-021-08	745-6240		
				Touty Partnet	2017.12.20. 2018.02.07			
The Britships Charling of the	nivers salesting and contribution be	whether dealers are had	and the state in the	Test Specification		Second		
18791					Icles: Screening of substances of very high-r			
505 Jain Ten	1.P-17.004453-118		11111111111111111111111111111111111111	(TVPC) subject to puty	semantices, according to (\$13.50) 1435(2011.02	U.Ne.		
Ciert Rel Information	09-2102138-8 09-2102138-7 09 26 09-2102138-8 09-21021387 1021361-25 09-2102188-7 09-2 09-21021887-18 09-21021887-0	0.05-27021381-15:05-2 102165-18:06-2702168-2	1001367-10.025-2	(Amer. XV of EC No. 1 Agency (ECNA), ensu- writes (Custance on n	(2013) (2013 No. 899(2014) and (2010 No. 2017 907/2006) and candidate list by European D day to the EU Coart of Antice rules on DVM sputnements for substances in articles, Ame	terrical Cole		
Hodel Res :	00-2102/00-34			Other information/	Other differentiation:			
Opte of Semple Received:				1) Reference Style No(C)	1) Reference (Sple Not);			
Testing Parlos	04 Dec 2017 - 17 Jan 2018			THC 80200 THC 8130 TH	THE ADDR. THE ADDR. THE ADDR. P. THE ADDR. THE ADDR. THE ADDR. P. THE ADDR. THE ADDR. THE ADDR. THE ADDRR THE ADDRR THE ADDR. ADDR			
Test Paloxites	As requested by client, BUHC you is One humbled and severity four Substances of Very High Concern European Online to Apendy (SO) Response TO New Coll (1970) 2008 on	(TN) substances in the Ca (SVAC) for surficientian p (A) on and before 2017, 21	nd date List of ubished by	HWT BINDIN, HWT BIND HWT BIND/HWT BIND 3 According to codomerts	LINET ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACTION WAT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACT ACCOUN	8210. 20. THC-8236-M un Seen Sedeni.		
Test Passila	Places whe to cast page bi			a real against order to	ALL COMPANY REPORT OF THE CONTINUES.	8 901.		
Lorenza .								
as ancie under RE+CH a	he Court of Justice of the Burgeen U and the specified scope and exclusion is only in the actives of the submitted	screening the left	Wettend (See Ranax)					
Recentling to the score of an active under RE+DH, a results of ShinG are + E in Operative and on balant of	he Court of Justice of the European U on the specifiest scope and workshop is joint in the articles of the submitted	sciencing, the left sprovie. See 012, 005						
Tony Li				Per and on behalf of TOV Resoluted Diheruthers	····			
Yang Li Adartiwe Signatory	_			Ac	cya			
-		Sarahari Sarahari		Date Text-must is deservative day in 1 this ear report reader is the or in depletence - warrants. The survey	Alarce Produce to de alarce d'acto performant Annarge effect performant de annarge effect performant d'actor actor de performant actorette o cargo actorette actorette o contrate actorette o cargo actorette actorette de alternative actorette actorette de alternative actorette actorette de alternative actorette de alterna	insid postarili		

#### **REACH SVHC Certification Report**

In addition to hazardous substance control, we actively develop and produce energy-saving and environmentally friendly products. During the reporting period, more than 5,000 Hikvision specifications and models obtained the China Environmental Label. More than 5,000 Hikvision specifications and models were certified as China Energy Conservation Product. These specifications and models fall into six categories, i.e. video camera, server, monitor, all-in-one equipment, network hard disk video recorder and display. In addition, during the reporting period, we obtained the WEEE (the Waste Electrical & Electronic Equipment Directive issued by the European Union) certification. More than 2,000 Hikvision specifications and models meet WEEE's requirements of recycling rate.



China Environmental Labeling Product Certification

中国节能产品认证证书 生产全主名称无法 L) L.正真称: 1月/规格/型号; 12-2024《硬盘录像机节能认证规则》认证别 上述产品符合OQC31 时的参求。 ·2015年44月69日 至 2618年44月8 书的有政性限操发证机的约定期监督获得保持 Cac Iff. Ath 中国质量认证中心



WEEE Report

CTI华测检测

China Energy Conservation Product Certification

WEEE Certification

As for product labelling, we strictly comply with the product labeling requirements of various countries and regions, and mark our products with corresponding environmental label on their packages.



#### **Quality Culture**

We attach great importance to developing a quality culture. We introduce it to new employees during the orientation training to unify their understanding of quality. In daily work, we instill quality concepts of "contribute to clients' success and deliver the right products the first time" into each employees' mind from the cognitive level, the system level, and the behavior level through various activities including quality education training, quality responsibility system, quality promotions, and further ensured the implementation of quality concepts in each employee's actions.

#### **Quality Themed Activities**

On March 23, 2018, the Company held the 2018 Hikvision Conference on Quality (6th) on the theme of "Elimination of Problem, Pursuit of Excellence". Nearly 300 people attended the conference including heads of the R&D, supply chain and customer service departments. The conference summarized quality results in 2017 and commended excellent teams on quality works in 2017.

To promote the theme of "Elimination of Problem, Pursuit of Excellence", we arranged posters, "Boss's Interpretation", quality culture fans, quality quiz, quality awareness training, etc., to engage employees and encourage them to pass on our quality culture to new employees.



## 2.3 Cybersecurity

The "Internet of Everything" and intelligent IoT feature even more massive, diverse, and powerful terminal devices, complex network architecture, extensive data, and diversified applications. Therefore, we need to strengthen security protection and privacy protection at more levels, such as terminal device, network, data, platform service, and application. We are deeply aware of the importance of cybersecurity and are actively dealing with cybersecurity challenges. While improving product quality and safety, we stick to the cybersecurity bottom line. During the reporting period, the Company officially released *Hikvision Cybersecurity White Paper*, which aims to share our cybersecurity experience and practice with the industry and improve overall cybersecurity capabilities.

#### **Security Management Structure**

The Company has a well-established organizational structure to address cybersecurity threats. Each division has clear responsibilities to integrate security management into R&D, supply chain, marketing and sales, project delivery and technical services.



Through close cooperation among different departments and the establishment of work processes, the Company can prevent cybersecurity problems the people to the maximum by virtue of its organizational structure.

#### **Procedures and Standards**

In accordance with *Law of the People's Republic of China on Guarding State Secrets* and *Cybersecurity Law of the People's Republic of China*, we formed a set of management systems to protect internal information security, such as the "Information Security Management Manual" and "Information Security Applicability Statement" and defined departments and divisions subject to the systems.

We recognized that standardization could reduce the occurrence of cybersecurity problems. Therefore, in accordance with domestic and international laws and regulations, industry standards, customer security demands, third-party analysis, industry activities, peer experience and the security requirements of certain businesses, we developed a series of product security-related specifications and standards for general security baseline, security code, secure password application, secure key management, secure session management, security authentication, security testing, and security event management to ensure all aspects of product security.


As to overseas operation, we followed the ISO 27001 information security management system principally to establish an internal management system to protect the intellectual property and privacy of customers and partners around the world to the maximum.

# Security R&D Process

To provide customers with safer products and solutions, we integrated security works into R&D (security design, security development, security testing, etc.) according to industry best practices for security and customer feedback. We proposed our product development security management process HSDLC (Hikvision Security Development Life-Cycle) to implement security works at the R&D level.



HSDLC divides product life cycle into six stages: conception, design, development, testing, delivery, and emergency response, and presents security guidelines and standards for each stage.

## **Emergency Response**

For post-delivery cybersecurity problems, the Company has established a product cybersecurity problem response mechanism, and arranged a dedicated team to receive, process, and disclose emergency responses to the security vulnerabilities in our products and solutions. Moreover, the Company set time limits for security responses to ensure response efficiency. For example, initial confirmation of security incidents must be completed in less than 24 hours and high-risk vulnerabilities must be corrected within 30 days.



For emergency handling of post-delivery vulnerabilities, the Company established procedures for security vulnerability and early warning disclosure based on ISO/IEC 30111, ISO/IEC 29147 information technology-security techniques -- vulnerability disclosure and other standards. The procedures include vulnerability research and data collection, security vulnerability assessments, analysis and verification, as well as tracking and solution.

While safeguarding our own cybersecurity, we proactively participate in industry and public events. We have built long-term relationships with vulnerability disclosure platforms, relevant divisions of our clients, other suppliers, researchers and third-party coordinating bodies.

#### Invest more resources to ensure cybersecurity

Hikvision attaches great importance to product and cybersecurity. It has made many explorations and implementations in the field of cybersecurity. Hikvision joined the Forum of Incident Response and Security Teams (FIRST), China Cyber Threat Governance Alliance and some other information security organizations, shared information on cyber threat, and

worked with other members to manage and report threats related to the dark web, improve cybersecurity environments, and protect cybersecurity and benefits.

In addition, the Company implemented a series of measures to enhance security and ensure cybersecurity:

- ✓ Hire professional organizations to assess our information security to improve our cybersecurity system;
- ✓ Hire well-known domestic and foreign security testing teams to conduct penetration testing on our products to minimize business risks and keep security risks within control;
- ✓ Invite well-known security experts to the Company to give lectures to equip our R&D personnel with stronger security abilities;
- ✓ Enhance exchanges and cooperation with domestic and foreign security vendors to improve the security of our products;
- ✓ The Cyber and Information Security Lab holds exchanges with clients several times a year on product security, emergency response mechanisms and security requirements to keep us as well as clients updated;
- ✓ We launched a "Security White Hat Reward Program" to reward white hats at home and abroad that follow Hikvision's information security and excellent researchers of security technologies that help Hikvision with product security.

For more information on cybersecurity, please refer to the 2018 Hikvision Cybersecurity White Paper.

https://www.hikvision.com/en/Support/Cybersecurity-Center/Cybersecurity

# **Chapter 3 Empowering Customers' Success for Win-Win Results**

Hikvision follows the core values of "dedication to client's success, value oriented, integrity and down-to-earth, pursuit of excellence" and continuously innovates to provide global clients with high-quality products and services and create longer-term value together. Moreover, Hikvision continues to promote the industrial chain, and work together with upstream and downstream partners in the supply chain to face challenges and opportunities and pursue excellence.

# **3.1 Provide Quality Services**

The Company closely focuses on the needs of clients, researches into market segments and carries out product development. The Company continues to uncover the needs of clients and provide customized solutions with sufficient industry-specific knowledge to create value for users.

# Satisfy Clients' Needs

As a client-oriented business, we embrace "industry segmentation, expansion of channels to cover more areas, and end-to-end business", always keep close to customers, constantly improve our abilities to provide customized solutions and consultant sales, and translate technologies into market value. Our clients are from different industries. They all have their own business scenarios and business logic, which diversifies their needs. We take the following measures to meet the diverse needs of our customers based on our understanding of the market.

# Hardware/Product

In light of diversified scenarios, we offer a wide range of products and models to deliver the best performance to customers with different needs. Solution

We offer customized solutions and customized hardware and software portfolios for different industries and different customers.

During the reporting period, the Company upgraded its software engineering capabilities and practice in an all-round way by establishing a unified software technology architecture in light of the development needs of the business, and transformed its software R&D model from the "market demandoriented" to the "market demandoriented and technology planning-driven". Eventually, the Company became able to launch high-quality software products in a quick and sustainable manner to meet the rapidly growing demands of the software market and support its strategic planning.

#### **Optimize Marketing Service System**

We have a global marketing service system that enhances customer stickiness as well as our brand popularity and enables effective resource allocation targeted on a global scale while efficiently serving customers.

#### **Global marketing network**

Global marketing service network for global resource allocation

- ➢ 32 provincial business centers /first level branches in Mainland China
- 44 overseas branches
- Products and solutions employed in more than 150 countries and regions.

To provide customers around the world with convenient, timely and high-quality services, we have also established a three-tiered service system which consists of global customer service centers, customer service departments under subsidiaries and authorized customer service stations.



To further improve service quality, we entered into partnership with tens of thousands of contractors, distributors, outsourcing service providers, etc. to provide product delivery, project delivery, software deployment, system operation and maintenance, and other services to customers of all industries in all regions. Furthermore, we are constantly improving our product and technical service standards, providing our partners with an all-round training and certification system to help them improve their professional competencies and service standards.

#### **Technology-enabled Convenient Service**

Internet technology is bringing us ever closer to our customers. Today, customers can reach us more easily. They can also quickly solve common problems by self-service.

#### Central Service Protal

- Where there is a product, there is information and service. We optimized the QR code on the device and enabled "one scan for all". In addition to basic information on the device, users can also access its instructions and information on latest products and services easily;
- As for access to information and service resources, we greatly improve the accessibility of information and services without charging extra to customers;

# **One-stop Self-service**

 Online robot assistant KK is available 24/7 on all platforms. At present, KK can provide 80% of customers with fast, convenient and efficient solutions to their problems. Customers can talk to human customer service representatives for more professional issues via our WeChat public account.

• As for product maintenance, we provide one-stop repair services. Customers can start a repair request by one click and check the repair status in real time.

# Online Materials and Instructions

- We launched a mobile knowledge library where customers can find answers to frequently asked questions other than productspecific ones. It is easy to locate a question and its answer by posting or searching a question. In addition to texts and illustrations, we post videos on certain product lines on a weekly basis for customers to learn how to operate the products;
- Security calculation tools are powerful and contain various calculation formulas. It is of great help in the design process of security system solutions and is a good choice for millions of security practitioners.

In the future, we will continue to optimize our marketing system and listen to our customers. We will expand and adjust the marketing system based on the characteristics of each market to bring our sales and service system closer to customers.

#### **3.2 Protect User Privacy**

#### **Regulations to Protect Client/User Privacy**

Hikvision adheres to the concept of "manipulating power of technology with the heart of awe, and protecting data security with prudence". Hikvision sticks to reasonable, transparent, controllable and secure privacy policies and built a systematic and standardized data security and privacy protection system. We set up a dedicated team to study laws and regulations as well as national/industry standards on personal data, including but not limited to *Cybersecurity Law of the People's Republic of China*, *GB/T 35273-2017 Information Technology – Personal Information Security Specification*, and *EU General Data Protection Regulation (GDPR)*. We formulated personal data protection guidelines on R&D, sales, service, after-sales service, technical support, etc. in accordance with laws and regulations and standards and in light of our own data processing scenarios. We issued supporting procedures and policies and gradually put them into practice.

#### **Data Protection Practice for Products and Services**

We factor data security requirements in product design and R&D. We benchmark our practice with industry best practices to establish data security and privacy protection mechanisms that cover compliance management, product review, security assurance, employee education, etc. We adopt a variety of security technologies such as identity authentication, authority management, desensitization, and encryption based on the scenario.

If a user uses Hikvision hardware only, we will not and are not able to collect or use the user's personal data through hardware products. However, as a device manufacturer, we do our best to suggest that users take necessary measures to protect their data.

If the user uses Hikvision cloud services as well, we will collect and use some user data. The Company has established a data life cycle management system that covers data collection, usage, transmission, storage and deletion to protect users' personal data. Moreover, we present our readily understandable privacy policy in a prominent position, informing users the purpose, method and scope of personal data collection and usage, and the rights of users. Besides, we have established a prompt and effective emergency response mechanism for data security event. We provide dedicated contact channels and personnel to deal with questions and comments regarding personal data handling.

For online sales, after-sales service and technical support, we further regulate scenarios in which user data is processed for operational purposes in documents such as *Information Security and Confidentiality Management System* and *Service Specifications*. We strictly manage the personal data of users collected for operational purposes, including but not limited to authority management and regular deletion, etc.

During the reporting period, the Company has not been punished by any regulator for violation of laws and regulations on data protection.

#### 3.3 Listen to Customer Feedback

The Company continues to enhance communication with customers and actively responds to consumer inquiries, complaints, and suggestions. While responding to customers, we constantly examine and improve the quality of our products and services.

#### **Telephone Hotline Online Channel Offline Methods** • WeChat Public Account: Visiting Address: • 400-800-5998 "Hikvision Customer Service" Hikvision outlets or customer • 400-700-5998 service stations • 400-878-7878 (EZVIZ) • E-mail Address: Mailing Address: 400@hikvision.com 555 Qianmo Road, Binjiang District, Official APP: Hangzhou E-commerce on cloud

## Feedback and Complaint Channels Provided by Hikvision

To optimize our service processes and therefore improve customer satisfaction, we developed a Customer Complaint Handling and Closing Procedure to instruct and regulate the handling of customer complaints lodged via the helpline, clarify the responsibility of each post, and ensure that customer complaints are handled in a timely, effective and standardized end-to-end manner.

After receiving a complaint, the customer service representative will enter it into the internal system, categorize it and follow it up to ensure that the problem is properly solved within the time frame. Then we will confirm with the customer and ask for his/her feedback.

In addition to solving specific problems, we analyze frequent complaints on a regular basis and make a follow-up to implement the PDCA (Plan-Do-Check-Act) circle.

# **Satisfaction Survey**

We have established a customer satisfaction management system to implement *Helpline Callback Service Procedure*, *After-sales Repair Satisfaction Callback Service Procedure*, doing callbacks and follow-ups on customer feedback.



In order to systematically analyze customer satisfaction and identify reasons for satisfaction or dissatisfaction, we perform a customer satisfaction survey that involves all operations of the Company at the end of each year. All relevant departments are involved to form a satisfaction survey team to conduct the survey.

# Net Promoter Score System

EZVIZ products are mostly used in everyday scenarios. To this end, EZVIZ established a user Net Promoter Score (hereinafter referred to as "NPS") to improve user experience. EZVIZ conducts satisfaction survey for each product at regular intervals. EZVIZ uses three rounds of surveys to figure out to which degree a product meets the needs of users and user satisfaction in an effort to optimize the product. Then it tests the effect of the improvement to enhance user expectation of product experience and the competitiveness of the product.



NPS is not only an evaluation mechanism but also an reflection of experiential culture. We measure our product improvement as well as operation with NPS as an indicator. According to recent NPS results, user recognition and loyalty to EZVIZ products are rising.

# 3.4 Contribute to Industrial Ecosystem

As we improve our supply chain, we pay great attention to communication and interaction with partners. Intelligent applications are scenario-based and fragmented. Therefore, we believe that open integration is the trend of the video industry and it is going to be a new format in the intelligent era. In order to achieve open integration, we established a complete open system.

There is a massive scale of AI applications demands in real economy, especially scenario-based, fragmented ones. However, various prerequisites for AI applications such as data, algorithm, computing power, product and application system make it difficult for AI to empower real economy. During the reporting period, in order to build an open and shared AI industry ecological environment and help the implementation of AI, Hikvision launched the AI open platform to provide complete services from demand mining to application release and to help industries to upgrade. We work with different partners in the ecosystem to generate synergy effects and create value for our clients together.

# Hikvision AI Cloud Open Platform: A Solid Step for the AI Ecosystem

Hikvision launched Hikvision AI Cloud Open Platform at the 14th China International Exhibition on Public Safety and Security 2018. Based on concepts of openness, equality, innovation, and win-win, the platform provides partners with open infrastructure, open data resources, open platform services, and open application interfaces. Hikvision will work together with partners to build two ecosystems for products and services respectively via this platform.

The platform brings together product providers and service providers from different parts of

the world and encourages them to work with each other, influence each other, and learn from each other to further integrate AI and IoT and create great value for public security, transportation, judiciary, education, energy, finance, building, real estate and other sectors.



In 2018, Hikvision has successfully applied the AI open platform to empower intelligence upgrading in multiple industries. In pharmaceutical companies, AI standardizes employee behavior and reduces security risks. In food companies, AI ensures food safety, standardizes production and storage, and improves regulatory efficiency. As to seal management, AI standardizes seal management and operational procedures to improve efficiency. As to weather forecasting, AI recognizes frost and clouds and monitors weather phenomena automatically.

# **3.5 Supply Chain Development**

While providing high-quality security services to our suppliers, we are also committed to creating a green supply chain to enhance the environmental awareness and abilities of upstream and downstream suppliers and achieve win-win results. We instill the importance of environmental protection, occupational health, safe production and some other factors to production by setting entry standards and assessment standards as well as offering promotion and training. We guide suppliers to do compliance management beforehand and attach strategic importance to compliance management to realize a green supply chain.

#### **Supplier Management**

We are dedicated to mutually beneficial long-term stable partnerships with suppliers. For the Company to develop in a sound and fast manner, we are committed to creating a stable and high-quality supply chain. To this end, we established a quality index assessment system for the entire supply chain management process, including material acceptance, production, market, etc. Moreover, we perform assessment and examination at all levels and monitor where we are at regular intervals. Besides, we update our goal each year to ensure continuous improvement in supply chain management.

As of December 31, 2018, the Company has a total of 728 suppliers worldwide.



# Introduction of New Supplier

As for existing suppliers, we draw up a plan each year to assess suppliers on a rolling basis and track how they deal with problems and make improvements. Supplier assessment is carried out in strict accordance with our internal *Supplier Assessment Procedures* quarterly and annually. We reward, punish and eliminate suppliers based on the assessment results to sustain high-quality supplier resources.

# **Supplier Assessment Model**



We take the social responsibility performance of suppliers into consideration and strive to continuously improve the awareness of responsibility and abilities of suppliers along the way.

- Evaluate the environmental, social and governance system and practice of suppliers and subcontractors in accordance with the *Supplier and Subcontractor Social Responsibility Assessment Report* and rate suppliers by the results;
- As stipulated in *Supplier and Procurement Management Procedures*, a single violation of laws and regulations related to environmental protection and social responsibility disqualifies a supplier;
- Suppliers are required to sign a *Supplier Social Responsibility Commitment*, and agree to legal employment, respect for human rights, protection of employees' health and safety, environmentally friendly operation, etc.
- Suppliers are required to sign a *Procurement Framework Agreement* which includes human rights guarantees.

# **Conflict Minerals Management**

To reduce the negative impact of supply chain on society, especially conflict minerals issues on society, the Company took the initiative to take risk management actions. The Company does not purchase or support the use of conflict minerals. We sign a *Declaration of Metal Conflict-Free* with suppliers, requiring all suppliers to provide corresponding evidence and prove that they do not use minerals from conflict areas, and subject their suppliers to the same requirements. Suppliers are responsible to do due diligence to ensure that the gold, antimony, tungsten, tin, etc. used are not obtained through trafficking from anarchy or illegal group from conflict zones.

In the past few years, the Company has been working with industry trade groups to ensure the transparency of raw material procurement. We will continue to pay attention to conflict minerals issues and work with business partners to seek sustainable solutions to such problems.

# **Chapter 4 Serve the Society to Create a Better Future**

Upholding our initial aspiration to serve the society and create a better future for all, we have been taking actions to promote the sustainable development of society for years. We not only encourage and organize employees to participate in social activities to make contributions to the public welfare, but also strive to help build a smart ecosystem and a harmonious social system by giving full play to Hikvision's expertise with reliance on innovative technologies and professional knowhow.

# 4.1 Dedicated to Public Welfare

As a responsible corporate citizen, the Company pays great attention to public welfare and continuously works to help more people and create more goodness to the world through technological innovation. Based on the technology of "video plus AI", the Company intends to carry out a series of valuable projects of public benefit to continuously make new contributions to the sustainable development of the society and the environment.

# **Voluntary Blood Donation**

We have long maintained good relations with the Zhejiang Blood Center and the Zhejiang Red Cross Society. With their support, the Company successfully established the Hikvision Red Cross Society to proactively practice and carry forward the red cross spirit of "Humanity, Devotion and Dedication".

The Company organizes hundreds of employees to participate in the blood donation every year. On July 1<sup>st</sup> 2018, the Company won the Excellent Organization Award in the event. "Donate blood for July 1<sup>st</sup>" jointly organized by seven authoritative departments including Hangzhou Spiritual Civilization Construction Committee Office, Hangzhou Health Commission, Hangzhou Culture Broadcasting and Television Group, etc.



# **Promote Fairness in Education and Development**

For a long time, Ding'an County of Hainan Province had been confronted with many difficulties including insufficient qualified teachers and uneven educational development. To ameliorate the situation, the Company joins hands with local education authority, creating more than 60 "transmitting classrooms" to enable children with timely access to the high-quality educational resources of schools in urban areas, and synchronously enjoy quality courses such as music and art.



Since the system was launch, it has been well playing its role as a bridge of friendship between schools in city centers and rural schools by organizing many featured teaching activities, thereby winning great popularity among local teachers and students.

# **EZVIZ Serving for Filial Piety**

Talking to the camera has become a new habit of the old people in Dashan Village, Yaolin Town, Tonglu County, Hangzhou. In October 2018, Dashan Village Committee installed two surveillance cameras in the houses of all elderly people over 80 years old so that their children are able to keep in close touch with the elderly at home through the mobile phone app EZVIZ Cloud which even allows video call.



We help shorten the distance among people through technologies and serve filial children in the world. Filial love will never be absent anymore.

## 4.2 Help to Build Harmonious Ecology

Relying on the products and technological edges accumulated by the Company over the years, we are also making great breakthroughs in adopting more high technologies in our environmental protection actions, hoping to utilize science and technology to support ecological protection work. We are applying innovative products and technologies to support ecological research and conservation work, and to help maintain rich biodiversity of our living earth. During the reporting period, the Company invested a total of more than 1 million RMB (estimated based on value) in ecological protection projects.

# Bring More Hope of Life to the World--Bar-headed Goose Protection Project

Located at the north bank of the Tuotuo River and at the foot of the Tanggula Mountain which is the source of the Yangtze River, the Lake Bande is a typical plateau lake with an altitude of over 4,700 meters in an arduous and unpopulated area on a hundred-mile radius. The lake, within the jurisdiction of the Sanjiangyuan National Nature Reserve, is an

unexpected paradise for wild birds including bar-headed geese. Threatened by the pilfering of bird eggs and bird hunting, the number of bar-headed geese in Lake Bande previously dropped to 1,000.

During the reporting period, Hikvision, as a technical supporter participated in the bar-headed goose conservation project conducted by the Sichuan Green River Environmental Protection Promotion Association (referred to as Green River), assisted in establishing dozens of bird protection monitoring sites in high-altitude and unpopulated area. The monitoring sites provide large-scale, all-weather and unremitting monitoring through video technology. Its strong image and data support for bird protection helps to effectively avoid the hardships and blind spots of the traditional human patrol mode, and significantly reduce the impact of human activities on bird habitats. Besides, we also assist Green River to carry out high-definition live video broadcast campaigns so as to attract more people to deliver attention to and participate in protecting the bar-headed geese.

According to incomplete statistics, the number of bar-headed geese in Lake Bande has increased from about 1,000 up to more than 3,000 till now, and our protection action continues.



Bar-headed geese family roaming in the plateau lake area

At present, Hikvision has signed an ecological cooperation memorandum with Green River. The two sides also announced that they will strengthen their cooperation next year that Hikvision will apply customized products of video technology to high-altitude, low-temperature and unpopulated areas to help protect the bar-headed geese. Given the needs of wildlife monitoring and protection in the plateau environment, Hikvision will cooperate with Green River to develop a feasible simulation camera, promoting the practice of wildlife protection in video surveillance equipment, image processing, data storage and transmission with technological innovation. The two sides also work to enhance the scope, timeliness and precision of monitoring, facilitate the effective utilization of animal protection data and data accumulation, and endeavor to protect biodiversity through science and technology. All these efforts are intended to build a sustainable eco-environment for the source regions of Yangtze River.



Hikvision PTZ camera 24-hour guiding wild bar-headed geese habitats

# **Tiger Protection through AI**

"It is a deed of great significance and honor to work together, grow together, take real responsibility, and guard our home planet via technology with a group of lovely people."

——A member of the Hikvision AI tiger protection team

Siberian tigers are at the top of the natural food chain, therefore their living status presents to be an important indicator of the soundness of the entire ecosystem. Plagued by increased human activities, deforestation, habitat degradation and other factors, the population of wild Siberian tigers and their habitats are constantly shrinking. In 2017, only 24 Siberian tigers were detected alive through wild infrared cameras. In this regard, Hikvision works jointly with Intel to help the World Wide Fund for Nature (WWF), in the field of wildlife protection in China, utilize the design concept of edge computing combined with cloud computing to intelligently identifying Siberian tigers. It works to give assistance to wild animal protection and help promote the harmonious development between man and nature through digital technology and artificial intelligence.



Siberian tiger-the king of beasts-running in snowfield

Hikvision's newly developed intelligent capture cameras for wildlife protection, when equipped with Intel® Movidius<sup>TM</sup> AI Vision Processing Unit (VPU), can realize the support for front-end intelligent algorithms and greatly improve processing efficiency. Based on the front-end target detection algorithm, a deep convolutional neural network (CNN) designed and adapted specially for wild life would extract video frames layer by layer, calculate the target position and confidence, and ultimately realize the accurate recognition and capture of Siberian tigers. Through the front-end intelligent capture, the system automatically filters out the photos of Siberian tigers that meet the requirements, which later on lessens the manual load of distinguishing pictures and videos.

In the future, forest rangers can upload massive pictures through handheld terminals or smart field capture cameras to realize automatic and efficient processing and intelligent identification and analysis of front-end and back-end data. Animal traces and behavior patterns can be identified through massive data mining, helping protect rare wild animals.

Through this project, Hikvision has realized the wide-range application of AI plus environmental protection in actual scenarios. In the future, AI intelligent products and solutions will be innovatively applied to inject new strength into the ecological protection cause.



Hikvision's newly developed intelligent capture camera for wildlife protection

# Straw Burning Prohibition, Intelligent Environmental Protection

Pollution from straw burning causes great damage to the quality of the atmospheric environment. Large-scale haze incidents occur frequently in every summer and autumn harvest season when straw is burnt in great amount.

As an important technical means to prevent and control air pollution as well as to eliminate open area straw burning, the Company's straw burning control system has been widely applied in Hebei Province. During the reporting period, five regulatory agencies in Shijiazhuang, Langfang, Zhangzhou, Xingtai and Hengshui have installed Hikvision thermal imaging dual-spectrum surveillance cameras along high-speed rails, expressways and in key straw burning areas, initially realizing full coverage of straw incineration monitoring in agriculture-related areas and helping prevent haze more effectively to improve air quality.



The platform helps regulatory agencies solve the problems of time and labor consuming, lags in discovery, low regulatory efficiency, and difficulty in obtaining evidence in supervising straw incineration, and helps reduce the harm to atmospheric environment.

# 4.3 Build a Smart City Together

As an important technology and product provider for the construction of smart city, we have always focused on fields closely related to social economy and people's life, such as public security, transportation, production, etc., and proactively provided innovative solutions to such ends. We use information technology to structure intelligent, efficient and convenient life, exert our advantages to develop ecological cooperation, enabling the public to enjoy happy life brought by scientific and technological progress.



# Safe Campus - Escort Campus Security

University is a part of the society. The method to ensure the safety of teachers and students when social personnel and vehicles are entering and exiting the university frequently has become an urgent problem for administrators of open universities. Take one of the domestic universities for example, we proposed and built a comprehensive solution for campus visual management in line with the customized needs of the security department, helping comprehensively upgrade the campus security level. The proposal includes the systems of monitoring suspected personnel, intelligent perimeter defence, vehicle management, intelligent operation and maintenance and more, on the basis of which it also sets up 2.5D maps, realizing the visualization of the whole process of business processing and contributing to safeguarding the campus security management.



# Intelligent Transportation – a Dispatcher for Convenient Travel

Accompanied with the urban expansion, the urban population and the number of motor vehicles have been growing rapidly, resulting in traffic congestion, traffic accidents, air pollution and other issues which make people's daily life suffer. To improve the efficiency of traffic management, the Company is assisting a city in Zhejiang Province in building an intelligent traffic operation monitoring and dispatching center ("TOCC"). The platform is designed in accordance with "One Center, Five Systems", including:



We use big data technology to integrate the data and videos of various regulatory systems in the local transportation industry, visualize the abstract data and analyze the key data, greatly improving the operational efficiency of the transportation system, and alleviating the traffic congestion, thereby enabling people to travel more conveniently and safely.

# **Food Safety - Reassured and Transparent**

Through in-depth market research and analysis, we have promoted the "Clean Transparent Kitchen" video networking supervision system solution catering for industry clients through our accumulated advantages of video technology in EZVIZ cloud Internet plus. The system can help solve problems in daily shop patrol, kitchen hygiene, emergencies, data operation and other issues in catering outlets, and fulfil the demand of post-event traceability and investigation.

The "Clean Transparent Kitchen" project guarantees the rights of consumers to supervise and to be informed, and provides an open, transparent supervision bridge between government regulatory authorities, corporates and the public. Through the dustproof and waterproof camera installed in the areas of warehouse, cleaning, cutting, cooking, special room, sample retention, etc.in the back kitchen, customers can monitor the real-time operation of the back kitchen anytime and anywhere through the Internet. Regulatory departments can also view videos in their jurisdictions for food safety management and supervision.



# Health Care - Empower the Construction of Safe Hospitals

In order to help hospitals improve their capability of early warning and prevention of emergencies, rapid and appropriate handling in the event, and prompt tracing after the event, the Company built a full three-dimensional digital intelligent security management platform based on AI Cloud security system. Based on this system, the Company assisted a well-known hospital in Zhejiang Province in fulfilling a variety of safety prevention and control functions, providing a guarantee for the orderliness and stability of the hospital.



# 4.4 Embrace Intelligent Manufacturing

Hikvision keeps pace with the new era and new technologies and considers intelligent manufacturing as an important market. Hangzhou Hikvision Robotic Technology Co., Ltd. (hereinafter referred to as "Hikvision Robotics"), the holding company of Hikvision, is mainly engaged in intelligent manufacturing regarding the development of mobile robots, machine vision and industrial-level unmanned aerial vehicle (UAV), and persists in independent design, R&D and production. Continuous innovation enables Hikvision Robotics to produce quality products that are recognized by the industry and widely used for various purposes including metal processing, industrial automation, and etc. These products offer stable and reliable operation. Moreover, customized development is available to help users greatly improve work efficiency and accuracy.

#### **Mobile Robot**

• Hikvision Robotics independently developed a robot system for smart warehousing with product lines of AGV (Auto-Guided Vehicles), and subsequently launched smart transfer AGVs that shuttle between production lines, smart sorting AGVs for small packages, smart forklift AGVs that reduce labor costs and improve automated warehousing logistics, and smart parking AGVs that enhance the capacity of parking lots. These robots fulfill the needs of intelligent manufacturing and redefine logistic revolution.

#### **Machine Vision**

• Hikvison Robotics persists with independent design, R&D and production of machine vision products, continues to innovate to launch well-recognized quality products and performs strict testing to ensure the products present high-quality images. Hikvision Robotics ensures that each product provides high precision, high efficiency, and high environmental performance with examinations in design and R&D processes.

## Industrial-level UAV

<sup>•</sup> The core technology of industrial-level UAV is video image processing. Industrial-level UAVs are safe and smart products used in a wide range of scenarios including fire rescue, emergency command, counter-terrorism action, traffic management, facility inspection, and event support, etc. Users may mount more than 10 kinds of devices on our UAVs, such as visible light head, thermal imaging head, laser head, megaphone, release and drop device and gas detector, which greatly enriches the functionality of UAVs.

# The Wide Application of Intelligent Manufacturing in Various Business Fields

Mobile robots, machine vision and UAVs of industry-level have been deployed in various fields to help clients automatize factories and build intelligent factories as well as in domains of source tracing, investigation and evaluation.

# Intelligent warehousing robots for automated delivery

• A company's production base launched a smart factory construction project, introducing Hikvision's intelligent warehousing and in-plant logistics solutions to automate logistics handling across the entire plant. In December 2017, the intelligent warehousing and in-plant logistics solutions were set up and ran with remarkable efficiency, as the number of logistics staff in the production workshops was reduced by 30%. Through this, logistics handling and delivery processes have been automated, the delivery efficiency increases by more than 35%, and the material delivery on-time rate increases by more than 95%.

# • Five-sided barcode reading system application

• During the reporting period, the Company cooperated with customers to inspect the site and analyze the situation, and formulated a traceability solution named Hikvision five-sided barcode reading system in response to the problem of low barcode reading rate caused by the irregular barcode direction in the on-site parcel information collection. It can collect, bind and integrate the three types of basic information of express barcode, weight and volume. It has the characteristics of high system flexibility and strong robustness. It can guarantee ultra-high reading rate even on barcode with distortion, wrinkles and coat.

# • UAV forest fire protection application

• The Hikvision UAV system is quick and easy to set up, and can reach the fire scenes for fire detection and evaluation in a timely manner. At the same time, the flight image and data can be transmitted back to the command center platform in real time for the command center personnel to view and facilitate the formulation of the forest area emergency handling plan. it can normalize the monitoring and early warning of forest fire prevention, wildlife regulation, anti-drug in forest area and ecological environment protection. All these functions are of great significance for protecting forest resources and enhancing the capbility in early warning and monitoring.

# **Chapter 5 Talent-Focused, Growing Together**

Human capital is an important strategic resource for a company. Hikvision is a people-oriented company that protects the rights and interests of employees, provides development opportunities for employees, offers safe and healthy working conditions, and shows concern and care for employees. We encourage employees to realize their own worth and grow with the Company.

#### 5.1 Protect the Rights and Interests of Employees

The basic rights and interests of employees are our top priority. We strictly abide by applicable laws, regulations and local policies to protect the rights and interests of employees, and provide them with equal opportunities and competitive compensation and benefits. We encourage employee engagement in decision making and share our development with employees. During the reporting period, the number of newly hired employees increased by 36.9% compared with 2017.

# Legal Hiring

We strictly abide by Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China, labor Union Law of the People's Republic of China and other laws and regulations. We developed and implemented normative documents such as *Recruitment Management System* and *Attendance Management Code*. We recruit employees of different races, nationalities, regions, ethnicities, and religious beliefs equally in the light of our development needs. We sign a written labor contract with each employee.

We pay respect to the principles of international labor agreements such as *International Labor Organization Conventions* and *the Universal Declaration of Human Rights*; we developed an internal *Social Responsibility Management Manual* in accordance with SA8000: *2014 Social Responsibility Management System Requirements*. We pay regard to the freedom of association and right to collective bargaining of employees in accordance with domestic law and out of free will. We pay attention to protecting the personal information and privacy of employees and prohibit illegal employment in all forms such as child labor, forced labor and deprivation of personal freedom. During the reporting period, 86% employees have been the members of Labor Union in China, and the Company did not engage in forced labor or child labor.

As of December 31, 2018, the Company had a total of 34,392 employees. Employee distributions are as follows.



## **Compensation and Benefits**

We advocate reward by value contribution and provide employees with competitive compensation and all kinds of benefits. Employees receive remuneration in full and on time. The five social insurance and one housing fund (endowment insurance, medical insurance, unemployment insurance, employment injury insurance, maternity insurance and the Housing Provident Fund) are provided for employees in accordance with applicable national and local laws and regulations. Besides, extra benefits such as supplementary medical insurance, free breakfast and optional physical examination are also available for employees and their family members each year.

Legal benefits	Additional benefits
• Social insurance	• Optional physical examination for employees and their family members each year
Housing     Provident Fund	• Commercial insurance for employees and their dependents covering personal accidents, critical illnesses, supplementary medical care, etc. Optional for employees' family members.
<ul><li>Public holiday</li><li>Paid leave</li></ul>	• Overseas business travel insurance, covering personal accidents, emergency medical treatment, financial loss, travel inconvenience, third-party liability, etc.
	<ul> <li>Health workshop and themed free treatment</li> <li>Free nutritious breakfast, birthday benefits, team-building and recreational activities, meal allowance, transportation subsidies, communication subsidies, holiday benefits, high temperature</li> </ul>

subsidies, etc.
• We provide employees with subsidies and personal accident
insurance when they go on business trips overseas. We provide
employees working abroad (and their family members) with
housing, subsidies, education allowance, and home leave and
allowance.

# **Democratic Management**

We embrace democratic management to protecting employees' right to information, participation and supervision. We set up a labor union and constantly improve our labor union system. We provide communication channels for employees at different posts, different departments and different levels to be heard. We listen to employees to understand what they need and help them with workplace problems and life issues.

During the reporting period, we held the series of "Dialogue" once per month that allows entry/junior-level employees to meet face-to-face with executives. We held "Listen to the Forefront" symposium quarterly, where department chiefs listened attentively to the views of frontline employees. In addition, we expanded communication channels for employees by setting suggestions box, employee appeal mechanism, "Dabai Hotline", "I Have Something to Say" and so on, having discussions with new employees, interns, employees at key posts, experienced employees, employees on probation, employees that plan to quit, and doing satisfaction surveys in an effort to arouse employees' enthusiasm and improve employee satisfaction.



# "Dialogue" Activity

## 5.2 Talent Training

We make great efforts to train talents as we develop our businesses. We provide promotion channels for technical staff and staff in the management sector. We have well-organized professional development and training systems to help employees at all levels maximize their values at their suitable positions.

#### **Professional Development**

We provide employees with dual professional development channels. We implement internal promotion and post rotation mechanisms and follow three principles to help employees achieve professional development goals. Employees can choose the Management or Professional routine to achieve promotion and development.

# > Principle of fairness and justice

Follow established procedures to select, remove, promote and demote employees.

Ensure the fairness and validity of the procedures and provide each employee with equal promotion opportunities according to the rules.

# Value both ability and integrity, promote employees on the basis of competitive selection

Consider integrity as the bottom line, performance as an important factor and ability as the key when selecting and promoting employees.

#### Promotion and demotion

Evaluate the duties, abilities, performance, and values of employees that meet the basic requirements of selection or promotion.

May break a rule to employ, promote, or skip a level to promote an employee that is particularly capable or required by special circumstances.

Incompetent employees will be transferred to different posts or demoted. Employees should be prepared for both promotion and demotion.

#### **Training System**

Based on business development strategies, we established a training system, enrich and improve the sytem through continuous demand analysis and research. We provide leadership training, managerial staff training all over the Company. The systems and learning platforms are able to fully support talent development. During the reporting period, RMB 21.8 million was dedicated to employee training. Training hours<sup>2</sup> totaled 463,235 hours, equivalent to

<sup>&</sup>lt;sup>24</sup> Training hours" refers to the hours of training organized by the Division of Learning and Development of the Department of Human Resources. It includes induction training, general capacity building, general managerial skill building and operational training organized

# 13.5 hours per employee.



# **Training Courses**

We establish a two-channel training course system based on the two-channel employee career path.

- For employees in the Management track, courses provided focus on fostering their leadership. We help staff at different levels to shift their roles, fulfill management responsibilities and develop leadership;
- For employees on the Professional track, coursed provided focus on upgrading their expertise and trainings are provided to enhance their professional skills.
- For new employees, we prepared a newcomer growth plan of introducing our corporate culture, rules and regulations, and professionalism requirements, insomuch that the newly employed can understand, recognize and fit in the Company and their own positions.

by the Division of Learning and Development. Training programs organized by functional departments themselves are not included.

# LMS (Learning Management System) in Line with Our Global Talent Strategy

To further satisfy our strategic development needs of globalization, we developed and launched a Learning Management System (hereinafter referred to as "LMS") based on our organizational structure and in line with our global talent strategy. LMS aims to train talents for the Company and build it into a lifelong learning organization. LMS allows employees to attend online courses and have offline practice. It also enables mobile learning to provide more diverse and flexible training.

During the reporting period, all employees of the Company, excluding entry-level staff, have registered LMS accounts. As of the end of the reporting period, there were 143 general courses, 1,586 business specific courses, 605 test papers, together with 24 learning and exchange communities in the system.

In addition, we developed a lecturer training program and formulated the *In-house Trainer Management System* to engage all employees in training. Everyone can apply to be a trainer. As of December 31, 2018, the lecturer training program trained a total number of 235 lecturers, including 78 lecturers for management courses, 54 lecturers for competency courses, and 103 lecturers in business specific courses.



Themed Salon for In-house Trainers

## 5.3 Safeguard Health and Safety

Clearly aware of the primary role of safety and health in maintaining employees' strong enthusiasm for work and enhancing work efficiency, holding the bottom line of ensuring production safety, we strive to protect employees' health and safety in practical means by continuously endeavoring to improve occupational health and safety system and occupational health services.

#### **Guarantee Occupational Health**

With the safety as well as physical and mental soundness of our employees always on our top agenda, we regularly conduct occupational hazard factor testing, provide qualified labor protection articles for personnel involved in occupational hazards, and organize occupational health examinations on regular basis, all of which are in strict compliance with the national laws and regulations and those in operation localities concerning occupational health, including *the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, Provisions on the Supervision and Administration of Occupational Health at Work Sites, the Regulations on Labor Protection in Workplaces Where Toxic Substances, etc. During the reporting period, we passed the OHSAS 18001 Occupational Health and Safety Management System Certification, and no new cases of occupational diseases occurred during the year.* 

To enhance employees' self-protection awareness, we continue to provide employees with a variety of occupational health and safety education and training, helping them learn to wear and use all kinds of labor protection products. Alongside that, in order to provide employees with a safe and healthy working environment, we keep optimizing the production process and proactively promote intelligent production through intelligent transformation to improve the safety of employees in operation. During the reporting period, our factory introduced a number of intelligent transformation projects, including automatic machine palletizing, machine dispensing, and automatic mounting of electrical heat sink fins.

# Machine Automatic Palletizing to Improve Employees' Work Safety

Traditional packaging pallets require manual lifting of products weighing up to 30 kg onto pallets or shelves, long-time work of which is not only costly for employees' physical strength, but also has huge potential to injure employees during handling. During the reporting period, to better the status of manual palletizing, the Company introduced automatic palletizing equipment. which enables automatically palletizing to pallets or shelves through machines after manual packaging, significantly improving the safety of employees' working environment.



#### Safety Production Management

Strictly abiding by *the Work Safety Law of the People's Republic of China* and wholeheartedly adhering to the safety production policy of "safety foremost, prevention first, manage comprehensively", we implement at every level the safety production responsibility system of "horizontally and vertically, all covering" and, with safety production standardization as the yardstick, establish and continuously improve the safety production rules and regulations as well as management system. Apart from that, we implement safety management objectives in accordance with the closed-loop working method, and comprehensively take actions to investigate and handle hidden troubles to safety production. During the reporting period, the safety education coverage rate of the Company's on-the-job personnel, the rate of employment of special operators with certificates and the testing rate of occupational hazard factors all reached 100% with no work-related fatalities throughout the year.

During the reporting period, the Company lost a total of 111 workdays due to work-related injuries. In terms of the types of accidents caused by work-related injuries, traffic accidents and safety production accidents are in majority. In order to protect the legitimate rights and interests of workers and employees, the Company intensified the implementation of *the Regulation on Work-Related Injury Insurance* to ensure that employees receive medical treatment and financial compensation after work-related injuries, and give due care to them and their families. At the same time, in order to prevent and eliminate the recurrence of such work-related accidents, the Company has increased security publicity through bulletin boards, security themed activities and internal mails to increase safety awareness of employees so that they can not only pay attention to the safety behaviors in work sites, working time and their occupation, but also attach more heed to their safety of commuting and in business hours.

#### Safety Culture Construction

To create a sound safety culture in the Company, we have carried out special safety education activities covering fire protection, electricity use, first aid, ascending, equipment, hazard identification, and chemical use at various levels, in multiple channels, and in many forms, aiming to effectively enhance employees' safety awareness and improve their risk prevention capabilities. Through the combination of knowledge contests and VR experiences along with a variety of such themed months as the safety production month and the fire protection month, the Company makes the safety production theory and knowledge concrete and attractive, aiming to enhance employees' safety awareness and ability through rich and colorful safety culture.

## **Emergency Drill**

Taking into account occupational health and safety risks from all sides, we have developed ten emergency plans. According to the emergency plan, we also continue to carry out corresponding emergency drills to strengthen employees' safety awareness, improve employees' abilities of self-protection, self-rescue, disaster prevention and escaping from danger, and accordingly minimize safety risks. During the reporting period, we organized nine fire emergency evacuation drills as well as more than ten other safety drills, including elevator trapping exercises, group food poisoning drills, flood control drills, anti-terrorism drills, natural gas leakage drills, power outage emergency drills, etc.



Fire emergency evacuation drill



Chemical leakage drill

## 5.4 Empathize Employees' Well-being

We attach great importance to keeping work-life balance of employees, spare no effort to perfect the care mechanism for all staff, strive by all means to optimize the office environment with more humanistic atmosphere, show the most empathy to employees with
their life, feelings, progress and all other aspects. All these efforts are meant to help employees pursue happy and healthy life .

# **Care to Employees**

For the sake of our employees' physical and mental soundness, we carry out vast and varied activities out of concern to protect the rights and interests of female employees, to help employees in need so as to enhance employees' sense of belonging, identity and happiness in the Company.

# Open access to fitness center

A fitness center is permanently open to employees free of charge, which accommodates various technical exercise venues, mechanical facilities, physical testing areas, dressing rooms, shower and spa rooms. Professional instructors who provide on-site training and fitness lessons are also accessible for employees with reservation.



**Fitness Center** 

# Launch "Dabai" EAP Care Plan

During the reporting period, "Dabai" EAP care plan was launched to offer tailored psychological care to all staff with lectures on psychology and round-the-clock at-service psychic hotline.

Dabai psychic hotline now allows a feedback mechanism with four channels, including

consultation through phone calls, emails, skype as well as on-site consulting.

For telephone and on-site consultation: An instant feedback mechanism is set up. For hard-cracked nuts that entail coordination or fail to be solved immediately, constant effort and real-time feedback will be taken till they are solved. Besides, in terms of telephone consultation, voice self –service will be available during non-working hours.

- For consultation through emails: A 24h feedback mechanism is established to give concise and clear response to employees about their concerns in a uniform format.
- For consultation through Skype: A mechanism that all consultation before 18:00 must be replied by the end of the day is set up.
- As of December 31 2018, Dabai Hotline had received a total of 14,399 consultations.

# **Care to Pregnant Female Employees**

The Labor Union of the Company set up a sound care mechanism for pregnant female employees. To be specific, for their convenience, mother-and-baby rooms are provided, which are well equipped with a variety of necessary facilities including refrigerators, racks, disinfection cabinets, coat racks, and sinks.



Mother-and-baby room

While establishing a mechanism for visits and condolences to sick people, we have also set up a support fund for relatives of employees suffering from major accidents or sudden dangerous diseases or illnesses.

#### Set up Care Fund for Employees Relatives

We set up care fund for employees' relatives, which was established by Mr. Gong Hongjia, one shareholder of Hikvision, and is now jointly managed by the Human Resources Department, the Labor Union, and the Supply Chain Management Center. The fund is targeted at caring the immediate family members of young and low-income employees who are not on the regular payroll. The fund is used for the rescue when those people mentioned above encounter major accidents or sudden dangerous diseases or illnesses, the subsidies for their college fees and their life skill training expenses, as well as aid for their daily life expenses. Since the launch of the fund, it has given aid to 6 employees with the amount of assistance totalled 630,000 RMB.

#### **Work-life Balance**

We have, as always, advocated happy work and happy life. To this end, a variety of cultural and sports activities are held to balance employees' work and life. Six amateur clubs for football, basketball, badminton, swimming, dance yoga, photography are set up. Activities are carried out regularly every year among clubs for employees. Some sports games are also threw inside the Company. More often than that, employees outstanding in some sports are sent to participate in performances and competitions outside the Company. In addition, we also hold a series of activities different themed topics such as "Happy New Year", "Goddess" and "Happiness" to enhance interaction among employees, bolstering their well-being and sense of belonging.



4V4 basketball game

Binjiang Youth football league

#### "Happy New Year" Activities

Every year of Spring Festival Eve, we celebrate the festival, create and pass the festivity on to all people in the Company with fun activities such as Inter-floor New Year greeting, Collecting Wufu, Gathering good luck, New Year sports meeting, New Year garden party, Special reunion dinner and Executive Challenge.

#### "Goddess" Activities

During the Women's Day each year, we usually organize Female Excellence activities, and specifically carry out activities such as Goddess Welfare Society, Goddess Training Course, Goddess Lecture Hall and Goddess Lucky Star to promote the image of ladies in new era with enterprising spirit and sagacious mind. The intention is to enable everyone to make friends and enjoy themselves with joy as well as knowledge and growth amid relaxed afternoon tea time and fun science class.





# "Happiness" Activities

The Company's annual "Happiness" events include three themes of "parents", "partners" and "babies". Six to seven colorful and warm fun activities are held for the family members of employees, to get familiar with the office environment, understand the work content of the staff, and to enhance the sense of belonging and identity of the employees' family members through inserting parent-child classroom link into the activities.



# Chapter 6 Pursue Green Operation, Empower Sustainable

# Ecosystem

As a leader in the industry, Hikvision keeps up with domestic and international environmental policies and trends. In this regard, it complies with related environmental protection laws and regulations, on the basis of which it puts environmental protection high on its agenda in pursuing sustainable development and incorporates it into the core values of the Company's daily operation Since its inception, Hikvision has been committed to creating an environmental-friendly management and development mode. To this end, it continuously endeavors to promote energy conservation, emission reduction and environmental greening, seize opportunities to develop and utilize clean technologies, and explore more energy-saving methods and channels.

# 6.1 Build Management System

The Company strictly abides by national, local and industrial environmental laws, regulations and standards, including *Environmental Protection Law of the People's Republic of China*, *Energy Conservation Law of the People's Republic of China*, *Water Pollution Prevention and Control Law of the People's Republic of China*, *Air Pollution Prevention and Control Law of the People's Republic of China*", *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution*. It compiles an internal management system in line with its conditions to clarify the roles, responsibilities and jurisdiction of managers, executives and supervisory personnel in environmental management activities so as to continuously push forward the Company's environmental protection work.

#### **System Certification**

The Company has obtained the ISO 14001 environmental management system certification, the SA 8000 social responsibility standard certification, the QC 080000 hazardous substances process management system certification and the ISO 50001 energy management system certification, and a five-star assessment of its green supply chain.





Certificate of Green Supply Chain Assessment

In accordance with the requirements of the ISO 14001 environmental management system, the Company evaluates the potential environmental risks in R&D phase, and has made corresponding written formulation to manage the whole process of production to increase investment in the construction of pollutant treatment facilities and strictly follow rules to handle waste gas, wastewater and solid waste in the production process.

# **Target Setting**

The Company encourages all subsidiaries to proactively carry out environmental improvement projects on the one side and minimize the damage of business operations to the environment on the other side. To this end, it is encouraged to strive to reduce consumption in energy, water and other resources through such measures as process optimization and source control, to increase resource recycling rate.

In order to ensure the effective implementation of environmental protection projects and the continued promotion of sustainable development concepts, the Company has set performance indicators for waste, chemicals and environmental protection equipment.

# Hikvision Environmental Indicators in 2018



In addition, the Company is working to minimize environmental risks by setting specific

targets for power consumption, water consumption, and gas consumption of the plant, continuing to increase investment in the construction of pollutant treatment facilities, and striving to reduce discharge of wastewater, solid waste and emissions through compliance treatment.

# **6.2 Practice Green Operation**

The Company adheres to the principle of sustainable development of enterprises and continuously strengthens the protection of the environment for building a low-carbon society. During the reporting period, we continued to promote equipment energy-saving renovation and process optimization, and gradually reduce consumption of energy and resources.

# **Energy Management**

After years of exploration and attempts, the Company, by adopting a series of energy management measures, has formulated an *Energy Saving and Consumption Reduction Control Procedure* which clearly defines energy saving and control in the whole process of utilizing electricity, natural gas and other energy in the main production process, auxiliary production process and subsidiary production process. As a result, the Company has made great headway in enhancing energy use efficiency comprehensively and meticulously, from macro to micro level, from management to implementation. The Company has also launched the establishment of an energy management system, putting in place refined energy management. All these endeavors of the Company are meant to regulate energy management, further improve energy management and reduce energy consumption in production and operations.

The Company has formulated and issued environmental and energy indicators, refined the energy targets of each department based on the company-level energy consumption per RMB 10,000 production value target, and set the 2017 value as the Company's energy benchmark while selecting energy performance parameters after determining energy performance parameters. During the reporting period, through unremitting efforts in energy conservation, we over fulfilled the energy target in 2018, and the Company's energy consumption of RMB 10,000 output value decreased by 3.8% compared to 2017.

Energy Types	Unit	Consumption amount
Unleaded gasoline	ton	617.3
Diesel	ton	52.8
Natural gas	10,000 cubic meters	143.5
Electricity	MWh	105,643.3
Energy consumption	Unit	Amount

Direct energy consumption	ton of standard coal	2,728.7
Indirect	ton of standard coal	12,983.6
energy consumption		
Total energy consumption	ton of standard coal	15,712.3
Energy	ton of standard coal per	0.32
consumption intensity	million revenue	
Greenhouse gas emission	Unit	Emission amount
Scope one	ton of CO <sub>2</sub>	5,045.4
Scope two	ton of CO <sub>2</sub>	72,602.6
Total emission	ton of CO <sub>2</sub>	77,648.0
(only scope one and		
scope two included)		
Emission intensity	ton of CO <sub>2</sub> per million revenue	1.56
	(RMB)	

In addition, during the reporting period, the Company carried out a number of energy-saving renovations and promoted intelligent production through intelligent transformation to create light-free factories with the aim of improving energy efficiency and boosting the Company's green development.



# Water Resource Management

The Company has established a strict water resource management system in accordance with the production technique level and relevant local laws, regulations and standards to promote scientific and rational use of water resources, and significantly enhance the efficiency of water use. We proactively adopt cutting-edge technologies for water conservation, choose water-saving equipment and appliances and install water-saving and anti-overflow devices while striving to reduce water consumption so as to increase the reuse rate of water resources. At the same time, we enthusiastically promote water-saving culture, create a water-saving atmosphere, and further intensify our efforts to conserve water resources.

Types of Water Resources	Unit	Consumption amount
Municipal water supply	ton	895,000.9
Underground water(from overseas exclusively)	ton	1,014.7
Total	ton	896,015.6
Intensity	ton per million revenue (RMB)	17.98

# **Packaging Material Management**

The packaging materials used by the Company in the production process are mainly paper, plastic, wood and metal.

During the reporting period, the Company continued to optimize the packaging and packaging materials, such as changing the packaging method, and replacing the polystyrene with air column bags. In the process of purchasing packaging materials from suppliers, we strictly evaluate their environmental qualifications and take into evaluation whether they have EIA certificates, sewage discharge permits, noise test reports, etc. Only when all requirements are assessed to be met, the suppliers are qualified to supply us with packaging materials.

At the same time, we proactively promote the recycling of packaging materials. The recyclable packaging materials are uniformly recycled by the departments which use these materials, stored at the warehouse at a fixed time, recycled or uniformly handled by suppliers.

Packaging materials	Unit	Consumption amount
Plastic	ton	5,389.4
Carton	ton	171,015.9
Wood	ton	23,753.7
Total	ton	200,159.0
Intensity of the packaging materials	ton per million revenue (RMB)	4.02

#### **Chemical Management**

In order to standardize the procurement, transportation, loading and unloading, storage, use and disposal of chemicals, the Company has formulated the *Regulations on the Management of Supply Chain Chemicals*, which clarifies relevant requirements and operational specifications, and requires employees to strictly follow the regulations.



# 6.3 Reasonably Reduce Emissions

The Company continues to strengthen the control of pollutants and endeavor to reduce emissions of pollutants so as to minimize the pressure of its production and operation on the environment. At the same time, it strives to further put into practice the concept of sustainable development when pursuing environmental-friendly design of products.

# Solid Waste Management

The Company has established *Waste Management Procedure* in accordance with its production technique level and relevant local laws, regulations and standards to manage the generation of waste more effectively. We classify waste into recyclable waste, non-recyclable waste and hazardous waste.

Recyclable waste	Unit	Amount
Plastic	ton	1,126.8
Wood	ton	546.3
Paper	ton	4,767.6
Metal	ton	1,034.6
Others (harness, oil paper, etc.)	ton	653.7
Total	ton	8,129.0
Intensity	ton per million revenue (RMB)	0.16
Non-recyclable waste	Unit	Amount
Kitchen waste	ton	2,281.1
Office garbage	ton	5,929.3
General industrial waste	ton	1,387.7
Total	ton	9,598.1
Intensity	ton per million revenue (RMB)	0.19
Hazardous waste	Unit	Amount
Total amount of hazardous waste	ton	121.6
Hazardous waste intensity	ton per million revenue (RMB)	0.002

In order to control all types of solid waste generated in all activities, products and services of the Company, we have established *Waste Management Procedure* and *Supply Chain Hazardous Waste Management Regulations*, which regulate the requirements for the classification, collection, handover, temporary storage, processing of hazardous wastes.



#### **Management of Electronics and Electrical Appliances**

The Company has developed a recycling plan to handle waste electronics and electrical appliances from products that has expired or fall short of quality, reduce the generation of electronic waste, thereby lowering operating costs. The Company has achieved full control of the recycling process by standardizing the whole five links in the process, namely material return, material acceptance, disposal assessment, disposal execution and end-of-life management.



#### **Environmental Design Concept**

The Company acts in line with the green design concept to design products and seeks to meet the environmental-friendly requirements of products in as many links as demand analysis, design, verification, release, manufacturing and sales of products. Apart from this, it also takes action in a number of aspects including hazardous substance control, green energy conservation and resource recycling.



	Green Products Design				
Conception Plan	Development	Testing Introduction	Life Cycle		
Environmental protection design planning	Environmental protection design	Environmental Compliance	Sustainable improvement		
Compliance with environmental laws and regulations	Selection of environmental protection	Testing of products environmental protection	Product design optimization		
ROHS REACH	Environmental protection on substance, on materials and on processing.	Environmental Protection examination and Testing of Products and examination on product release	Sampling and improvement of environmental protection, Effectiveness control of environmental protection repo		
Green and energy-efficient	Green manufacturer	Green examination	and sustainable environmenta		
Low power consumption and high efficiency	Environmental protection access	on manufacturer Examination and rectification of environmental protection system	protection improvement plan and implementation		
Resources recycling					
miniaturization, lightness, long service life and	recycling				

The Company constantly keeps updated with clean technology application and integrates environmental protection concepts into product design, product packaging and other aspects in its endeavor to implement energy conservation and consumption reduction.



# 6.4 Create Environmental-friendly Culture

The creation of a green harmonious environment and the Company's sustainable development is closely bound up with raising employees' environmental awareness. Believing that a quality environment brings better work, we create an energy-saving and emission-reducing atmosphere and subtly increase employees' awareness of environmental protection by releasing energy-saving and consumption-reducing initiatives, optimizing equipment operating parameters, and appointing administrators in this regard.



In addition, the Company strives to create an environmental-friendly culture, maintain and continuously enhance employees' environmental awareness through various environmental protection activities, and encourage employees to translate environmental awareness into down-to-earth environmental actions.

# Publicity and activities on environmental protection

In order to ingrain environmental protection concept deeply into the daily life of employees, during the reporting period, the Company launched a series of environmental protection themed activities, continuously deepening the environmental-friendly concept, publicizing environmental protection ideas, instilling the values of sustainable development to every employee, and actively creating green atmosphere.



# Appendix Report index: GRI Standards

Disclosure issues/disclosures	Disclosure title	Chapter index	Page number index
GRI 101 Foundati	on 2016		
GRI 102 General o	lisclosures 2016		
Organization Prof	ile		
102-1	Name of the organization	About This Report	3-4
102-2	Activities, brands, products, and services	1.1 Company Profile	9-14
102-3	Location of headquarters	About This Report	3-4
102-4	Location of operations	1.1 Company Profile	9-14
102-5	Ownership and legal form	Legal form: company limited	-
102-6	Markets served	1.1 Company Profile	9-14
102-7	Scale of the organization	Chapter 1: Our Company at A Glance 5.1 Protect the rights and interests of employees	9-25 63-65
102-8	Information about employees and other workers	5.1 Protect the rights and interests of employees	63-65
102-9	Supply chain	3.5 Supply Chain Development	46-48
102-10	Significant changes to the organization and its supply chain	Not applicable, there were no major changes in the organization and its supply chain during the reporting period.	-
Strategy			
102-14	Statement from senior decision-maker	Letter from the Management Letter from Chief Compliance	5-6 7

		Officer	
Morality and Inte	grity		
102-16	Values, principles, standards and norms of behavior	1.1 Company Profile	9-14
Governance			
102-18	Governance structure	1.3 Corporate Governance	15-20
Stakeholder Invol	vement		
102-40	List of stakeholder groups	1.4 ESG Management	20-25
102-42	Identifying and selecting stakeholders	1.4 ESG Management	20-25
102-43	Approach to stakeholder engagement	1.4 ESG Management	20-25
102-44	Key topics and concerns raised	1.4 ESG Management	20-25
Reporting Practic	e		
102-45	Entities included in the consolidated financial statements	About This Report	3-4
102-46	Defining report content and topic Boundaries	About This Report	3-4
102-47	List of material topics	1.4 ESG Management	20-25
102-48	Restatements of information	Not applicable, this report is the first ESG report, no information restatement	-
102-49	Changes in the reporting	Not applicable, this report is the first ESG report	-
102-50	Reporting period	About This Report	3-4
102-51	Date of most recent report	Not applicable, this report is the first ESG report	-
102-52	Reporting cycle	About This Report	3-4

102-53	Contact point for questions regarding the report	About This Report	3-4	
102-55	GRI content index	Appendix Report Index: GRI Standards	88-99	
Material topic				
Economy				
GRI 201 Economic	e Performance 2016			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25	
	103-2 The management approach and its components	1.2 Operational Performance	15	
	103-3 Evaluation of management approach	1.2 Operational Performance	15	
201-1	Direct economic value generated and distributed	1.2 Operational Performance	15	
GRI 202: Market	Performance 2016			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25	
	103-2 The management approach and its components	1.2 Operational Performance	15	
	103-3 Evaluation of management approach	1.2 Operational Performance	15	
GRI 204: Procurer	GRI 204: Procurement Practices 2016			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25	
	103-2 The management approach and its components	3.5 Supply Chain Development	46-48	
	103-3 Evaluation of	3.5 Supply Chain	46-48	

	management approach	Development	
GRI 205: Anti-corruption 2016			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	1.3 Corporate Governance	15-20
	103-3 Evaluation of management approach	1.3 Corporate Governance	15-20
205-2	Communication and training about anti-corruption policies and procedures	1.3 Corporate Governance	15-20
205-3	Confirmed incidents of corruption and actions taken	1.3 Corporate Governance	15-20
GRI 206: Anti-con	npetitive Behavior 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	1.3 Corporate Governance	15-20
	103-3 Evaluation of management approach	1.3 Corporate Governance	15-20
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1.3 Corporate Governance	15-20
Environment			
GRI 301: Material	s 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25

	103-2 The management approach and its components	6.2 Practice Green Operations	78-81
	103-3 Evaluation of management approach	6.2 Practice Green Operations	78-81
301-1	Materials used by weight or volume	6.2 Practice Green Operations	78-81
GRI 302: Energy 2	2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	6.2 Practice Green Operations	78-81
	103-3 Evaluation of management approach	6.2 Practice Green Operations	78-81
302-1	Energy consumption within the organization	6.2 Practice Green Operations	78-81
302-3	Energy intensity	6.2 Practice Green Operations	78-81
302-4	Reduction of energy consumption	6.2 Practice Green Operations	78-81
302-5	Reductions in energy requirements of products and services	6.2 Practice Green Operations	78-81
GRI 303: Water an	nd Effluents 2018		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	6.2 Practice Green Operations	78-81
	103-3 Evaluation of management approach	6.2 Practice Green Operations	78-81
303-1	Water withdrawal by source	6.2 Practice Green Operations	78-81

GRI 305: Emission 2016			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	6.2 Practice Green Operations	78-81
	103-3 Evaluationof management approach	6.2 Practice Green Operations	78-81
305-1	Direct (Scope 1) GHG emissions	6.2 Practice Green Operations	78-81
305-2	Energy indirect (Scope 2) GHG emissions	6.2 Practice Green Operations	78-81
305-4	GHG emission intensity	6.2 Practice Green Operations	78-81
GRI 306: Effluents	s and Waste 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	6.2 Practice Green Operations	78-81
	103-3 Evaluation of management approach	6.3 Reasonably Reduce emissions	81-85
306-2	Waste by type and disposal method	6.3 Reasonably Reduce Emissions	81-85
306-4	Transport of hazardous waste	6.3 Reasonably Reduce Emissions	81-85
GRI 307; Environmental Compliance 2016			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	Chapter 6 Pursue Green Operation, Empower	76-87

		Sustainable Ecosystem	
	103-3 Evaluation of management approach	Chapter 6 Pursue Green Operation, Empower Sustainable Ecosystem	76-87
GRI 308: Supplier	Environmental Assessment 201	16	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	3.5 Supply Chain Development	46-48
	103-3 Evaluation of management approach	3.5 Supply Chain Development	46-48
308-1	New suppliers that were screened using environmental criteria	3.5 Supply Chain Development	46-48
Society			
GRI 401: Employ	nent 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	Chapter 5 Talent-Focused, Growing Together	63-75
	103-3 Evaluation of management approach	Chapter 5 Talent-Focused, Growing Together	63-75
401-1	New employee hires and employee turnover	5.1 Protect the Rights and Interests of Employees	63-65
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<ul><li>5.1 Protect the Rights and Interests of Employees</li><li>5.4 Empathize Employees' Well-being</li></ul>	63-65 71-75
401-3	Parental leave	5.1 Protect the Rights and	63-65

		Interests of Employees	
GRI 403: Occupat	GRI 403: Occupational Health and Safety 2018		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	5.3 Safeguard Health and Safety	68-71
	103-3 Evaluation of management approach	5.3 Safeguard Health and Safety	68-71
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	5.3 Safeguard Health and Safety	68-71
GRI 404: Training	GRI 404: Training and Education 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management approach and its components	5.2 Talent Training	65-68
	103-3 Evaluation of management approach	5.2 Talent Training	65-68
404-1	Average hours of training per year per employee	5.2 Talent Training	65-68
404-2	Programs for upgrading employee skills and transition assistance programs	5.2 Talent Training	65-68
GRI 405: Diversity	v and Equal Opportunity 2016	·	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	1.4 ESG Management	20-25
	103-2 The management	5.1 Protect the Rights and	63-65

	anneach and its components	Interests of Employees	
	approach and its components	Interests of Employees	
	103-3 Evaluation of	5.1 Protect the Rights and	63-65
	management approach	Interests of Employees	
405-1	Diversity of governance	5.1 Protect the Rights and	63-65
	bodies and employees	Interests of Employees	
GRI 406: Non-disc	crimination 2016		
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	5.1 Protect the Rights and	63-65
	approach and its components	Interests of Employees	
	103-3 Evaluation of	5.1 Protect the Rights and	63-65
	management approach	Interests of Employees	
GRI 407: Freedom of Association and Collective Bargaining 2016			
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	5.1 Protect the Rights and	63-65
	approach and its components	Interests of Employees	
	103-3 Evaluation of	5.1 Protect the Rights and	63-65
	management approach	Interests of Employees	
GRI 408: Child La	bor 2016	I	
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	5.1 Protect the Rights and	63-65
	approach and its components	Interests of Employees	
	103-3 Evaluation of	5.1 Protect the Rights and	63-65
	management approach	Interests of Employees	
GRI 409: Forced o			

GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	5.1 Protect the Rights and	63-65
	approach and its components	Interests of Employees	
	103-3 Evaluation of	5.1 Protect the Rights and	63-65
	management approach	Interests of Employees	
GRI 413: Local Co	ommunities 2016		
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	Chapter 4 Serve the Society to	49-62
	approach and its components	Create a Better Future	
	-rr-own and no components		
	103-3 Evaluation of	Chapter 4 Serve the Society to	49-62
	management approach	Create a Better Future	
GRI 414: Supplier	Social Assessment 2016	1	
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 Management approach	3.5 Supply Chain	46-48
	and its components	Development	
GRI 416: Customer Health and Safety 2016			
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	2.2 Quality Assurance	29-34
	approach and its components		
	103-3 Evaluation of	2.2 Quality Assurance	29-34
	management approach		
			20.24
416-1	Assessments of the health and	2.2 Quality Assurance	29-34
	safety impacts of product and		
	service categories		

GRI 417: Marketi	ng and Labeling 2016		
			20.25
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	2.2 Quality Assurance	29-34
	approach and its components	3.1 Provide Quality Service	39-41
	103-3 Evaluation of	2.2 Quality Assurance	29-34
	management approach	3.1 Provide Quality Service	39-41
417-1	Requirements for product and service information and labeling	2.2 Quality Assurance	29-34
417-3	Incidents of non-compliance concerning marketing communications	3.2 Protect User Privacy	42-43
GRI 418 Customer	r Privacy 2016		
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management approach and its components	3.2 Protect User Privacy	42-43
	103-3 Evaluation of management approach	3.2 Protect User Privacy	42-43
418-1	Substantiated complaints concerning breaches of customer privacy and loss of customer data	3.2 Protect User Privacy	42-43
GRI 419: Socioeconomic Compliance 2016			
GRI 103:	103-1 Explanation of the	1.4 ESG Management	20-25
Management	material topic and its		
Approach 2016	Boundary		
	103-2 The management	Letter from Chief Compliance	7

approach and its components	Officer	15-20
	1.3 Corporate Governance	
103-3 Evaluation of	Letter from Chief Compliance	7
management approach	Officer	15-20
	1.3 Corporate Governance	

# Note:

This document is a translated version of the Chinese version 2018 Environmental, Social and Governance Report ("2018年环境、社会及管治报告"), and the published announcements in the Chinese version shall prevail. The complete published Chinese 2018 ESG Report may be obtained at www.cninfo.com.cn.

# See Far, Go Further