



Intelligence Enlightens Life
For a Shared Future

QINGDAO HAIER BIOMEDICAL CO., LTD.
2022 CORPORATE SOCIAL RESPONSIBILITY REPORT



Make Life Better

Qingdao Haier Biomedical Co., Ltd.

CONTENTS



01	About the Report	06	CSR governance
03	Chairman's statement	88	Outlook 2023
05	About Haier Biomedical	89	Appendix



L Leadership

17 Innovating for well-being and health

- 21 Technology upgrades life barrier
- 29 Digital and intelligent solutions guard well-being



I Integrity

37 Paying reverence for life

- 39 Improving governance and consolidating the foundation of operation
- 42 Avoiding risks and practising compliance
- 46 Higher quality to meet user needs
- 51 Best user experience with premium services



F Future

55 Creating value together with our people

- 57 Exploring tremendous potential of employees
- 70 Creating a healthy and happy life for people



E Ecosystem

77 Building a green homeland

- 81 Supporting carbon reduction with policies
- 83 Driving carbon actions by technology innovation
- 86 Pursuing a green future through cooperation



About the Report

This is the third corporate social responsibility report (hereinafter referred to as "the Report") issued by Qingdao Haier Biomedical Co., Ltd. In the Report, Haier Biomedical discloses practices and performance in fulfilling economic, environmental, social and corporate governance responsibilities in 2022, this is to provide further visibility to all our stakeholders and present our consolidated key performance indicators for our fiscal year 2022.

Reporting frequency

The report is issued annually.

Reporting scope

Unless otherwise stated, the reporting scope is consistent with the annual report of Haier Biomedical. The information hereof covers Haier Biomedical and the subsidiaries within the scope of consolidation.

Reporting period

The reporting period is from 1 January 2022 to 31 December 2022. To provide more comparable and forward-looking information, the period may be extended accordingly.

Reporting guidelines

The United Nations ("UN") - [SDG Compass](#)

International Sustainability Standards Board - [Sustainability Reporting Standards](#) (GRI Standards)

Chinese Academy of Social Science - [Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises](#) (CASS—CSR4.0)

China National Standards - [Guidance on Social Responsibility Reporting](#) (GB / T36001—2015)

Shanghai Stock Exchange - [Notice on Strengthening the Social Responsibility of Listed Companies and Issuing the "Guidelines for Environmental Information Disclosure of Listed Companies on the Shanghai Stock Exchange"](#)

Description of data

The data sources used in the Report include original data of the Company' s actual operation, public data from government departments, annual financial data, internal statistics statements, and surveys, assessments and interviews by third parties, etc. All financial data quoted in the Report are shown in Renminbi ("RMB"). In the case of any discrepancies, the financial report shall prevail.



Definitions

For the sake of compendious expression and smooth reading, "Qingdao Haier Biomedical Co., Ltd." in the Report is also referred to as "Haier Biomedical" , "the Company" or "we" .

Preparation procedures

The Report is prepared based on the corporate social responsibility ("CSR") practices of Haier Biomedical, following the process of "initiation - material collection - compilation and revision - review by senior management - review by the Board of Directors - release" . At the initiation, compilation and revision stages, the Company actively communicated with relevant stakeholders to determine appropriate reporting framework and content.

Reliability assurance

The Company has made a commitment that there is no false record, misleading statement or material omissions in the Report, and is responsible for the truthfulness, accuracy and completeness of its content. The Report is published in both simplified Chinese and English. Should there be any inconsistency between the two versions, the simplified Chinese version shall prevail.

Approval of the Report

The Report has been reviewed and approved by the Board of Directors of the Company.

Access to the Report

The Report is available at the website of Shanghai Stock Exchange (www.sse.com.cn) and Haier Biomedical' s official website (<https://www.haierbiomedical.com/>) for reading and downloading.

Contact information

Address: No. 280 Fengyuan Road, High-tech Zone, Qingdao, Shandong

Postcode: 266000 Tel: 0532-88935566 Email: haierbiomedical@haierbiomedical.com

Chairman's statement



Chief Executive Officer of
Qingdao Haier Biomedical Co., Ltd.
Lixia Tan

2022 is crucial for the national "14th Five-Year Plan", as well as for Haier Biomedical to move forward vigorously and live up to the times. In such an environment full of uncertainties, Haier Biomedical has kept up with the trends and strived with determination, insisting on that intelligence enlightens life for a shared future. Riding on changes in the world, our times and science and technology, Haier Biomedical always adheres to the "Rendanheyi" model, and has put ecological transition, digital transformation and self-reliance in science and technology high on agenda of strategic development to build on the momentum. Haier Biomedical moved fast to make rock-solid achievements against an ever-changing landscape. For 12 consecutive quarters, the Company had maintained an increase of 30% or more in revenue, successfully stepping onto a high-quality development path.

In 2022, Haier Biomedical officially became a member of the United Nations Global Compact ("UNGC"), and made continuous efforts in fulfilling social responsibilities. We have built a "LIFE" social responsibility system centring on "life science and medical innovation" to cater for users' needs, which covers four key areas, i.e., Leadership, Integrity, Future and Ecosystem. Guided by this system, we have taken concrete actions to realise our CSR vision that "Intelligence enlightens life for a shared future".

In 2022, we safeguarded well-being and health through continuous innovation and intelligent manufacturing.

We integrated our own development with national strategies and the people's livelihood. An independent innovation system of synergy between industry, universities, research institutions, and application has been opened up to achieve development engined by innovation and led by hard technology, and to make high-end medical equipment independent and controllable. Being deeply convinced that value creation drives the reshaping of thinking and mode, we have accelerated the development of intelligent manufacturing and contributed to the construction of modern industrial system. We continued to explore the innovative application of digital technologies and shared our innovation outcomes. For example, we served major national strategic projects concerning biosafety, food security, genetic security, etc., to strengthen national security. We gave full play to our demonstration and leading role in the industry. Throughout our ecosystem co-creation, we integrated cutting-edge technologies into user scenarios to add value and ensure the well-being and health of all people.

In 2022, we worked to form a multi-win industry ecosystem with integrity, serving users attentively and sincerely.

We adhered to high-standard corporate governance and carefully mitigated corporate risks. We continued to improve compliance governance and proactively built an incorruptible and legal business culture in order to maximise long-term value for shareholders. We upheld the quality culture that quality is of utmost importance and we should pay "reverence for life" to establish a responsible supply chain system. To always offer best user experience, we made concerted efforts with members of our ecosystem as we operate.

In 2022, we joined hands with makers and all sectors of society to share a sustainable future.

We firmly believe that culture excellence creates leading value and constantly improve the "maker training system". We respect and care for employees, striving to enhance their well-being. Adhering to the principle of "maximising the value of people", we have established a sound incentive mechanism of "high-value creation for high reward", to unleash their vitality and potential, and enable them to steer sustainable development of the Company. By leveraging our strengths in the medical and health industry, we have accelerated the popularity of medical technology, and promoted the universal sharing of high-quality medical resources. We have worked with our partners to export China's intelligent solutions, to facilitate the development of global public health, and make health accessible.

In 2022, we adhere to the bottom line of green development and built our homeland with green and low-carbon technologies.

Upholding the concept of "building a prosperous industry in the long run with green mountains and fresh air", Haier Biomedical has made practical efforts to implement national strategy of "carbon peaking and carbon neutrality". We prioritised ecology and stepped up efforts in green parks, green factories, green technologies, green products, green supply chains, as well as the green manufacturing system to lay a green foundation for high-quality development. We were proactively engaged in the building of a modern China, where man and nature coexist harmoniously, and the transition to a green industry, to make the earth greener with Chinese strength. We fulfil our responsibility as a global ecological civilisation enterprise, and are committed to building a shared future for all life on earth and a clean and beautiful world with China's scientific and technological strength, so as to make life better!

We maintain brave enough to charge at the toughest and aim at the farthest. The year of 2023 is the first year for the full implementation of the Party's 20th National People's Congress Guiding principles, with both hopes and challenges. Looking forward to a new journey, Haier Biomedical will vigorously forge ahead. Bearing in mind the responsibility and mission of an enterprise in Chinese modernisation, we will thoroughly implement the strategy of innovation-driven development and keep making scientific and technological breakthroughs in the high-end medical equipment field. We will continue to deepen the "LIFE" CSR system and practice the vision that "Intelligence enlightens life for a shared future". We will actively devote ourselves into China's overall development and make special contributions to boosting China's overall strengths, to the national rejuvenation, and to the building of a community with a shared future for mankind.

About Haier Biomedical

Company profile

Haier Biomedical was founded to focus on research and development ("R&D"), manufacturing, marketing and sales of low temperature storage equipment for biomedical samples. The Company has grown up as a service solution provider on basis of IoT. We mainly engage in two major business fields, life science and medical innovation, and we strive to create the best user experience. For a wide range of user groups such as hospitals, biomedicine enterprises, scientific research institutions, universities, disease control and prevention centres, and blood banks, the Company provides comprehensive digital solutions with multiple types of products and services for scenarios including smart laboratories, digital hospitals, smart public health and smart blood distribution.

It is an era of digital economy full of challenges and opportunities. The Company takes lead in transforming the biomedical industry, with the pioneering solutions launched for scenarios including smart blood distribution, smart vaccination, automatic in-hospital pharmacy and digital public health check, which are built on emerging technologies such as the IoT and automation. Moreover, with breakthroughs successively made in core technologies, such as microbial culture, environmental simulation, rapid refrigeration centrifugation and laboratory consumable manufacturing technology, the Company keeps innovating and iterating solutions for smart laboratory and other scenarios, to expand presence in arenas of life science and medical innovation.

By now, our products and solutions have been applied in more than 130 countries and regions around the world, and we have built long-term cooperative relationships with more than 40 international organisations including the World Health Organisation ("WHO") and the United Nations International Children' s Emergency Fund ("UNICEF").



CSR governance

We are committed to offering digital scenario-based solutions of life science and medical innovation. Bearing in mind our mission to protect people's life and health, we actively support the implementation of The Ten Principles of the United Nations Global Compact and the achievement of Sustainable Development Goals ("SDGs") of United Nations, and continue to integrate CSR governance into our daily operations and business practices. We have established a top-down CSR governance structure and communicate with stakeholders to identify CSR governance priorities. In view of the assessment results of Haier Biomedical' s development strategy and material issues, we have developed the "LIFE" CSR model, which gives clearer guidance on our CSR work and delivers our core CSR values.

CSR governance structure

Haier Biomedical has established a tiered CSR governance structure, which clarifies rights and responsibilities of each tier, decision-making procedures and a reporting mechanism. This structure lays a solid foundation for promoting our CSR and sustainability practices.

Tier 1:

The Board of Directors is the top decision-making and final responsible body of environmental, social and governance ("ESG") issues at Haier Biomedical. It reviews and supervises management policies, strategies and risks related to ESG issues, and steers the overall ESG development of Haier Biomedical.

Tier 2:

The Strategy and ESG Committee consists of the board officers led by the Chairman. It is responsible for the formulation of ESG management policies and strategies, ESG targets and coordination of ESG work, and reports to the Board of Directors on core issues. It also supervises and coordinates the planning, progress and implementation of ESG work.

Tier 3:

The ESG Working Group consists of ESG functional department heads. It is responsible for the formulation of annual work plans according to the Company' s ESG policies and strategies, implementation of specific tasks based on these work plans, and ensures the achievement of the Company' s ESG targets.



Stakeholder engagement

Haier Biomedical puts much emphasis on engagement with stakeholders. To give them active responses, we have established a regular communication mechanism and identifies ESG issues of their concern. The main communications between Haier Biomedical and stakeholders in 2022 are summarised as follows:

Stakeholders	Issues	Channels
Government and regulators	Compliant operation Information security Responsible marketing Green manufacturing Biodiversity Corporate governance	Consultation with government Information disclosure Topic reporting Working conferences Inquiries and answers
Stockholders and investors	Corporate governance Compliant operation Protection of intellectual properties Anti-corruption	Information disclosure Shareholders' meetings Performance briefing Online platforms Roadshow Institutions'research meetings
Customers	Consumers' rights and interests Product innovation Cooperation and communication Product quality Superior service Responsible marketing Information security	Product launch Satisfaction survey Customers'communication and complaint channels Official WeChat account
Suppliers and partners	Protection of human rights Supply chain management Anti-corruption	Training Working conferences Industry activities Online or offline regular communication
Employees	Employees'rights and interests Occupational health and safety Balance between work and life Development and training Diversity & equal opportunities Protection of human rights	Employee symposium Meetings of employee representatives Labour union Employee training Employees'complaint and reporting mechanism
Environment and communities	Community investment Low-carbon technologies Waste management Water management Emission management Energy and resource conservation Responsible procurement Green office Climate change	Charity projects and fundraising platforms Information disclosure Media-related conference Regular communication with media

Material issues

To assess material issues of Haier Biomedical that stakeholders concern and their materiality to our business, we have sorted out and built up a library of ESG issues from three pillars of ESG, taking into consideration the Company's actual business operations, issues of concern to stakeholders and hot industrial topics. With this library, we drew the following materiality matrix:



Environmental

- 1 Low-carbon technologies
- 2 Energy and resource saving
- 3 Emission management
- 4 Waste management
- 5 Climate change
- 6 Responsible procurement
- 7 Water management
- 8 Green office

Social

- 9 Product innovation
- 10 Cooperation and communication
- 11 Protection of intellectual properties
- 12 Biodiversity
- 13 Community investment
- 14 Superior service
- 15 Protection of human rights
- 16 Consumers' rights and interests
- 17 Responsible marketing

Governance

- 18 Supply chain management
- 19 Product quality
- 20 Diversity & equal opportunities
- 21 Employees' rights and interests
- 22 Employees' rights and interests
- 23 Development and training
- 24 Occupational health and safety

- 25 Corporate governance
- 26 Anti-corruption
- 27 Compliant operation
- 28 Information security

CSR strategy of Haier Biomedical

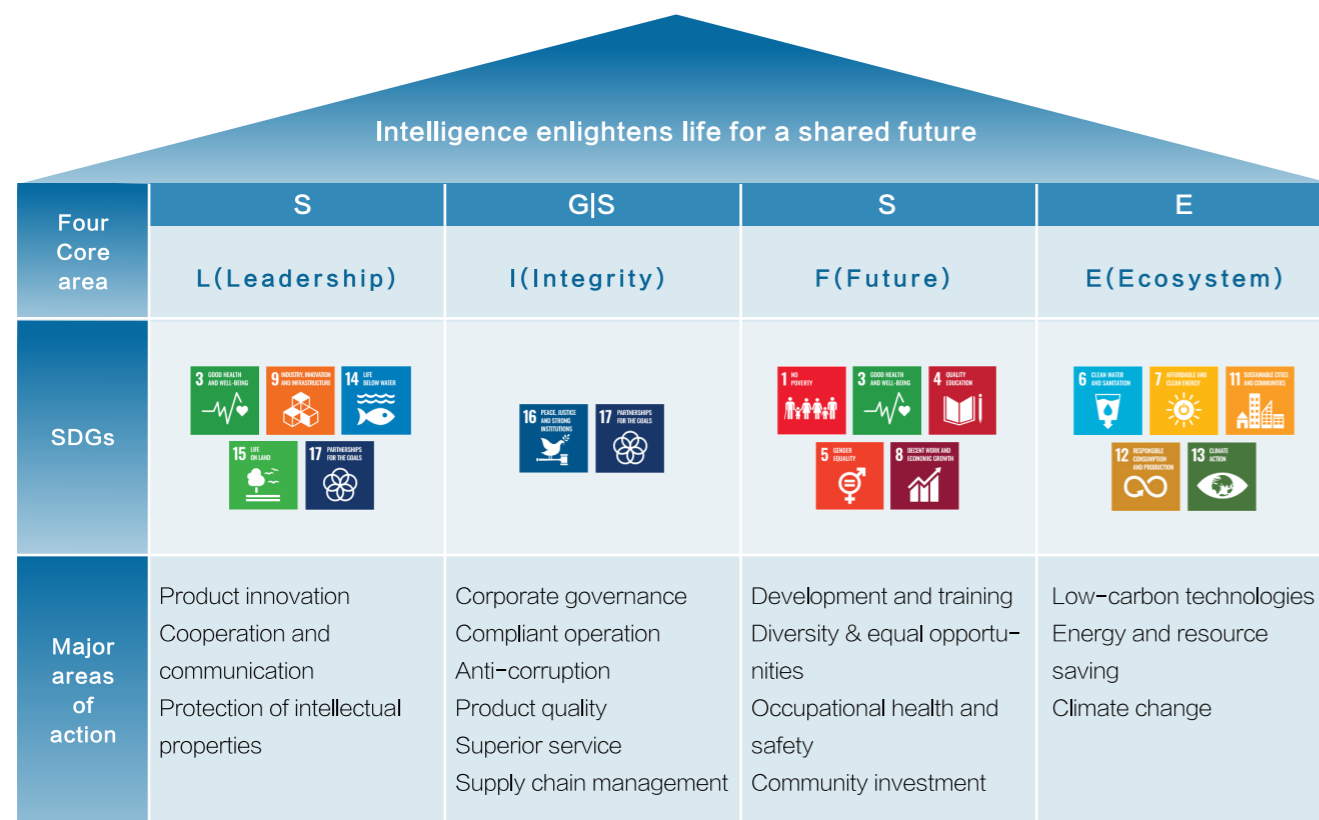
In line with the CSR vision of "Intelligence enlightens life for a shared future", we strive to practice our CSR concept. With a self-developed CSR model with "LIFE" as its core, we continue to promote the sustainability at Haier Biomedical.

CSR concept

Integrity, intelligence and technology enlighten life for a shared and sustainable future.

CSR model

Based on the review and assessment results of material ESG issues, we have built a CSR model with "LIFE" as the core, which works as a guidance for Haier Biomedical's new CSR journey. "LIFE" refers to our four core areas, i.e. Leadership, Integrity, Future and Ecosystem, which is highly consistent with the UN SDGs and China's national strategies.







Key performance of Haier Biomedical in 2022

CSR performance highlights

Leadership	Integrity	Future	Ecosystem
RMB 292 million Investment in R&D	RMB 2,864 million Operating income	2,690 Jobs created	23.74 kg CO₂e/RMB 10,000 of revenue GHG emission intensity
897 Researchers	RMB 210 million Total global tax payments	778 Newly recruited talents in 2022	45.72 kWh/RMB 10,000 of revenue Energy consumption intensity
795 Patents owned in total	130+ Countries or regions covered by our products and solutions	89,416 hours Of employee training delivered	0.16 m³/RMB 10,000 of revenue Energy consumption intensity
114 Software copyrights owned in total	36% Of directors identify as women	100% Coverage rate of employee training, as well as that of staff union	National Green Factory Awarded in 2022
32 International and national, industry and association standards and technical specifications published, under our leadership or with our participation	100% Coverage rate of anti-corruption warning case study	0 Lost-time injury frequency rate per million hours	69 Energy conservation and environmental protection certificates First energy-saving and environmental protection certificate for medical refrigerator within the industry
24 Scientific and technological awards above the provincial level obtained	100% Coverage rate of compliance training for directors, supervisors and senior management Coverage rate of fair competition training for employees	20,000+ Medical institutions, enterprises, scientific research institutions, etc. served	100% Disposal rate of hazardous waste in compliance
28 World-leading technological achievements	0 Product recall rate	RMB 3,679 thousand Cash, materials and equipment donated	109,500 tonnes Annual carbon reduction due to solar powered vaccine refrigerators
	99.8% Domestic user satisfaction	RMB 612.4 thousand Other medical products / services donated	865.69 tonnes Carbon reduction due to photovoltaic power generation

Haier Biomedical and SDGs

Core area	SDGs	Our actions in 2022
Leadership		<p>Improved the strengths in global innovation and development, and built global R&D centres with a holistic approach</p> <p>Shared development experience with the industry, regulated industry standards, and explored the win-win pattern</p> <p>Continued to improve the system for protecting intellectual property rights, and the patent rights protection control mechanism</p>
Integrity		<p>Continued to improve corporate governance, as well as the risk management and compliance system</p> <p>Promoted ecosystem integrity, and enhanced the anti-corruption system through anti-corruption warning education and training for all employees</p> <p>Set up a whole-process quality system to push for continuous improvement and ensure "zero defects of products and zero complaints from users"</p> <p>Improved service capabilities to ensure user experience</p>
Future		<p>Protected rights and interests of employees to create a diverse, equitable and inclusive working environment</p> <p>Established talent development channels and sound incentive mechanisms to attract and retain talents</p> <p>Set up an occupational health and safety management system to safeguard employees' health and safety</p> <p>Provided smart healthcare solutions, promoted accessible healthcare, and built a community of common health for mankind</p>
Ecosystem		<p>Responded to and implemented "carbon peaking and carbon neutrality" goals, refined the environmental management system and continued to implement the concept of sustainable development</p> <p>Focused on process innovation and low-carbon technologies, and realised the green management throughout the product life cycle</p> <p>Empowered partners to drive carbon reduction across the value chain</p>

Social recognition

Economic honours

Awards

Category	Award	Issued by
Technical innovation	China Industry Awards Key and Core Technology Industrialisation and Application Innovation "Demonstration Project of High-end Equipment for Biosafety"	The State Council (approved the establishment of the project); China Federation of Industrial Economics
	National Enterprise Technology Centre	National Development and Reform Commission
	Postdoctoral Programme	Ministry of Human Resources and Social Security
	National Intellectual Property Advantageous Enterprise	China National Intellectual Property Administration
	The First Prize of Science and Technology Award of China Society for the Promotion of Science and Technology Commercialisation "Creation and Industrialisation of High-end Biomedical Equipment and Intelligent System"	China Society for the Promotion of Science and Technology Commercialisation
	First Prize of Chinese Medical Science and Technology Award "Establishment of a Laboratory Biosafety Technical System and Its Innovative Application in Major Epidemic Prevention and Control"	Chinese Medical Association
	Second Prize of CAA Technology Invention Award "Key Intelligent Control Technology of Multi-axis Servo System"	Chinese Association of Automation
	First Prize of Shandong Science and Technology Progress Award "Creation and Industrialisation of Highly Reliable Intelligent Support Equipment for Biosafety"	The People's Government of Shandong Province
	Major scientific and technological innovation projects in Shandong "R&D and Industrialisation of Complete Equipment and Intelligent Systems for Digital Cryogenic Storage and Transportation"	Department of Science & Technology of Shandong Province
	Leading Science and Technology Enterprise in Shandong Province	Department of Science & Technology of Shandong Province
Technological Innovation Demonstration Enterprise in Shandong Province	Department of Industry and Information Technology of Shandong Province	
First Prize of Excellent New Products of Enterprise Technology Innovation in Shandong "IoT based Mobile Safe Vaccination System and Safe Sampling Booths"	Enterprise Technological Innovation Promotion Association of Shandong Province	
Second Prize of Qingdao Science and Technology Progress Award "Research and Application Demonstration of Key Technologies of Municipal Digital Blood Safety Monitoring and Management Platform" Key Laboratory for Digital Biomedical Scenarios in Qingdao	Qingdao Municipal Science and Technology Bureau	
Key Laboratory for Digital Biomedical Scenarios in Qingdao	Qingdao Municipal Science and Technology Bureau	
Qingdao Municipal Standardisation Innovation Research Project "Research on Standardisation of Medical Equipment for Biosafety"	Qingdao Administration for Market Regulation	
2021 Golden Bull Award - Technological Innovation Award	China Securities Journal	
Golden Wand Award - Biotech Innovation Award for the Year of 2022	China Times	

Category	Award	Issued by
Technical innovation	Case Study of the Best Innovative Products for Export of Medical Devices in 2022	International Health Exchange and Cooperation Centre, VBDATA.CN, VB100
	"Technological Innovation Awards" by Science and Technology Innovation Growth Index of 2021-2022 - Overseas Pioneer Award	Hexun
	Innovation Practice Case Study of Technological Innovation Conference for the Year of 2022 Smart Laboratory - Kuidou Hailab	Southern Weekly
	Great Domestic Devices Tabletop High Speed Refrigerated Centrifuge	www.instrument.com.cn

Category	Award	Issued by
Digital transformation	Excellent Scenario of National Intelligent Manufacturing Pilot and Demonstration	Ministry of Industry and Information Technology
	Pilot and Demonstration Project of Integrated Development of Next-Generation Information Technology and Manufacturing Industry in Shandong Province	Department of Industry and Information Technology of Shandong Province
	Excellent Data Security Solution in the Industrial Field of Shandong Province "Integrated Digital Platform for Data Security of Cell Preparation Scenarios in the Biopharmaceutical Field"	Department of Industry and Information Technology of Shandong Province
	Excellent Digital Solutions in Shandong Province "Intelligent Digital Blood Safety Management Solution"	Department of Industry and Information Technology of Shandong Province
	Excellent Big Data Application Cases in Shandong Province "New Applications for IoT based Mobile Safe Vaccination"	Department of Industry and Information Technology of Shandong Province
	Excellent Big Data Solutions in Shandong Province "Haiyunyu Smart Digital Cell Solutions", "IoT-based Big Data Platform Solutions for Nucleic Acid Sampling"	Department of Industry and Information Technology of Shandong Province
	New Technologies, Products and Equipment in the Energy Field of Shandong Province "-150°C Energy-saving Hydrocarbon Cryogenic Medical Freezer"	Energy Administration of Shandong Province
	2022 Excellent Achievements in the Construction of New Smart City of Qingdao "Nucleic Acid Collection and Testing Supporting the Building of A New Ecology of Smart Public Health"	Digital Qingdao Construction Leading Group Office

Category	Award	Issued by
Industry Leadership and Demonstration	Excellent Scenario of Robot Application in Medical Field "Automatic Plasma Inventory Management"	National Health Commission, Ministry of Industry and Information Technology
	Excellent Domestic Medical Equipment (36 products listed)	China Association of Medical Equipment
	The 7th Shandong Province Enterprise Management Innovation Award "Exploration and Practice of Intelligent Service Management System for Biosafety"	The People's Government of Shandong Province
	Major Projects of Shandong Province in 2022 "Qingdao Haier Biosafety Science and Innovation Industrial Park Project"	The People's Government of Shandong Province
	Products under the Programme of Smart Facilities to Benefit the People into the Communities "Antigen Detection Automatic Distribution Machine", "Nucleic Acid Antigen Sampling Service System", "Intelligent Drug Selling Machine"	Shandong Provincial Big Data Bureau
	Safety Production Standardization Secondary Unit	Department of Emergency Management of Shandong Province
	Famous Brands of Shandong	Shandong Council for Brand Development
	Excellent Product of "Quality Lu Medicines" "Medical Refrigerator"	Shandong Pharmaceutical Industry Association
	Main Enterprises of the Biomedicine and Medical Device Industry Chain in Qingdao	Qingdao Municipal Committee of the CPC, The People's Government of Qingdao
	Qingdao Innovative Products (the first batch in 2022) "Hailemia" Mobile Vaccination Vehicle", "Biosafety Cabinets (Class III)", "Air Containers with Active Temperature Control"	Qingdao Municipal Bureau of Industry and Information Technology
	Qingdao Innovative Products (the second batch in 2022) "Vertical Automatic High-pressure Steam Sterilizer", "Constant Temperature and Humidity Chamber"	Qingdao Municipal Bureau of Industry and Information Technology
	Products under the Programme of Smart Facilities to Benefit the People into the Communities in Qingdao "Intelligent Drug Selling Machine"	Qingdao Big Data Development Promotion Association
	Recommended Enterprises of Modern Pharmaceutical Logistics Technology and Equipment	Yaolianquan Certification Centre



Lists

Category	Award	Issued by
Industry recognition	The Honour List of Investment and Financing in China's Medical and Health Industry in 2021 TOP 10 among the Most Influential Listed Medical Device Companies	China Healthcare Consulting, CITIC Securities
	Top 100 Life Science Service Enterprise Brands in China	Healthcare Executive
	China's Top 500 New Economy Companies in 2021	China Enterprise Evaluation Association
Listed companies	Top 100 Listed Enterprises on the STAR Market	SMDC
	China's Top 500 Listed Manufacturing Companies by Value in 2021	China Association of Plant Engineering, Research Institute of Machinery Industry Economic & Management of State-owned Assets Supervision and Administration Commission of the State Council, The People's Government of Qingdao
	China's Top 30 Listed Medical Instrument Companies by Value in 2021	China Association of Plant Engineering, Research Institute of Machinery Industry Economic & Management of State-owned Assets Supervision and Administration Commission of the State Council, The People's Government of Qingdao
	China's Top 50 Listed Medical Instrument Companies by Value in 2021	All-China Federation of Industry and Commerce Medical and Pharmaceutical Chamber
	Top 100 Private Enterprises in Qingdao	Qingdao Federation of Industry and Commerce
	China's TOP10 Scientific Innovation Strengths in Medical Equipment Manufacturing Industry in 2022	Southern Weekly
	Top 50 on the STAR Market by Value	Shanghai Headquarters of the China Media Group

Governance honours

Award	Issued by
Tianma Award - "Best Investor Relations"	Securities Times
2022 Most Valuable Listed Companies on the STAR Market	www.chinastarmarket.cn
Excellent Listed Companies in 2022	StockStar
"Most Influential Award" in 2022	Hithink RoyalFlush Information Network
Outstanding Listed Companies in 2022	21st Century Business Herald

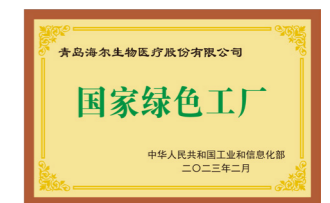
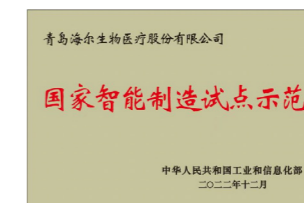


Social honours

Category	Award	Issued by
Individual/ Team	First Prize in the Public Speaking Contest to Ren Wenguang	Shandong Provincial Party Committee Publicity Department, Shandong Internet and Information Office, Working Committee Directly under Shandong Party Committee, Shandong Federation of Trade Unions, Shandong Youth League Committee, Shandong Women's Federation, Shandong Department of Education, Shandong State-owned Assets Supervision and Administration Commission
	The Innovation Leader of Shandong Enterprise Technology Innovation Promotion Association to Wang Guangsheng	Enterprise Technological Innovation Promotion Association of Shandong Province
	"Strong and Agile Team Award" to the Vaccine Network Group	Harvard Business Review China, FESCO
	"Honour Awards" - 2022 Annual Responsibility Gold Award	Social Responsibility Conference
Companies	Social Innovation Contribution Award	China Business News
	Most Influential Enterprise in Qingdao for 2021	Qingdao Publicity Department, Qingdao Enterprise Association, Qingdao Entrepreneur Association, Qingdao Publishing Group, Qingdao Broadcasting System, Qingdao Daily

Environmental honours

Award	Issued by
National Green Factory	Ministry of Industry and Information Technology
Qingdao Green Factory	Qingdao Municipal Bureau of Industry and Information Technology
Catalogue of Energy Saving and Eco-environmental Products and Technologies for 2021 and 2022 "Ultra-low temperature storage boxes"	Chinese Institute of Refrigeration
Low-carbon Contribution Award for Listed Companies in 2022	syobserve.com, gongyidaily.com



Milestones

January 2022 Haier Biomedical obtained the first domestic UL CTDP laboratory qualification, and comprehensively accelerated the globalisation
Qingdao Haier Biomedical Safety Science and Innovation Industrial Park was selected as one of the major projects of Shandong Province in 2022

February 2022 The association standards for the [Construction Specification of Regional Platform for National Basic Public Health Physical Examination Service](#) with Haier Biomedical participating in the drafting were officially released
The standards for the [Guidelines for Building A Smart Blood Management Platform](#) with Haier Biomedical participating in the formulation, were officially released

March 2022 The world's first -150°C Hydrocarbon IoT Cryogenic Freezer was launched
Haier Biomedical successively obtained MDA Certificate and IATA code issued by Civil Aviation Administration of China and International Air Transport Association (IATA) respectively
HB TempCon Aviation Technology and China Southern Airlines Logistics successfully completed the first flight with an active temperature control air container in China

April 2022 The central budget investment project - "Haier Biomedical Industrialisation Project" - was successfully accepted
The first five-star digital vaccination clinic was launched
China's first energy-saving and environmental protection certificate for medical refrigerator was issued by the CQC

May 2022 The first product standard in China, the Biosafety Nucleic Acid Sampling Chamber, with Haier Biomedical leading the formulation was published

June 2022 "Shandong Engineering Research Centre of Life Science and Intelligent Medical Digital Management System" with Haier Biomedical leading the construction was included into the list of engineering research centres of Shandong Province

July 2022 Dubai 001 Training Centre was completed and awarded
The solar lab solution was successfully delivered to help fight epidemics in Senegal
The world's first robotic collaborative unmanned intelligence laboratory was completed in collaboration with the South Marine Laboratory

August 2022 HB TempCon Aviation Technology won the Pre-A financing of ten million level
Haier Biomedical obtained China's first Class II medical device registration certificate for the self-developed program controlled rate freezers

September 2022 HB TempCon Aviation Technology opened the first regional temperature controlled airline of "Shanghai - Taipei" and the first international temperature control airline of "Shanghai, China - Frankfurt, Germany"

October 2022 Haier Biomedical acquired "Cybermax", a leader in immunisation planning information industry to accelerate the building of vaccine city network
Haier Biomedical participated in the ArabLab Exhibition in Dubai and accelerated the business globalisation
Haier Biomedical was successfully approved the national postdoctoral research station

November 2022 Haier Biomedical launched the smart laboratory platform - Kuidou HaiLab
The industry's first Haiyundun safe ecological platform for the use of hazardous chemicals was released to promote the adoption of pre-prevention mode in public safety governance
Haier Biomedical released China's first Public Health Service Ecological Platform of Smart City to accelerate the construction of a digital vaccine ecosystem for all scenarios
Haier Biomedical released the world's first ecological platform for the aviation temperature control industry to drive local innovation
An aerospace medical freezer was launched into space for the first time and an aerospace medical refrigerator was launched into space for the eighth time, supporting life and scientific research in space
Haier Biomedical was successfully included into Qingdao Green Factories

December 2022 Haier Biomedical Awarded the "China Grand Awards for Industry", the highest honour for the industrial sector in China
The main body of the Life Science and Medical Innovation Industrial Park was completed
Haier Biomedical acquired Suzhou Kangsheng Biotechnology Co., Ltd., incorporating the disposable laboratory consumables business
The plasma freezing machine won the overseas project of the Congo National Health Ministry, breaking the monopoly by foreign brands

01

Leadership

Innovating for well-being and health

LIFE

- Technology upgrades life barrier
- Digital and intelligent solutions guard well-being

Concept and Vision:

Science and technology are the driving forces of the development of Haier Biomedical. As a trailblazer in technology, Haier Biomedical steps up the efforts in life science and medical innovation, promotes original scientific and technological leadership and ecological co-creation, strives to be a new benchmark enterprise in smart manufacturing, so as to help build the modern industrial system and safeguard public health and safety. In this regard, the Company constantly provides intelligent solutions to build a healthy China and boost China's strength in science and technology. Meanwhile, the Company makes relentless efforts in building a community of common health for mankind and serving life and health.

R&D investment: **RMB 292 million**

897 researchers, accounting for **33%** of the staff

Obtained a total of **24** scientific and technological awards above the provincial level

Owned a total of **795** patents and **114** software copyrights



Exploring digital and intelligent solutions



Serving national strategies with cutting-edge technologies



Safeguarding life and health with medical innovation

Life science

Medical innovation

Biopharmacy scenario

Laboratory service scenario

Public health scenario

Blood safety scenario

Digital hospital scenario

A modern industrial system

Pushing for technological upgrade

Conducting R&D with a global view

Building an innovative talent pool

Strengthening the collaborative innovation ecosystem

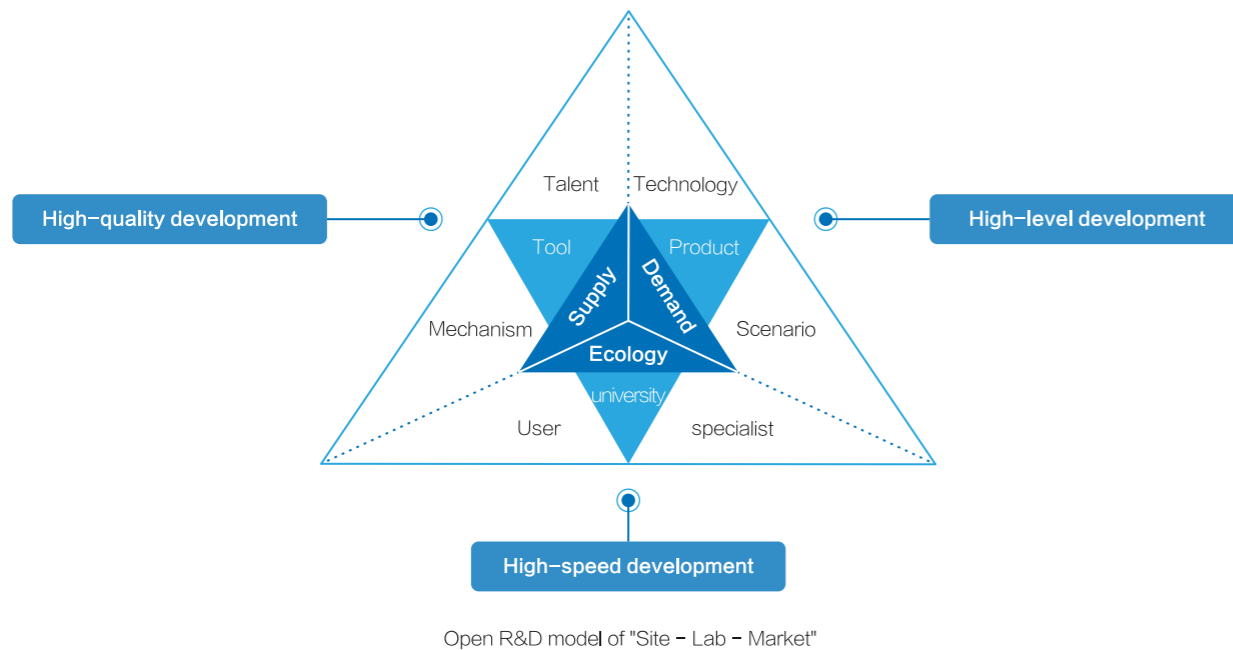
Protecting intellectual property rights

Open R&D model of "Site - Lab - Market"

Sustainable technology innovation+integrated innovation+service innovation

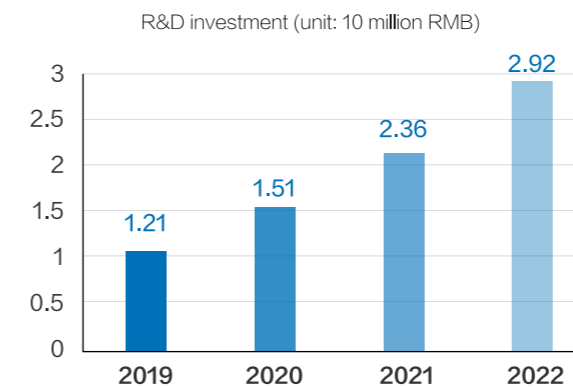
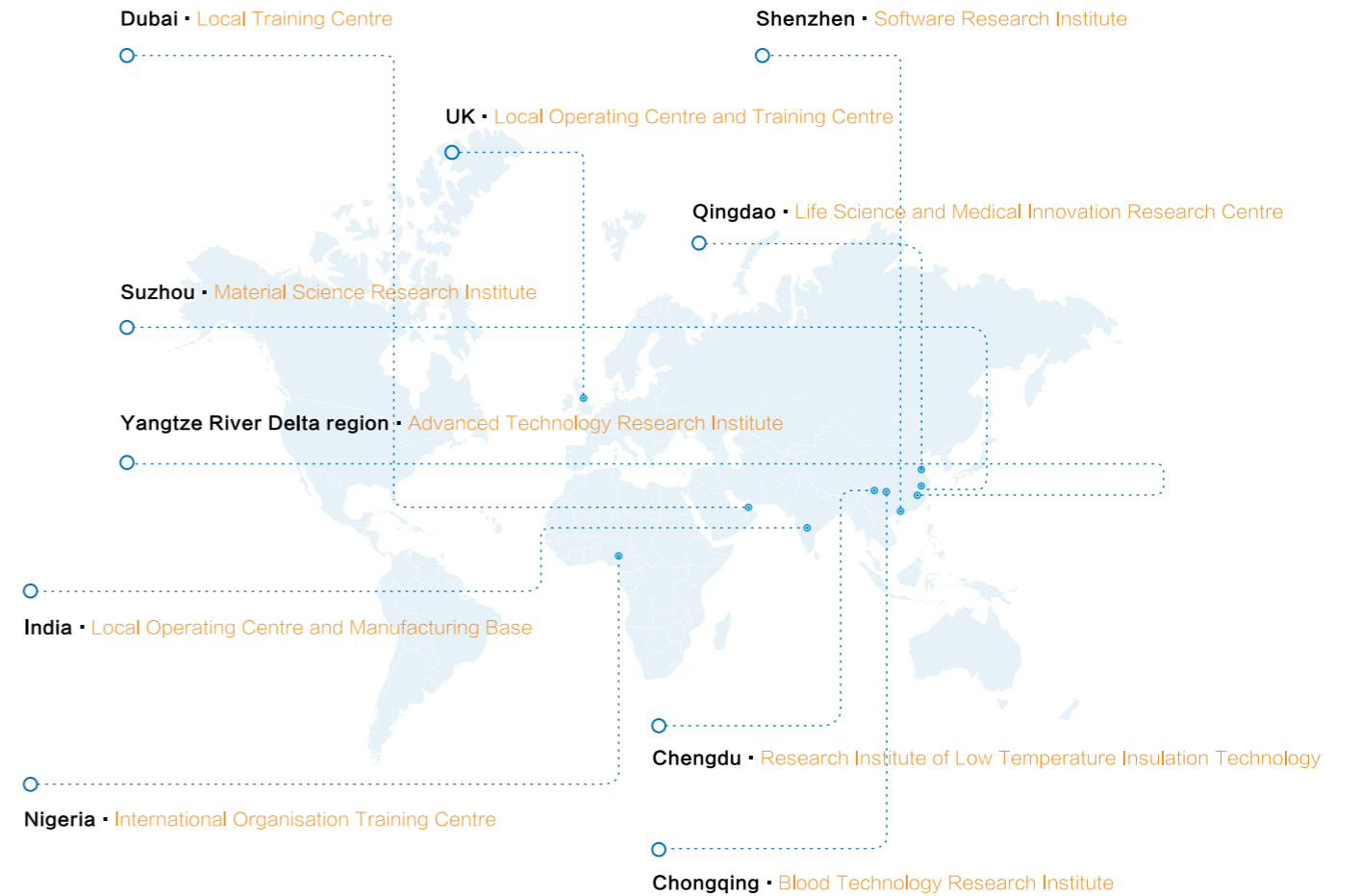
Technology upgrades life barrier

Based on the global R&D resources, the Company continues to scout top-notch talent at home and abroad to join the R&D teams of various innovative platforms such as low-temperature storage technology platform and automation technology platform, forming a technical committee with senior technical talents and experts as the core. Meanwhile, the Company proactively cooperates with external entities, including higher institutions, testing certification agencies, experts and users in this field, and industrial chain resources, and gradually builds an open R&D model of "site - laboratory - market" centred on the user demands, so as to forge synergy in the R&D value chain. With a "win-win cooperation through co-creation and sharing" mechanism, the open R&D model attracts users, first-class R&D resources and ecological stakeholders. This model is able to quickly respond to users' needs and provides the Company with medium- and long-term technological reserves, thus injecting constant impetus into innovation.



Conducting R&D with a global view

We never cease our efforts in global market layout. To improve innovation efficiency as well as strengths in global innovation and development, we have built global R&D centres with a holistic approach. To this end, we pool global R&D resources, and promote the application of globalisation scenarios, laying out our business throughout the world by dint of our technological strengths.

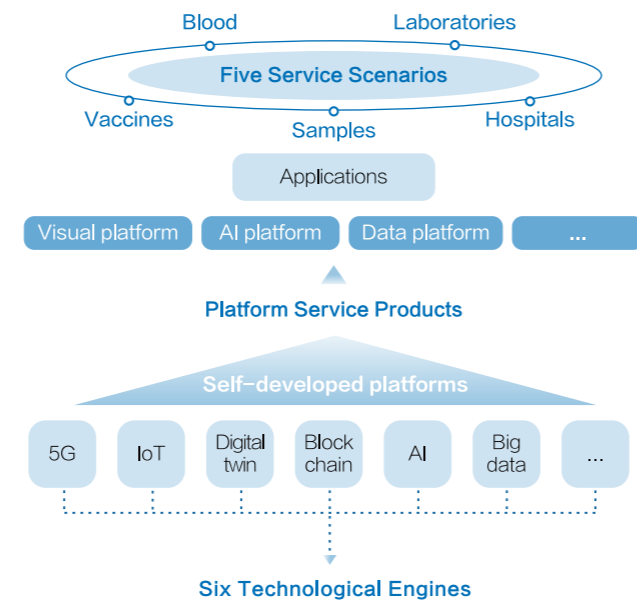
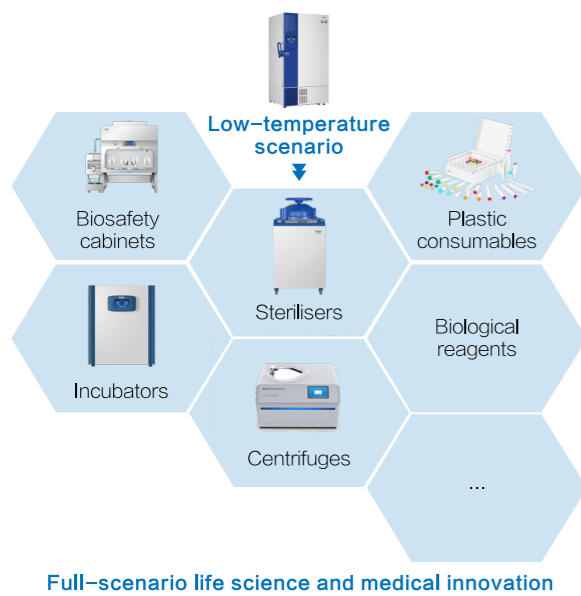


To ensure sustainable and high-quality innovation, Haier Biomedical has made increasingly investment in R&D. In 2022, the Company invested RMB **292 million** in R&D, with a year on year increase of **23.77%**, showing an upward trend in three consecutive years.

Building a platform to innovate and iterate

Haier Biomedical prioritises users'needs and refines the technology-driven system. With the support of professional technologies such as low-temperature storage, automation, microculture, environment simulation, rapid cooling centrifugation, Haier Biomedical develops technological and innovative strengths, playing a leading role in the industry with core high-tech products.

In addition, the Company speeds up digital innovation, and has developed a vertical biomedical platform on life science and medical innovation as well as a differentiated model of "equipment + platform + service", so as to realise automatic, intelligent, IoT-led, and shared scenario solutions.



Building international inspection capabilities

The Company continues to build laboratories of all types, lays out four major international certification systems, and forges a close connection between product research and development and international certification. In addition, we build all-round inspection capabilities from software, hardware, scenarios, applications, and constantly improves laboratory R&D strength and scientific and technological innovation capabilities. By the end of 2022, laboratories of Haier Biomedical has obtained 4 categories of international certifications, namely the UL CTPD Laboratory Qualification in the domestic industry, TUV Rheinland Witness Laboratory Qualification, TUV SUD Witness Laboratory Qualification and CNAS Accreditation on Laboratory. Haier Biomedical has more than 30 laboratories, covering equipment and machines performance, feasibility, high and low temperature, electrical safety, EMC, mechanical environment, high-precision laboratory, physical and chemical laboratory, user experience, IoT communication, etc. Moreover, Haier Biomedical has CNAS-accredited laboratory testing capabilities to undertake over 200 test projects under 48 international and domestic standards.



CNAS Accreditation on Laboratory



TUV Rheinland Certificate



UL CTPD Laboratory Qualification



TUV Nord Certificate

Case Haier Biomedical planned the layout in advance and developed the first self-inspection registration system in Shandong Province

Haier Biomedical made advance preparations for a self-inspection system. After obtaining the CNAS Accreditation on Laboratory in July 2021, the Company immediately began to build the self-inspection system starting from controlled rate freezers. In 2022, the product technical standards for controlled rate freezers formulated by Haier Biomedical were certified by experts. Among China's medical device enterprises, Haier Biomedical obtained the first medical device registration certificate for controlled rate freezers. Haier Biomedical now is the first enterprise in Shandong Province to complete the registration of medical devices through the issuance of self-inspection report, and leads the province with a full-capacity self-inspection system.



Controlled rate freezers

Case Haier Biomedical's plasma centrifuge separator for single use obtained the Medical Device Regulation ("MDR") Certification of the EU

On 5 December 2022, the plasma centrifuge separator for single use of Haier Haematologi under Haier Biomedical was awarded the MDR Certification for CE marking of the EU. The new MDR was released in May 2017 to replace the CE regulation for medical devices of the EU. The MDR Certification indicates that our products meet the production quality and safety standards to be sold in the EU market.

Building an innovative talent pool

Adhering to "Rendanheyi" core values, the Company sticks to an open mindset to attract global talents, building an all-round and diverse echelon structure of scientific research talents specialised in biomedicine, automation, computer science and artificial intelligence. The Company continues to optimise the talent pool through efforts in personnel, structure, and mechanism.

Sharpening technical edge

Through the scientific and technological talents supply chain system, the Company sharpens technical edge, forms a medium and long-term plan for sourcing and attracting high-level scientific and technological talents. Meanwhile, prioritising the internal training and development of scientific and technological talent, the Company forms a talent reserve pool with echelon training. By virtue of improved high-end talent cultivation and retention mechanism, the Company constantly leverages the potential of employees and maintains the vitality of enterprise innovation.

By the end of 2022, the Company had 897 researchers, accounting for 33.35% of the staff, showing an upward trend in four consecutive years. Specifically, researchers with master's degrees and above accounted for 18.3% of the total staff, making up a stable core technical team.

Case Haier Biomedical's plasma centrifuge separator for single use obtained the Medical Device Regulation ("MDR") Certification of the EU

In July 2022, Haier Biomedical officially set up a Medical Technical Committee to accelerate the building of an ecological brand that integrates digital scenarios for life science and medical innovation. The committee is composed of researchers with doctorates in biological refrigeration, big data on the IoT, automation, biotechnology and advanced algorithms. The committee is dedicated to the development and exploration of cutting-edge technologies and new industries. In the future, the committee will continue to build a technological highland in life science and medical innovation to enhancing user interaction and enriching scenario solutions.

Case Haier Biomedical's national postdoctoral programme was approved

In 2022, Haier Biomedical's national postdoctoral programme was approved. Under the programme, Haier Biomedical introduced high-end technical talents, and launched the key technology research project - "R&D and Industrialisation of Complete Equipment and Intelligent Systems for Digital Cryogenic Storage and Transportation in Shandong Province". With the goal of leading the digital and green development of the industry, the project focused on quick breakthroughs in core technologies of key fields, as well as in key "stranglehold" technologies, to improve weak links in industrial development. The project team had several industry experts and technical engineering talents, including experts of the national "Ten Thousand Talents Programme", Taishan scholars of Shandong, and top talents and industry leaders of Qingdao. The project sought to promote the interdisciplinary development of the next-generation information technology and the medical equipment technology for cryogenic storage, build a cross-industry collaborative innovation platform, drive the digital transformation of the medical industry, and strengthen the strategic scientific and technological strengths for China's public security.



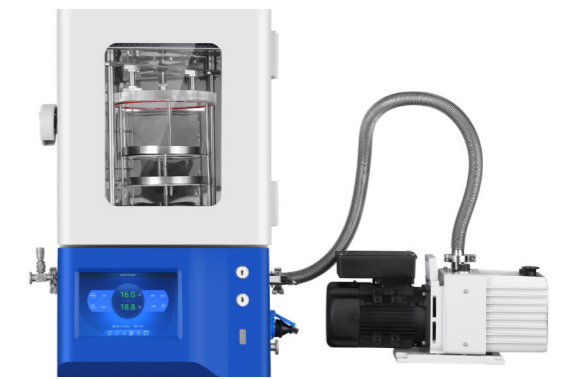
Case Haier Biomedical was approved as the engineering research centre in Shandong Province

In 2022, the "Engineering Research Centre for Life Sciences and Intelligent Medical Digital Management System in Shandong Province" led by Haier Biomedical was approved as an engineering research centre in Shandong Province. The Research Centre is the only engineering research centre in the biomedical field at provincial level in Shandong Province.

The Research Centre is a biomedical innovation base covering life science and medical innovation application scenarios, which is built by Haier Biomedical in response to the information-based, digital, web-based and intelligent development trend, making use of the resources of "industry, universities, research and application". The Research Centre is of great significance to accelerate the research of key technologies and basic applications in this field, promote the transformation and industrialisation of technological achievements, as well as better protect the life and health of the people.

Case Haier Biomedical joined hands with universities to develop freeze dryers

In 2022, Haier Biomedical cooperated with Jiangnan University, ZhongkeJuyan STEM CELL, Joint Lab of China University of Petroleum, and Professor Xiguang Chen's research group of Ocean University of China to jointly develop freeze dryers. This R&D result enables automatic control with no risk of sample contamination and maximises the preservation of cell viability. It has the characteristics of stable product performance, thorough drying and good user experience.



Improving the talent incentive mechanism

The Company continuously optimises the joint training and long-term diversification incentive mechanism for scientific research talent and improves the research and development support system. The Company's upward channel setting varies according to different types of technical personnel, which is conducive to creating a diversified science and research talent ecosystem, in order to further help attract and retain outstanding talent, and stimulate innovation vitality. Under the core principle of "high-value creation for high reward", the Company launched a restricted stock incentive plan and made concrete actions, with the scope of incentives covering middle-level technical personnel. At present, the Company has completed the first vesting period for the equity incentive recipients.

Incentive plan for programmes

Incentive plan for products

Incentive plan for patents

Incentive plan for talents

Strengthening the collaborative innovation ecosystem

Haier Biomedical shares development experience with the industry and regulates industry standards. Through these efforts, Haier Biomedical explores a new pattern of ecological co-creation and win-win results, strives to promote the integration of technology into medical scenarios for creating new value, and seeks after life and health with digital intelligence solutions to lead the development of the industry.

Integration of industry, universities and research institutions

The Company actively integrates internal and external R&D resources, conducts customised R&D with universities, scientific research institutions and other cooperative units in pursuit of stronger technological innovation capabilities and technological breakthroughs. In 2022, the Company cooperated with universities such as University of Shanghai for Science and Technology, China University of Petroleum and Harbin Institute of Technology in 11 scientific research projects and achieved a series of R&D achievements.

Co-creation with partners

Haier Biomedical actively co-creates with partners and gives full play to their respective advantages in technology and talent resources to bring better technical foundation and scientific research guarantee for life sciences and medical innovation.

Cooperative enterprises	Projects
Yebio Biology Engineering Co., Ltd. Of Qingdao	Jointly build P3 intelligent lab management system
Suzhou Basecare Medical Co., Ltd.	Jointly build ew scenario of reproductive health care
Kindstar Global (Beijing) Technology Co., Ltd.	Jointly build industry-leading special inspection intelligence lab
China National Heavy Duty Truck Group Ji'nan Special Purpose Car Co., Ltd.	Output the R&D outcome of customised full-scene and mobile medical solutions

We selected part of the cooperation projects to display.

Leading the industry

Haier Biomedical actively participates in the formulation of national, industry and group standards and technical specifications, and carries out scientific research cooperation with product certification bodies to promote the standardised development of the industry. By the end of 2022, the Company had taken the lead and participated in the publication of 32 standards and technical specifications at different levels (international standard, national standard, industrial standard, group standard and technical standard). In 2022, the Company participated in the drafting of 12 standards and 1 CQC certification of technical specification.

Standard type	Standard number	Standard name
National standard	GB 41918-2022	Biosafety cabinet
	GB 42186-2022	Operational specification for cold chain logistics of medical laboratory biological samples
	T/STSI 30-2022	Construction specification of regional platform for national basic public health physical examination service
	T/QDAS 079-2022	Guidelines for building intelligent blood management platform
Group standard	T/CITS 0009-2022	Vaccine cold chain-Technical requirement and test method for portable2 passive vaccine cold box
	T/QDAS 086-2022	Biosafety nucleic acid sampling chamber
	T/CBMMAS 017-2022	Technical requirements of mobile severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) nucleic acid sampling station
	T/CHAA 017-2022	
	T/SDAMDI 001-2022	Bioprotective nucleic acid sampling station
	T/CECA-G 0199-2022	Quality grading and "Forerunner" evaluation requirements -cryogenic freezer
	T/CSTE 0139-2022	
	T/CECA-G 0202-2022	Quality grading and "Forerunner" evaluation requirements - medical refrigerator
	T/CSTE 0142-2022	
	TCITS 0018-2022	Vaccine cold chain-Technical requirement and test method for ice-lined vaccine refrigerator and/or freezer
CQC technical specifications	CQC 6105-2022	Technical specifications for energy conservation certification of medical refrigerator

Standards and specifications the Company issued and participated in for the year of 2022

Case Haier Biomedical led the publication of the first product standard of the Biosafety Nucleic Acid Sampling Chamber in China

On 31 May 2022, Haier Biomedical and Shandong Centre for Disease Control and Prevention took the lead in the official publication of the Biosafety Nucleic Acid Sampling Chamber, the first product standard in China. The standard was jointly launched by Haier Biomedical and national authoritative institutions, which provides a unified reference standard for the nucleic acid sampling chamber in the country and can better standardise and guide market product technology and promote the development of the industry.



Sharing industry experience

The Company actively participates in industry associations and forums, and shares experiences and achievements with partners to help achieve industry progress and development.

Case Haier Biomedical communicated with industry experts face-to-face on new trends in biopharmaceutical experimental safety and intelligence

On 28 September 2022, Haier Biomedical held a seminar on exploring the safety and intelligent management of biopharmaceutical experiments in Qingdao, China. Together with industry experts, Haier Biomedical discussed on topics such as intelligent management of biopharmaceutical laboratories and industrial prospects with the aim to pursue new trends in the industrial development with partners.



Case Haier Biomedical held the Strategic Cooperative Partner Conference to discuss the future of the medical industry

On 22 November, 2022, Haier Biomedical held the 2022 Strategic Cooperative Partner Conference. A total of 122 agency partners from all over the country participated in the conference. The conference had 55 online sub-venues in Beijing, Tianjin and other cities, with 202 agency partners participating online. At the meeting, all of participants had in-depth exchanges on the new trends and new driving forces of the future development of the medical industry, and all partners shared and interpreted the cutting-edge technical knowledge.



Protecting intellectual property rights

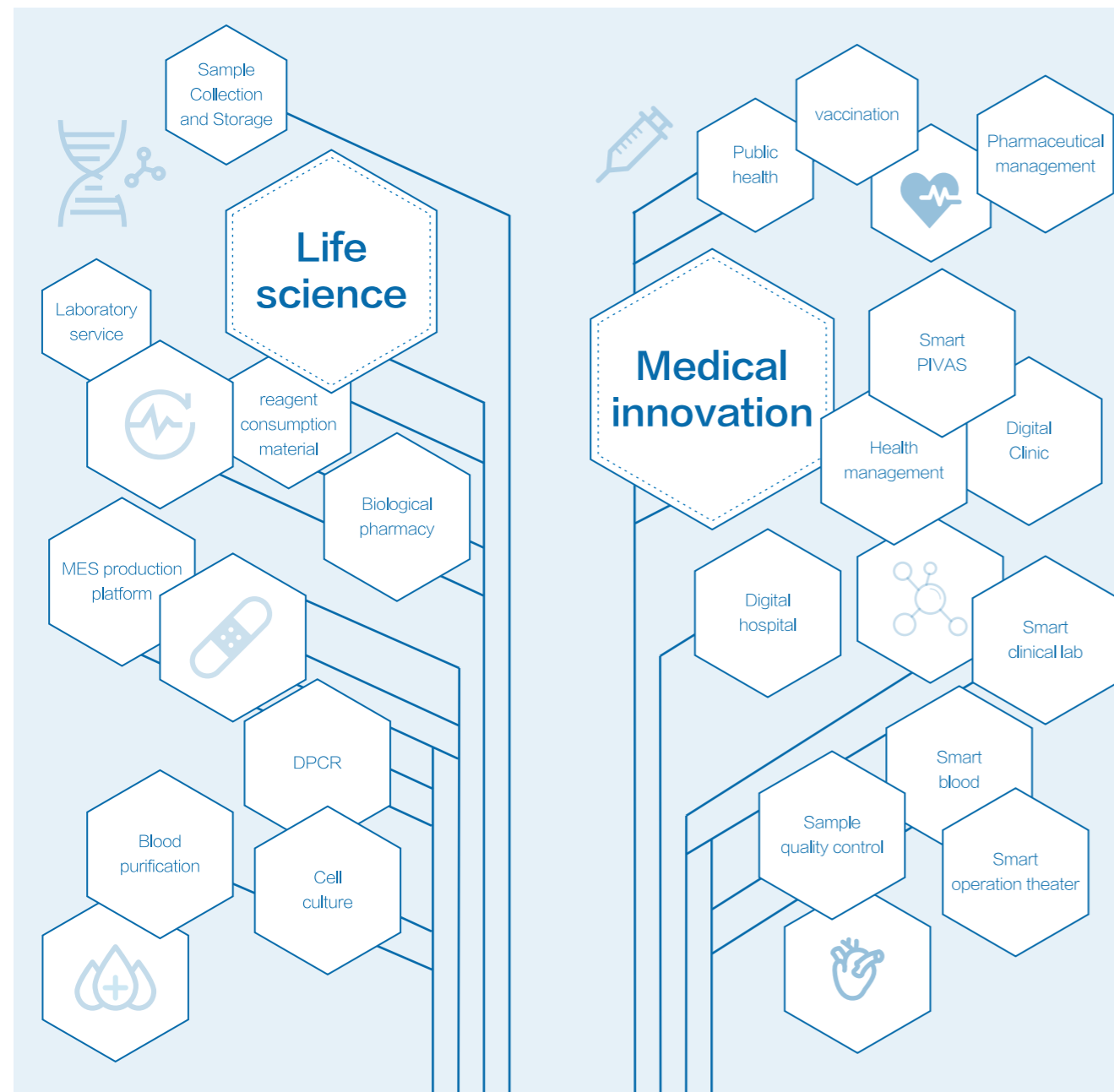
Haier Biomedical attaches importance to the protection and management of intellectual property rights. Complying with the Patent Law of the People's Republic of China and other intellectual property related laws, Haier Biomedical has formulated internal regulations such as the Regulations on the Management of Intellectual Property Rights, and the patent rights protection control mechanism. We continue to improve the system for protecting intellectual property rights. While protecting our own intellectual property rights, we also avoid infringing on the rights and interests of others.

To achieve efficient management of the whole life cycle of patents, the Company has established a digital patent management system. Technical personnel, patent management personnel and external patent service personnel are fully recorded in the system to improve the whole chain mechanism for patent management and protection. At the same time, the Company values the transformation and implementation of innovation results, formulates a patent reward mechanism and practices it in concrete actions. Besides, the Company encourages technical personnel and innovation entities to maintain innovation enthusiasm and ability on a continuous basis.

In 2022, Haier Biomedical was recognised as a "National Intellectual Property Superior Model Enterprise" by the China National Intellectual Property Administration. This indicates that the Company has achieved comprehensive development in the creation, application, protection and management of intellectual property rights, and has initially fostered outstanding comprehensive competitive advantages. Through continuous R&D and innovation, by the end of 2022, The Company obtained **795** patents in total, including **49** invention patents, **473** utility model patents, **273** design patents, **114** software copyrights. In 2022, the Company obtained **131** new invention patent applications.

Digital and intelligent solutions guard well-being

The Company's R&D layout continues to improve. In the life sciences sector, the Company has steadily promoted the innovation process of multi-category laboratory instruments, actively made development in consumables and reagents, continuously improved smart laboratory scenario solutions and entered into industrial application scenarios such as biopharmaceuticals; in the medical innovation sector, the Company has accelerated product innovation to support the continuous extension and in-depth development of scenario solutions such as smart blood distribution, smart public health, and digital hospitals.

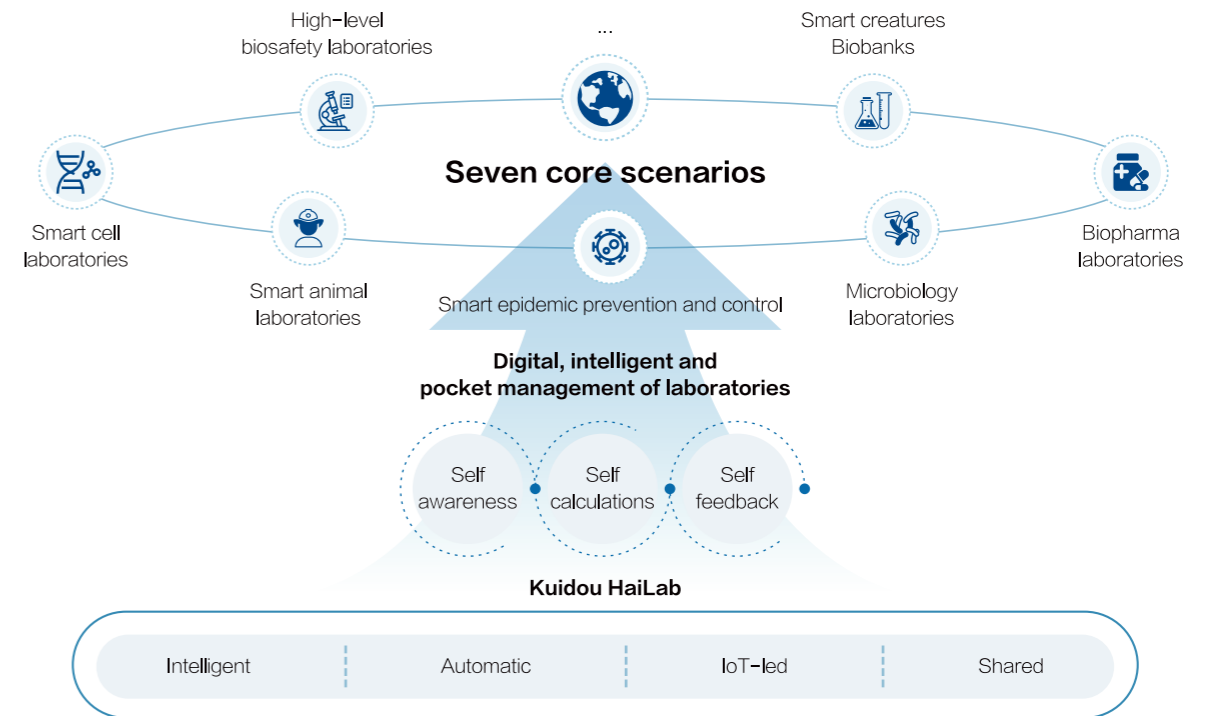


Serving national strategies with cutting-edge technologies

Through the R&D development of cutting-edge science and technology that breaks the technological monopoly, Haier Biomedical has created intelligent innovative scenario solutions to serve major national strategic projects such as biosecurity, food security, genetic security, and biodiversity in China, thus safeguarding the national security.

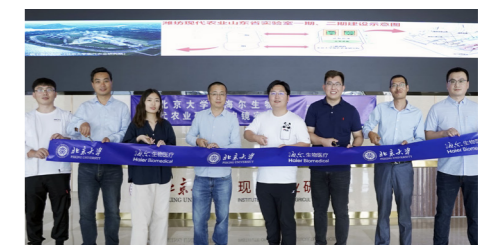
Promoting rapid development of life sciences

Through the use of emerging technologies such as the Internet of Things, big data, AI, and 5G, Haier Biomedical's HaiLab Intelligent Lab Platform has derived 7 core scenarios such as microbiology laboratory and cell laboratory, providing customised solutions for more than 13,000 universities, scientific research units, and enterprises. In December 2022, with the acquisition of Suzhou Kangsheng Biotechnology Co., Ltd., Haier Biomedical accelerated the extension of intelligent laboratory application scenarios and planned the layout concerning the laboratory disposable plastic consumables field.



Case Haier Biomedical provided electron microscope laboratory services for Peking University to promote advanced scientific research

On 21 September 2022, the electron microscopy laboratory of Institute of Advanced Agricultural Sciences, Peking University, jointly built by Haier Biomedical and HaiLab Intelligent Lab, officially started its construction. The laboratory will build an intelligent electron microscopy laboratory integrating modern high technology and efficient intelligent management for Institute of Advanced Agricultural Sciences, Peking University. It will also help the Institute of Advanced Agricultural Sciences, Peking University to better carry out frontier agricultural scientific research and achievement transformation, and provide technical support for the establishment of a research and development base for applied biology and modern agricultural technology as well as the transformation of scientific research achievements.



Opening ceremony of the electron microscopy laboratory of Institute of Advanced Agricultural Sciences, Peking University

Ensuring the security of the industrial chain and supply chain

Through self-innovation, Haier Biomedical has tackled the challenges such as the core technology of active aviation temperature control container, and developed an active aviation temperature control container with precise and uniform temperature control. This achievement has broken nearly 30 years of foreign monopoly and built an aviation temperature control transportation service ecosystem and mature business model covering the whole chain from pharmaceutical companies, airlines, freight forwarding companies, airports, cargo terminals to MROs. At present, the Company has initially completed its global layout and built the first long-range temperature control transport ecological platform in the Asia-Pacific region with global coverage. Thus, we created the new pattern of global aviation cold chain logistics development, and ensure the safety of the biopharmaceutical industry chain.



Key nodes of the establishment of aviation temperature control industry ecosystem

Case Haier Biomedical leads the joint construction of the global aviation temperature control ecological platform

As a part of the healthcare industry chain, aviation cold chain logistics is considered the international "lifeline for transportation". China's aviation cold chain logistics industry started relatively late. Before Haier Biomedical entered the aviation temperature control industry, the active aviation cold chain logistics equipment required by the domestic consumer market was monopolised by foreign enterprises for a long time. On 7 November 2022, at the 5th China International Import Expo, HB TempCon, a subsidiary of Haier Biomedical, jointly with CEVA Logistics, Jet Logistics, Aviagen Systems and other partners, launched the first global aviation temperature control ecological platform. On this platform, all parties will focus on service capability and technical support through complementary advantages and sharing of resources, while cooperating at the global route network and operation stations to create a green and low carbon "industrial ecological alliance" that serves the global market.



Improving public safety governance

By building a city-level comprehensive service platform for the safe use and management of hazardous chemicals, Haier Biomedical has established a real-time control and precise supervision system for hazardous chemical information. This system realises the digital, authorised, and refined management of the whole process of hazardous chemicals, and ensures the safety of employees, materials, environment and behaviours, and achieve the four "zero" goals (zero injury to employees, zero-hazard materials, zero environmental pollution and zero-distance service), thereby building a solid line of defence for public safety supervision, and protecting people's lives and health.

Case Haier Biomedical's intelligent management solution for the safety of hazardous chemicals landed at a university laboratory

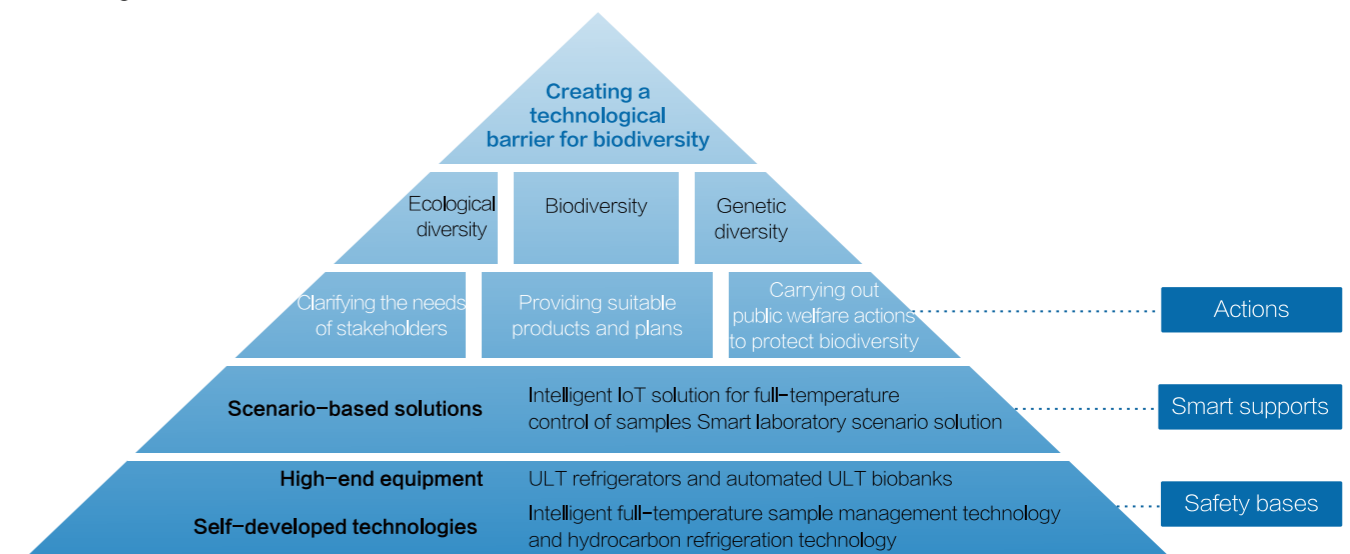
In 2022, Haier Biomedical provided a university in Qingdao with a whole-process intelligent management solution for hazardous chemicals that integrates software and hardware using digital technologies such as Internet of Things. The solution enables real-time monitoring of chemical storage relevant elements, advance risk awareness and timely advance warning. With technologies such as remote video surveillance and indoor hazardous gas monitoring, the solution realises the digital management throughout the life cycle of hazardous chemicals from procurement to scrapping. Since the university adopted the Haier Biomedical's intelligent management solution for the safety of hazardous chemicals, it has effectively improved the safety management of laboratories and ensured the safety of teachers, students, researchers, facilities and equipment, and the environment during the research.



Haier Biomedical's solution for the safety management of hazardous chemicals

Exploring technologies to protect biodiversity

Haier Biomedical takes "creating a technological barrier for biodiversity" as its goal. With the help of self-developed technology, high-end equipment, as well as the full-process, full-scenario of intelligent IoT solutions throughout the full cycle, Haier Biomedical integrates digital and intelligence technology innovations such as Internet of Things, big data, AI, and 5G into application scenarios such as biological resource preservation and scientific research. These efforts aim to help upgrade the off-site conservation system, create scientific barriers for biodiversity, and protect biodiversity security with innovative technologies.



Haier Biomedical's strategic initiative for biodiversity scientific barriers

Case Haier Biomedical Products Used to Protect Species in UK's National Zoological Biobank CryoArks

Haier Biomedical's equipment is widely used in different medical fields around the world, and the high-end quality and excellent performance of the products are widely recognised. In May 2022, Haier Biomedical's Ultra-low Temperature ("ULT") refrigerator is listed in CryoArks, the UK national Zoological Biobank, to help protect endangered species samples.

CryoArks is the first zoological biobank in UK designed to preserve the genetic diversity of living organisms. Haier Biomedical's ULT Refrigerator (model DW-86L578J) can store biological samples for a long time at low temperatures. An ULT refrigerator can store up to 20,000 species samples. This ULT Refrigerator contributes to the enrichment of the resource base of scientists across the UK for biological research and conservation planning.



Case Haier Biomedical built the world's first unmanned intelligent laboratory with robot collaboration to help protect marine biodiversity

Haier Biomedical and Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai) built the world's first unmanned intelligent laboratory with robot collaboration, realising the automated, unmanned and intelligent management of the whole process of millions of biological samples from pre-treatment, transfer to warehousing and delivery. When storing and accessing samples, the sample can be pinpointed in real time through the 5G-based sample information intelligent management system, together with image and RF sample precise positioning technology. With a single click, any sample can be precisely selected, stored, and accessed from a million samples in 60 seconds at the fastest speed by a mechanical arm. The laboratory has realised zero exposure of irrelevant samples to avoid the impact of rewarming of samples, as well as met the preservation needs of different types of marine biological samples, such as cryopreservation, ultra-low temperature preservation, and low temperature preservation, thus effectively promoting the scientific conservation and efficient exploitation of marine biological resources.



Safeguarding life and health with medical innovation

Through innovative technology, Haier Biomedical integrates digital intelligence technologies, such as Internet of Things, big data, AI, and 5G into medical innovation application scenarios such as public health, blood centres, and hospitals. By integrating emerging technologies with medical scenarios, Haier Biomedical serves the people's livelihood, builds life barriers, and protects life and health.

Improving public health at the community level

To assist in the development of a closed primary health protection network, the Company has used 5G, AIOT and other technologies to build a public health service ecological platform. The platform promotes the convenience, accessibility and timeliness of medical resources and medical services, helps improve the public health system at the community level and increases the accessibility of medical resources to people. The Company aims to comprehensively improve the primary prevention, control and treatment capabilities and build a solid security guarantee for people's lives and health.

Case Haier Biomedical launched China's first Public Health Service Ecological Platform of Smart City

On 8 November, 2022, at the 5th China International Import Expo, Haier Biomedical released the first Public Health Service Ecological Platform of Smart City in China. The platform is oriented toward the vital needs of the country and the life and health of the people. Following the strategic principle of "hardware + platform +service", the platform accelerates the integration of industry ecosystem, and drives the innovation of health management for the elderly, maternal and child health care and mobile medical scenarios. The Public Health Service Ecological Platform of Smart City has been developed to achieve the standardised and smart development of public health services nationwide.



Raising the efficiency of medical services

At present, China is in a critical period for achieving the strategic goal of "Healthy China 2030". Haier Biomedical actively helps simplify the medical treatment process for optimised patient experiences, raises the efficiency of disease diagnosis and patient management. In doing so, we innovate in the health care service model, leading China to accelerate into a new era of digital medicine.

Case Haier Biomedical Xihe Service Medical Ecological Platform innovates the health care service model

On 23 November 2022, at the 86th China International Medical Equipment Fair ("CMEF"), Haier Biomedical's Xihe Service Medical Ecological Platform made its debut. Focusing on the digital transformation of the whole hospital, the platform connects six major scenarios within the hospital. It not only breaks down the barriers between departments to enable efficient collaboration and information sharing in the hospital, but also greatly improves the efficiency of healthcare. This platform provides better consultation and treatment services for patients and transforms Chinese healthcare from a "traditional medical service model" to a "smart health management model".



Xihe Service Medical Ecological Platform made its debut

Case Haier Biomedical worked with the Second Affiliated Hospital Zhejiang University School of Medicine to create a smart emergency model for blood

On 8 November, 2022, at the 5th China International Import Expo, Haier Biomedical released the first Public Health Service Ecological Platform of Smart City in China. The platform is oriented toward the vital needs of the country and the life and health of the people. Following the strategic principle of "hardware + platform + service", the platform accelerates the integration of industry ecosystem, and drives the innovation of health management for the elderly, maternal and child health care and mobile medical scenarios. The Public Health Service Ecological Platform of Smart City has been developed to achieve the standardised and smart development of public health services nationwide.



The smart emergency model for blood with "pre-setting of blood sampling window"

Widening people's access to medical services

Haier Biomedical responds positively to national policy requirements. Focusing on changes in the health needs of the people, Haier Biomedical accelerates the innovation and expansion of digital medical service scenarios to enhance the capacity of primary health care services and assist in the development of a primary health protection network.

Case Haier Biomedical's unattended smart pharmacies guarantee the rural supply of basic drugs

Haier Biomedical has innovatively developed unattended smart pharmacies to ensure the operation of basic health systems and drug supply in rural areas and communities. In the post-epidemic era, in the face of the increasing demand for medical treatment and insufficient drug supply, Haier Biomedical has integrated digital technologies such as IoT into the safe medication service scenario to create the unattended smart pharmacy. The pharmacy can provide the whole-process automated services, covering prescription identification, prescription check, payment, prescription review, dispensation of drugs, and provision of medical advice, which releases pharmacists from shifts. Besides, residents can purchase drugs from the pharmacy around the clock. At present, the product program has been landed in Langhushao Village, Liulimiao Town, Huairou District, Beijing. The program has effectively solved the difficulties such as purchasing drugs for residents during night, the risk of cross-infection in hospitals, night shift for pharmacists in hospitals and pharmacies, and aggravated manpower tension on 24-hour shift. In this way, Haier Biomedical helps overcome the last-mile challenges in health services, and improve the efficiency and governance of community health services.



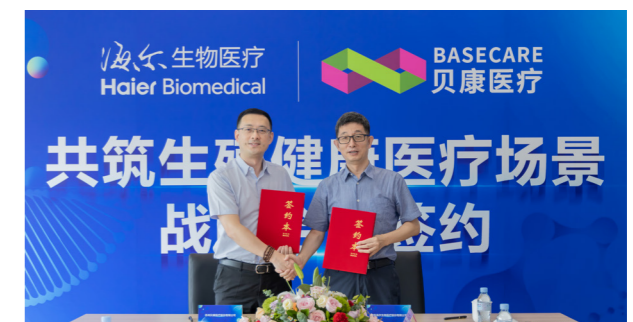
Haier Biomedical unattended self-service pharmacy

Optimising population development strategies

Under the background of building a healthy China, Haier Biomedical responds to the national population strategy, focuses on fertility preservation and healthy ageing development needs, and expands scene service capabilities in multiple dimensions. By innovative use of emerging technologies such as Internet of Things, big data and 5G, Haier Biomedical has jointly created a comprehensive digital public health management solution including digital routine physical examination vehicle, contracted follow-up workstation for family doctors and reproductive cryogenic freezing solutions with ecological partners. In doing so, Haier Biomedical helps society reduce fertility and pension costs, and build multi-level medical security.

Case Haier Biomedical and Basecare Medical have built an assisted reproductive cryogenic freezing solution

On 13 July, 2022, Haier Biomedical and Suzhou Basecare Medical Co., Ltd. formally signed a strategic cooperation agreement. Both parties would cooperate in research and development in the field of assisted reproductive cryogenic freezing. As an indispensable and important technology in the implementation of assisted reproduction, Cryogenic freezing technology has been widely used in the field of assisted reproduction. The two parties would empower the development of the assisted reproduction industry with a new resource sharing model, effectively introduce good products and technologies to clinical applications for the benefit of more patients.



Signing ceremony for strategic cooperation

Case Haier Biomedical provides health management services for the elderly

Focusing on the health management needs of the elderly, Haier Biomedical has created a comprehensive plan for digital public health management, which includes three major scenarios of in-hospital physical examination workstation, digital routine physical examination vehicle, and contracted follow-up workstation for family doctors. The plan enables whole-process information management of public health examination at the community level and improves the efficiency of physical examination. Besides, it also helps the elderly build more accurate digital health records, making personal health information traceable. The application of digital physical examination vehicles and follow-up workstations allows the elderly to experience efficient health management services and enjoy high-quality medical resources at their doorstep.



02

Integrity

Contributing
reverence for life

- Improving governance and consolidating the foundation of operation
- Avoiding risks and practising compliance
- Higher quality to meet user needs
- Best user experience with premium services

Concept and Vision:

Haier Biomedical adheres to the concept of "reverence for life". Sticking to the "customer-centred" approach, we create an integrity ecosystem with all stakeholders. We conduct our corporate governance in accordance with the highest standards of business ethics and corporate governance requirements, strictly prevent corporate risks and operate with integrity and compliance. At the same time, we firmly control the quality of our products and establish a responsible supply chain to sincerely treat users' needs, and serve life science and medical innovation with practical actions.

Operating income of RMB **2,864** million

Female directors **36%**

Product recall rate **0**

Domestic user satisfaction rate **99.8%**

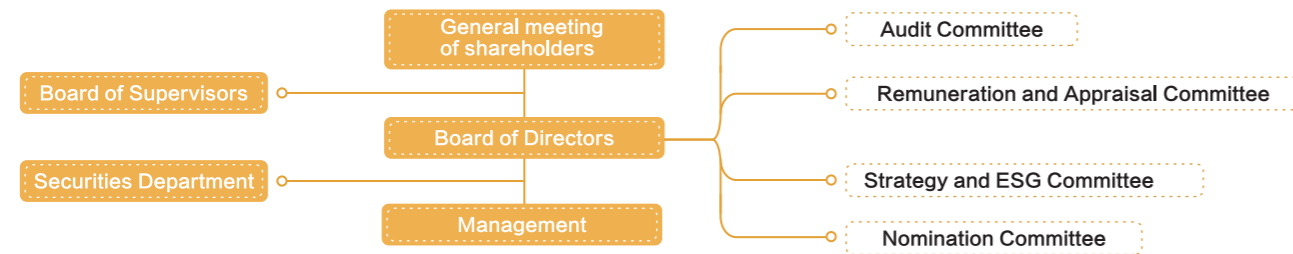
LIFE



Improving governance and consolidating the foundation of operation

Company profile

Haier Biomedical strictly abides by the Code of Corporate Governance for Listed Companies in China, the Rules Governing the Listing of Stocks on the Science and Technology Innovation Board of Shanghai Stock Exchange and relevant laws and regulations. We continuously improve the corporate governance structure, standardise our operation to protect the legitimate rights and interests of the Company and shareholders. Haier Biomedical has established an organisational structure under which decisions and management are jointly supervised by the General Meeting of Shareholders, the Board of Directors and its special sub-committees, the Board of Supervisors, Securities Department and Management.



We require the Board members to be experienced in economic management or industry, and the non-independent directors to have extensive financial or managerial experience. At the same time, we believe that a diverse Board composition is conducive to the Company's ability to obtain professional advice from different perspectives and promote sustainable and healthy development. While assessing the skills, experience and independence of directors, we select Board members based on the principle of diversity, including but not limited to the race, cultural background and gender.

Title	Name	Gender	Education	Composition of Board of Directors
Chairman	Tan Lixia	Female	the Doctorate of Professional Advanced Studies (DrAPS) in Applied Finance	
Director	Zhou Yunjie	Male	Doctor of Business Administration	
Director	Liu Zhanjie	Male	PhD in Refrigeration and Cryogenic Engineering Master of Business Administration	
Director	Gong Wenwen	Female	Bachelor of Management and Economics	
Director	Wang Wenfu	Male	Bachelor of Engineering	
Director	Hu Xiong	Male	Master of Business Administration Bachelor of Economics and Information Management	
Director	Zhang Zhaoyue*	Male	Master of Insurance Bachelor of Financial Engineering	
Independent Director	Chen Jie	Female	Master of Business Administration Bachelor of Applied Chemistry in Ceramics	
Independent Director	Luo Jin	Female	PhD in Biochemistry and Molecular Biology	
Independent Director	Zou Dianxin	Male	Master of Medicine	
Independent Director	Huang Weide	Male	Bachelor of Economics and Business	

Note*: Zhang Zhaoyue served until 30 December 2022

Proportion of female executives

	Total number of executives	Number of female	Proportion (%)
Board of Directors	11	4	36.36%
Board of Supervisors	3	3	100.00%
Senior management	8	3	37.50%

The Company regularly convenes shareholders' meetings to ensure that all shareholders enjoy equal status and legal interests and protect the voting rights of shareholders. The Board of Directors and its special sub-committees deliberate and make decisions on various matters relating to the management of the Company to ensure the establishment of a sound internal control and risk management system through strategy formulation and oversight of strategy implementation. The Board of Supervisors supervise the Company's financial performance, as well as the legal compliance of the Company's directors and other senior management in the performance of their duties.



Investor communication

To safeguard investors' interests, Haier Biomedical actively communicates with the regulatory authorities and investors to ensure that the disclosure of relevant information is true, accurate and complete. During the reporting period, Haier Biomedical continuously improves its information disclosure system and strictly complies with the Articles of Association and other regulatory requirements. This year, we have revised the Information Disclosure Management System of Haier Biomedical to standardise the information disclosure process and ensure the authenticity and completeness of information disclosure. For major related party transactions, we strictly follow the requirements of the Qingdao Haier Biomedical Co., Ltd. Related Party Transaction Decision System and other documents to perform necessary audit procedures and make full disclosure. In April 2022, the Company updated the Decision-Making System for Related Transactions of Qingdao Haier Biomedical Co., Ltd., which strengthened the management of information disclosure and enhanced the transparency.

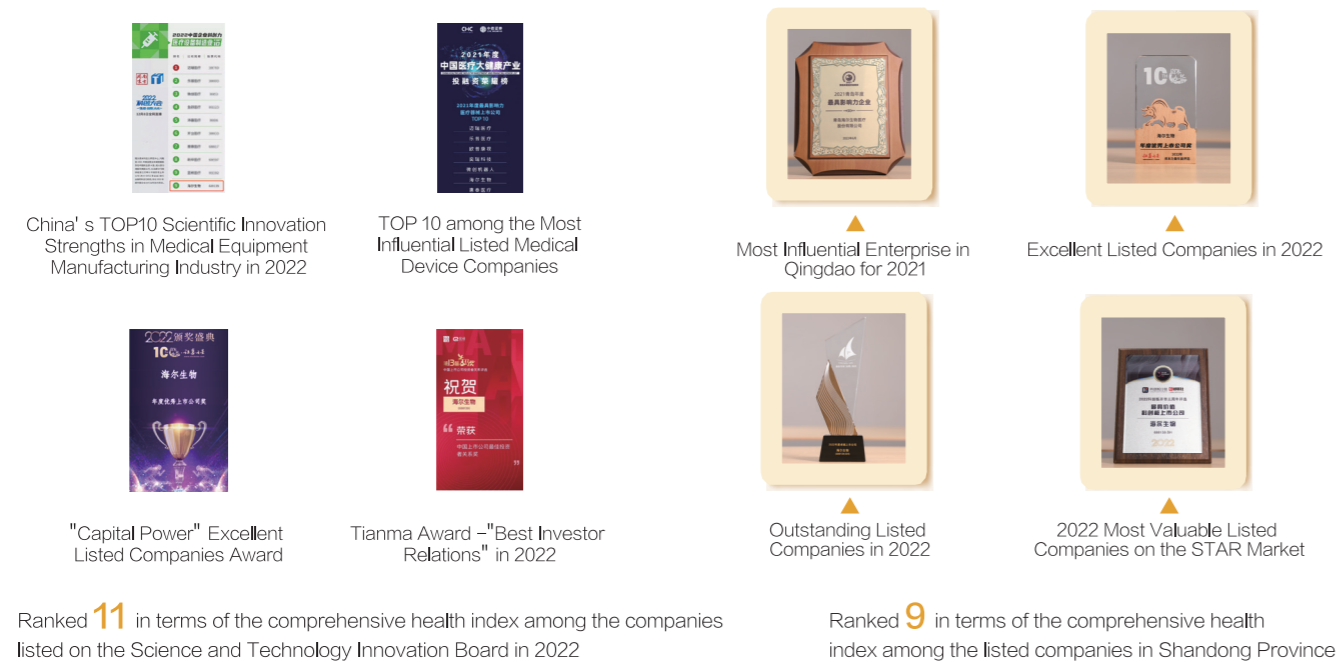
The Company complies with the regulatory requirements of the Investor Relations Guidelines for Listed Companies and revised a series of corporate regulatory systems such as the Investor Relations Management System of Haier Biomedical this year. At the same time, the Company is committed to maintaining good communication with investors in various ways, and safeguarding investors' right to know.



For institutional investors, the Company takes the initiative in investor communication and maintains high frequency communication with them in 2022. We hold performance briefings for institutional investors after each periodic report, which is attended by all the management of the Company. At the same time, the Company actively participates in the annual meeting held by institutional investors and takes the initiative to communicate. For small and medium investors, the Company holds a performance briefing for all investors after the issuance of the annual report, the semi-annual report and the three-quarter report, with the participation of the General Manager, the Chief Financial Officer and the Secretary to the Chairman. This practice demonstrates the high importance that management attaches to small and medium investors. Moreover, the Company communicates directly with investors through telephone calls and emails at any time and welcomes investors for their visits.



In 2022, Haier Biomedical received a number of honours and recognition. Haier Biomedical was included in the Shanghai – Hong Kong Stock Connect, SSE 380 Index, FTSE GEIS Index and CSI Xinhua News Agency National Brand Engineering Index. Meanwhile, it was selected as one of the top 5 weighted stocks in the SSE STAR Market Biomedical Index. In addition, the Company was recognised by the capital market and listed in the China's New Economy Top 500, Top 50 on the STAR Market by Value and China's Top 30 Listed Medical Instrument Companies by Value.



Avoiding risks and practising compliance

Risk management

Haier Biomedical has established a sound risk management process to meet internal and external legal requirements and standards, identify and assess risks, and ensure honest operation and the Company's sound operation.

Risk prevention and control

In the process of steady development, Haier Biomedical has continuously strengthened risk management and internal control. In line with its business characteristics, Haier Biomedical has established a risk management and internal control system to identify and provide early warning of financial and non-financial risks in the operation process, and formed an effective risk prevention and control mechanism. At the same time, Haier Biomedical has clarified the roles and responsibilities of the Board of Directors, Board of Supervisors, management, internal control team and external audit institutions in the risk prevention and control system for achievement of the overall interests of the Company.

Risk management framework

Based on international and domestic practices, Haier Biomedical has developed three lines of defence for risk management that are applicable within the Company:

Chain groups ¹ and businesses	Brand Department, Legal Department and so on	Audit Committee, internal audits, external audits
The first line of defence <ul style="list-style-type: none"> Implement the Company's risk management policy and process Clarify the bottom line for risk management Conduct regular self-inspection and risk summary and analysis 	The second line of defence <ul style="list-style-type: none"> Promote the establishment of risk management system Clarify the bottom line mechanism Provide risk control and mitigation resources Promote closed-loop management of risks 	The third line of defence <ul style="list-style-type: none"> Provide risk management tools Supervise and evaluate the risk management Release the supervision and evaluation audit report

¹ chain group is the name of organizational structure unit within Haier Biomedical.

Risk management process



Risk management system

In 2022, Haier Biomedical improved the risk management system. The Company set up a Risk Management Committee to be responsible for the daily identification, assessment and response of risks, the implementation of accountability and so on. The Company also issued the **Haier Biomedical Management Accountability Policy** and the **Valuation Adjustment Mechanism of Haier Biomedical for Comprehensive Risk Management System**, which clarified risk owners and their main responsibilities and enhanced the restriction mechanism through stronger risk management. In 2022, the Company held meetings on risk management system building to discuss the current status, objective, method and mechanism of risk management, which facilitated agreement on risk management philosophy and clarified key risks.

Internal control audit

Haier Biomedical tests and self-evaluates the effectiveness of the design and implementation of the internal control system. Every year, Haier Biomedical engages auditors to audit the effectiveness of the internal control over financial reporting, and discloses the identified material deficiencies in the internal control over non-financial reporting in accordance with compliance requirements. The full text of the financial report and internal audit report issued by the auditor is available on the official website of Shanghai Stock Exchange ("SSE"), and is subject to review and supervision by all stakeholders.

Compliant operation

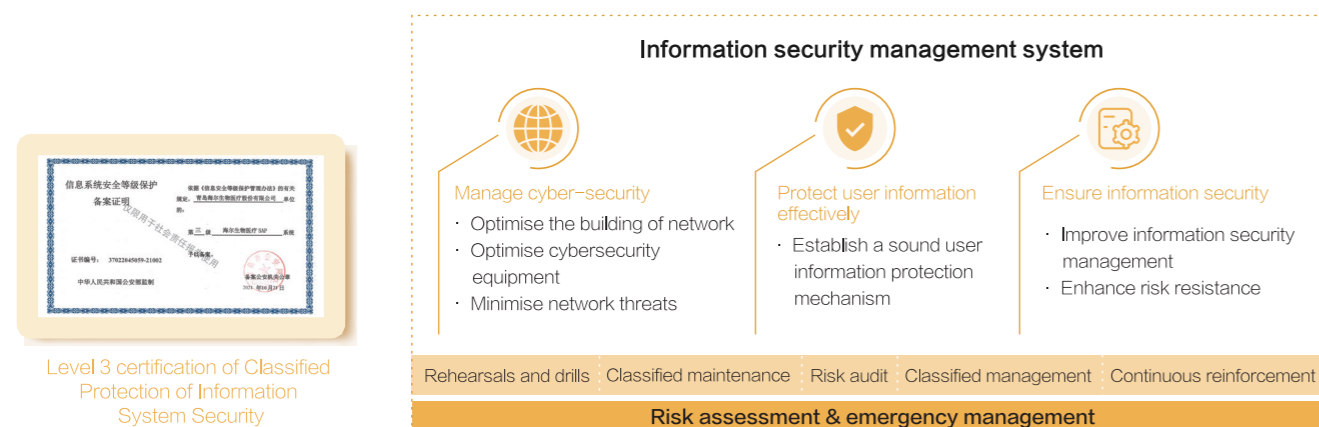
We firmly hold that compliance management is conducive to the sound operation of enterprises. Therefore, we strictly follow compliant operation requirements to ensure that all of our related party transactions are fair and just. We have reviewed our compliant operation standards, and established compliance chain groups based on clarified responsible persons and internal business nodes. With these efforts, we have standardised daily compliant operation process, ensuring that relevant guidance is in place.

Compliance training

To enhance the awareness and professional competence of those charged with governance and management in compliant operation, Haier Biomedical provides compliance training for all directors, supervisors and senior management. During the reporting period, the Company conducted "Short-swing Trading Training" for all directors, supervisors and senior management, and organised them to participate in the "Corporate Governance Training" held by China Association for Public Companies, with a training coverage rate of 100%.

Information security

To protect information assets and data security, we have formulated the Code of Conduct for Biomedical Information Security based on the Data Security Law of the People's Republic of China, which strengthens information security management to ensure the confidentiality, integrity, reliability and availability of data. In 2022, we implemented 12 anti-phishing drills to enhance employees' security awareness. Besides, our SAP system obtained the Level 3 certification of Classified Protection of Information System Security. We had no major information leakage incidents in 2022.



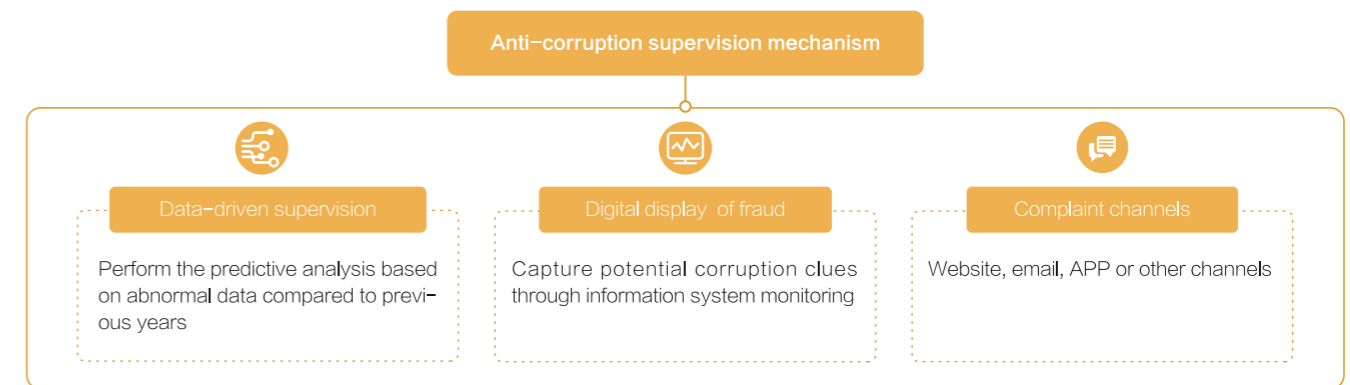
Business ethics

Haier Biomedical adheres to high business ethics in a complex business environment, and sets a good example in shouldering social responsibilities.

Anti-corruption

We continue to perfect our anti-corruption system, and require all employees to sign the **Haier Biomedical Business Code of Conduct**, the **Haier Biomedical Information Security Code of Conduct** and the **Letter of Commitment to Integrity and Self-discipline**. Moreover, we have established strict anti-corruption supervision mechanism and whistle-blower protection mechanism, and organise anti-corruption training.

Anti-corruption supervision mechanism



Report acceptance mechanism

We have designated specific employees to manage complaint channels. Upon receiving a complaint, they will first check information on the whistle-blower, the person being reported, and the content and recipient of the report, so as to develop an investigation plan based on the report type.

We protect the information of the whistle-blower, prevent any unauthorised disclosure of the whistle-blower's information, and seriously deal with any non-compliant leakage of the report or retaliation against the whistle-blower.



The Company has opened up the following reporting channels for all relevant parties, including employees and suppliers:

Address | No. 280 Fengyuan Road, High-tech Zone, Qingdao, Shandong | E-mail | jkubao@haier.com

Anti-corruption training

During the reporting period, Haier Biomedical conducted anti-corruption warning education and training for all employees, staff in key positions and suppliers. In addition, all employees were required to self-check fraud issues, and employees and suppliers are required to sign the Letter of Commitment to Self check, the Letter of Commitment to Integrity and Self-discipline for Suppliers respectively, to create a clean working environment.

11 warning education and training sessions

8 training sessions for personnel at key positions

5 centralised training sessions for new employees

2 publicity training sessions for suppliers



Factory-wide Anti-corruption Training



Warning Education and Training



Responsible marketing

Haier Biomedical carries out all publicity activities in strict compliance with relevant laws and regulations such as the Advertisements Law of the People's Republic of China. The Company conducts its marketing and sales activities on the premise of protecting the environment to fulfil corporate social responsibilities. The Company abides by the General Data Protection Regulation ("GDPR") of the EU in overseas marketing activities. Thus, the Company prohibits cross-board transmission of user data, and makes the data source reliable, traceable and verifiable.

Human rights protection

As a corporate member of UNGC and UNICEF, we always support the protection of internationally recognised human rights. We oppose any disregard or abuse of human rights, and do not tolerate any illegal discrimination or harassment against race, ethnicity, region, gender, age, country, class, etc. We respect and protect human rights carefully in our business and actively promoted the implementation of relevant work. We also respect the rights to subsistence and development of the poor, people with disabilities and other vulnerable groups, and help to advance human rights protection in poor and remote areas.

Higher quality to meet user needs

Following the concept of "Reverence for Life", Haier Biomedical aims at "Creating Top-rated Medical Company among Users". We have upgraded the operation model from "product-centric" to "user-centric" and improved the whole manufacturing process for better-organised operation. Our whole-process quality system aims at meeting user needs and offering the best user experience. We continue to improve this system and quality to ensure "zero defects of products and zero complaints from users". During the reporting period, the product defect rate decreased by **33%** year on year.



Whole-process quality management and control system

In 2022, the Company obtained various quality certifications and honours, including certifications of ISO9001 and TUV Rheinland ISO13485 and so on.



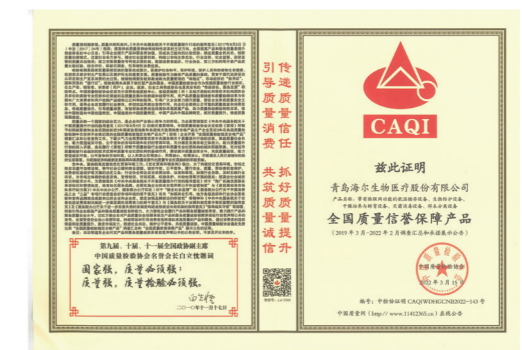
National Product and Service Quality and Integrity Brand



National Product and Service Quality and Integrity Demonstration Enterprise



National Leading Quality Brand in the Medical Device Industry



National Quality Reputation Guarantee Product

User-centric R&D planning

The Company's design and R&D staff investigate users' needs and score points of products, and provide competitive solutions based on user scenarios. Overall, the Company always focuses on user needs to create shared value with them. During the R&D planning, the Company develops testing standards based on user's scenario requirements, and conducts joint research and testing for product quality with the quality authorities. Through these efforts, the Company can ensure the R&D quality, and verify the R&D results to meet specific user needs.

Case Insight into users – Haier Biomedical conducted research for the R&D of oscillating incubators

Haier Biomedical is committed to gaining insight into user needs to provide competitive solutions. When developing the oscillating incubator, R&D staff worked with users on-site to discover their needs and pain points of products, and provided competitive solutions based on user scenarios to optimise user experience.



R&D investigation for the oscillating incubators

Responsible supply chain management

Suppliers are the cornerstone of high product quality. Therefore, the Company continues to develop suppliers with professional qualifications to build a zero-defect supplier system. Meanwhile, the supplier management concept has been upgraded from "recovering loss after incidents" to "creating shared value with suppliers". By doing so, the Company timely identifies product and process risks, and improves inspection standards to enhance procurement quality. The Company has undertaken 8 supplier co-creation projects to improve quality, accounting for about 32% of market quality losses, of which 3 have been completed.

Case Haier Biomedical worked with filter suppliers to develop quality co-creation

Haier Biomedical seeks cooperation with more suppliers holding professional qualifications to build a zero-defect supplier system in the medical industry. In 2022, Haier Biomedical shared resources with filter suppliers to reduce the water content of filter parts to less than 0.7% through measures such as steel ring fixture design optimisation, process standardisation, factory environment improvement, supplier staff training and real-time production monitoring.



Build a support system

Digital system

In 2022, the Company built a digital supply chain management system. With the help of analysts of procurement data, the Company achieved the supply chain information flow management and analysis, quantified internal supply chain planning data to realise digital operation and higher management efficiency.

Dedicated supplier system for the life science business

In 2022, to support the development of new industry (life science) at Haier Biomedical, the Company launched a dedicated supplier access process and built a new supplier pool for the life science business to ensure scientific procurement management and lower supply chain risks.

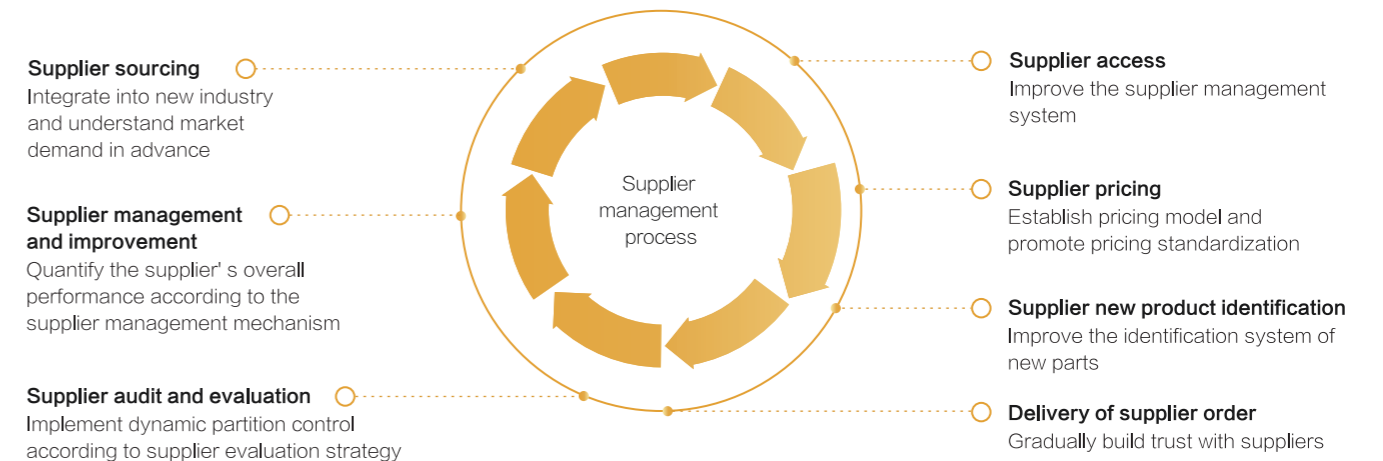
Higher supplier access standards

The Company strictly controls supplier access and management, and continuously strengthens access audit and risk management. At the early stage of procurement, the Company organises the procurement, quality and R&D units to assess suppliers. Meanwhile, the Company fulfils environmental and social responsibilities in procurement, and requires suppliers to undertake the agreed social responsibilities. Besides, the Company requires all suppliers to sign and strictly comply with the **Supplier Code of Conduct**. By setting out general terms of supplier contract, the Company requires suppliers to manage quality, environmental impact, labour and so on.

Strict control over supplier management process

To ensure the quality and safety of materials and create a high-quality supplier pool, Haier Biomedical has set up a whole-process supplier management system, and continuously strengthens the funnel and competition mechanism. During the service period, the Company conducts quarterly audits and evaluations of suppliers for their quality, cost, delivery and technical performance, and suppliers with poor performance in consecutive assessments will be eliminated. In 2022, the Company introduced 141 suppliers and eliminated 8 suppliers.

We encourage suppliers to minimise the use of resources, including raw materials and energy, throughout the life cycle of products. We also recommend them to dispose of waste and recycled materials in an environmentally responsible manner, and urge them to obtain ISO14001 certification and set carbon reduction targets. We promote eco-friendly production by maximising the use of alternatives to hazardous chemicals. We protect internationally recognised human rights, and have reached agreement with our suppliers to prohibit the employment of child labour and restricted labour, discrimination, and forced labour. We also encourage suppliers to provide reasonable working schedule, wages and benefits for their employees.



For key procurement categories, we have established a "pre-procurement - in-procurement - post-procurement" supplier management system, and have formulated emergency plans, to continuously improve our capabilities to handle urgent orders and emergencies. In addition, we strictly trace the source of raw materials and require all suppliers to provide source proofs for our strict verification. Through these efforts, we use legal and compliant raw materials to ensure product quality. Our raw materials are mainly sourced from the Chinese mainland, and the risk associated with conflict minerals is low.

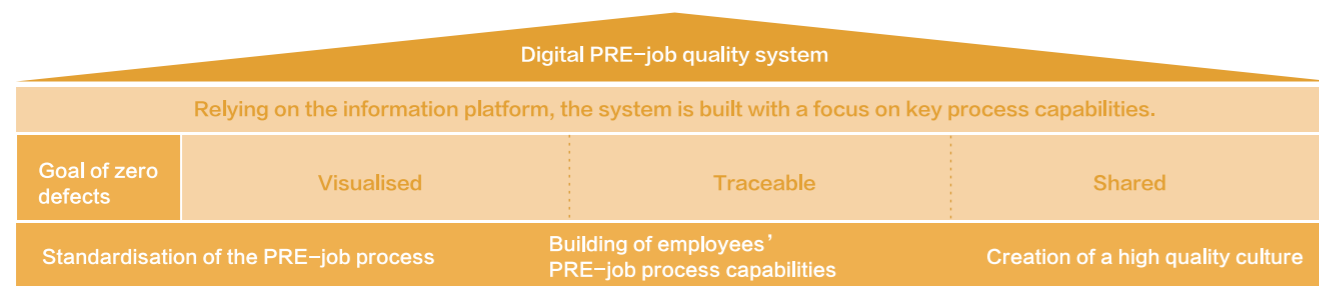
To enhance the quality and service capabilities across the supply chain, Haier Biomedical regularly guides, trains and communicates with suppliers, thereby creating shared value.



Supplier training

Intelligent manufacturing

Relying on the information platform, we have built a digital PRE-job (prepares job) quality system around key process capabilities. Through standardising the PRE-job process, building up employees' PRE-job process capabilities and creating a high-quality culture, we have set up a visualised, traceable, and shared manufacturing process for the quality goal of zero defect. In 2022, we continued the PRE-job process upgrading programme to increase the number of optimised PRE-job system testing projects from 0 to 62.



Meanwhile, to ensure the quality of every key aspect in production, we keep motivating our staff to identify and solve problems. Through the "Eagle Eye" activity and "zero defect" activity, Haier Biomedical organised training and competitions such as training on risk analysis and safety regulations to improve the quality awareness and professional competence of employees.

Case Hair Biomedical implemented the "zero defect" activity, improving the quality awareness and professional competence of employees

In 2022, We implemented the "zero defect" activity, set up an incentive mechanism for improvement, and promoted the submission of 432 "Five Ones" process improvement projects. Among them, 327 were completed, 15 were rated as excellent improvement cases, and 17 were improvement projects targeting difficult problems. Overall, the projects with poor performance to be rectified were reduced by 39% year-on-year. Such activities have enhanced employees' enthusiasm for quality management and improvement. Haier Biomedical also encourages employees to give full play to their value, and grow into versatile talents, thereby cultivating a zero-defect talent pool.

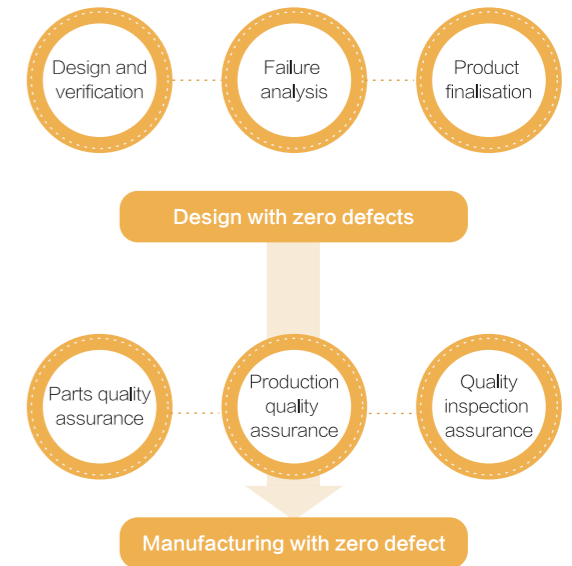


Case Haier Biomedical tightens the quality control of aviation temperature control containers through closed-loop management

As a high-end temperature control solution, active aviation temperature control containers are used on aircraft to transport temperature-sensitive materials, such as biopharmaceuticals, bulk pharmaceutical chemicals, and electronic components. The temperature control effect is directly related to the quality safety or curative effect of materials, so the market has always been strict on their performance.

To ensure the end-to-end quality management and achieve zero defects in the design and manufacturing of the containers, Haier Biomedical has established a closed-loop quality management system, which covers the whole process from design and verification to quality assurance inspection. Through the system, the Company strictly controls the quality of design and production to protect life and health of people with high quality.

Besides, to ensure that the manufacturing process meets the production standards of the aviation industry, Haier Biomedical engages external experts in civil aviation industries to provide regular quality training for relevant staff of the Company.



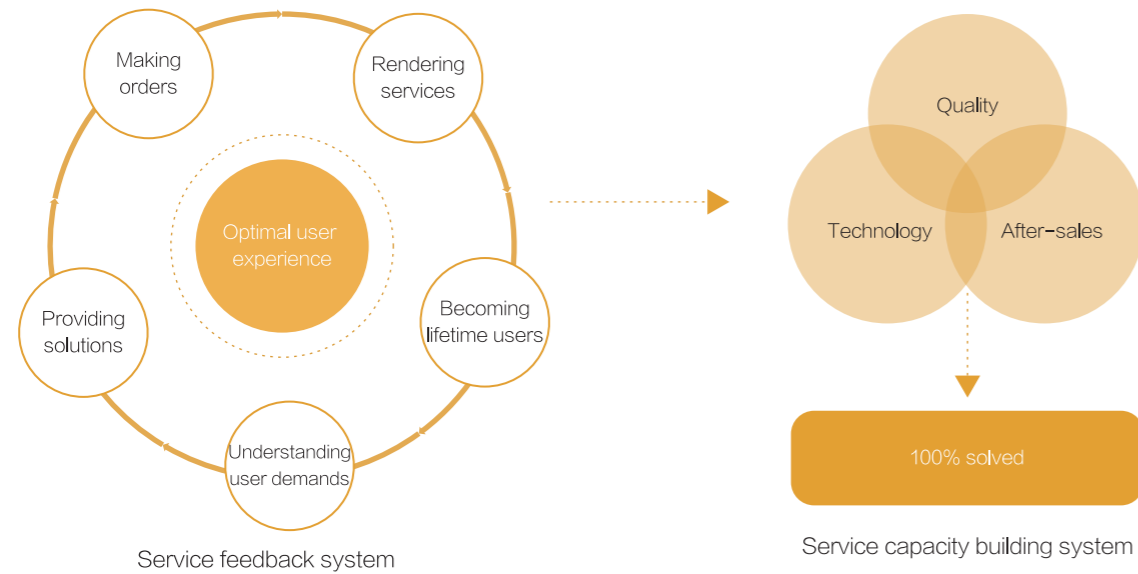
Case Haier Biomedical, China Southern Logistics and COSCO Shipping Air Freight launched the first international air route for HB RKN Container

On September 17, 2022, Haier Biomedical's Active Temperature Controlled RKN Container carried by the CZ463 cargo flight of China Southern Airlines Logistics Co, Ltd. (referred to as Southern Airlines Logistics) reached Frankfurt Airport, Germany from Shanghai Pudong Airport, China. The successful launch of the "Shanghai, China - Frankfurt, Germany" international route was the first international route for China's self-developed Active Temperature Controlled RKN Container, which was a result of the joint efforts of HB TempCon Aviation, a holding subsidiary specializing in the aviation temperature control business under Haier Biomedical, Qingdao COSCO Shipping Air Freight and Southern Airlines Logistics. It means that the "Made in China" high-end aviation cold chain logistics equipment has officially stepped into the international stage, and China's aviation cold chain logistics industry is striding into a period featuring specialized and rapid development.



Best user experience with premium services

Haier Biomedical is keenly aware that it is important to improve quality for users, and adheres to the philosophy of "warming users' heart with premium services". Therefore, the Company has established a closed-loop service capacity building system that covers the "solution, market, and service" to deliver the best user experience. Besides, the Company has introduced a whole-chain service mechanism, continuously improving the all-around service capacity and quality.



Service capability building

The Company continues to strengthen exchanges and sharing with frontline service staff, carry out multi-level and diversified upskilling training, and improve services through employee incentive and promotion systems. In 2022, the Company held **64** training sessions about quality and service in total. Of the **3,200** service staff and **151** core technicians who participated in the training, **123** became gold-class service engineers and **500** core engineers.

Training and certification	Offline training activities Skills competition Skill training certification	
Technical support	Provide diverse technical support means Output technical process data and form learning courses	
Benefits and incentives	Offer extra allowances and care to top performers Improve the promotion channel and incentive system	

Empowerment and incentive system for after-sales service team

After-sales manager training Organise weekly meetings of after-sales managers to feedback and deal with market issues and user needs in a timely manner.	Product launch training Train service staff before the launch of new products to improve their service capabilities and user experience.	Conduct exchange with other companies Improve service quality by learning from their corporate culture.
--	--	---



Product launch training



Conduct exchange with other companies

03

Future

Creating value together with our people

- Exploring tremendous potential of employees
- Creating a healthy and happy life for people

Concept and Vision:

Haier Biomedical regards the growth of employees as the cornerstone of our development, provides them with a diversified, healthy, safe and happy working environment, stimulates their potential through an open and all-around talent system, and shares a bright future with our employees. We share development results with society, promote accessible medical resources and services with in-house technological innovations and influence, help achieve global medical equity, and constantly forge ahead to build a community with a shared future for mankind.

Number of new employees recruited in 2022: **778**

Total hours of employee training: **89,416** hours

Cash, materials and equipment donated: RMB **3,679** thousand

Medical institutions, enterprises, scientific research institutions, etc. served: over **20,000**

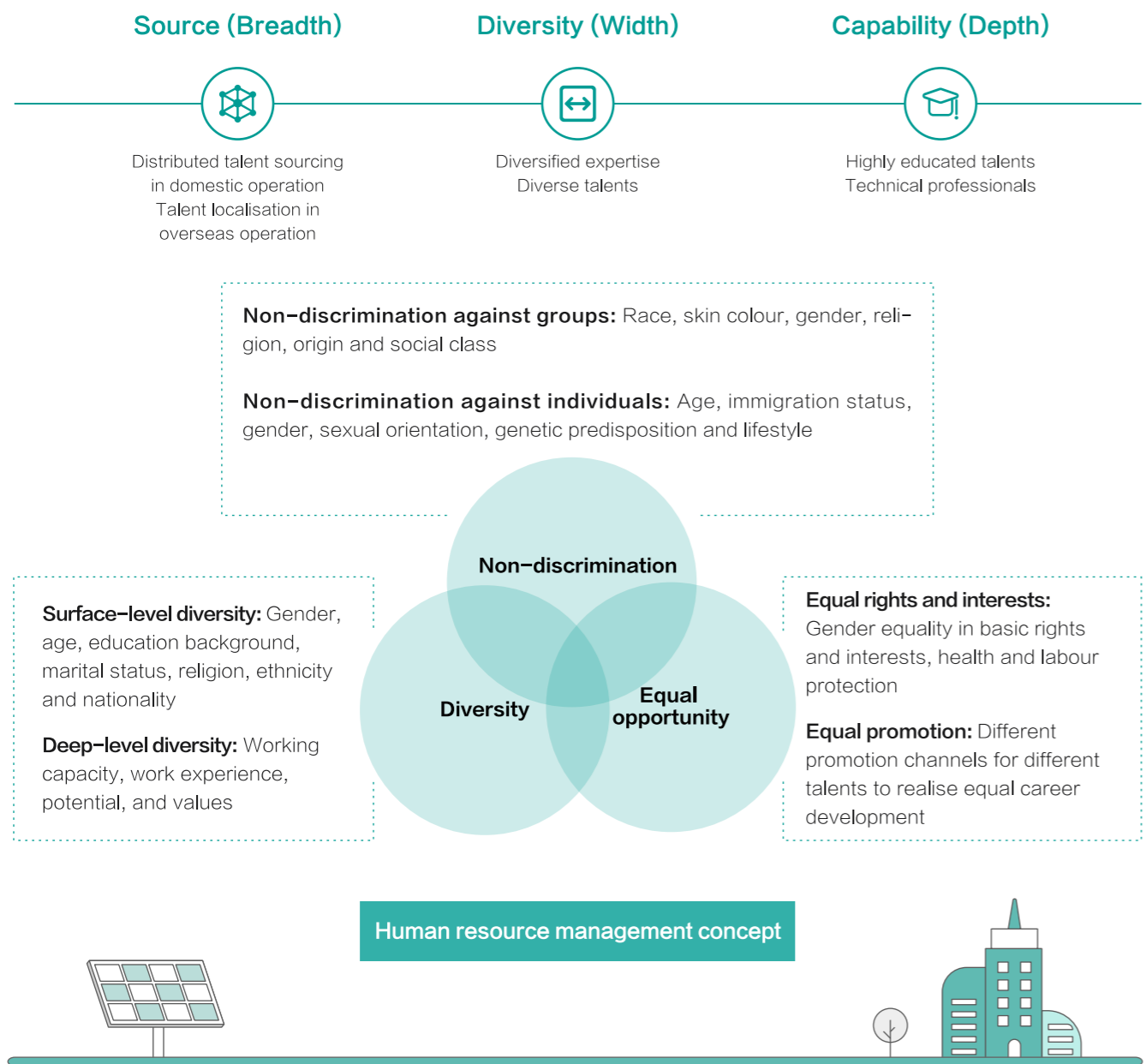
LIFE



Exploring tremendous potential of employees

Diversified workforce

Based on the human resource management concept of "non-discrimination, diversity and equal opportunity", we have established an open and all-around talent acquisition system. Our demand for talents is based on 3 dimensions, namely source (breadth), diversity (width), and capability (depth), in order to attract and retain most outstanding talents, and build up diversified workforce. With these efforts, we strive to provide employees with an equal workplace free from discrimination, harassment and any form of abuse.



Basic rights and interests of employees

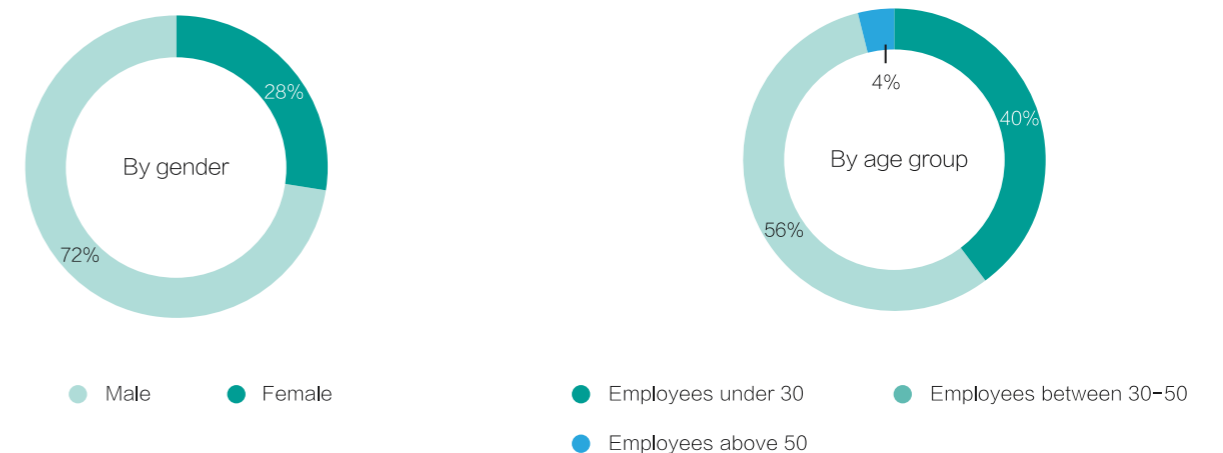
Based on national laws and regulations such as the Labour Law of the People's Republic of China and the Labour Contract Law of the People's Republic of China, we have formulated and improved several internal human resource management policies such as the Haier Biomedical Recruitment and Employment Policy and the Haier Biomedical Employee Development Policy to standardise and protect the rights and interests of employees. Meanwhile, we adhere to equal employment, recruit necessary talents on a "fair, just and open" basis, and sign employment contracts with all employees. We implement the gender equality policy, and prohibit discrimination on grounds of race, ethnicity, place of origin, gender, age, marital status, etc. in the recruitment, appointment, promotion, and departure of employees. We also insist on equal pay for equal work between men and women, protecting equality at workplace. We prohibit any forms of forced labour and child labour. In case of any violations in employment, we will immediately and seriously deal with relevant responsible persons based on the severity of actual circumstances.

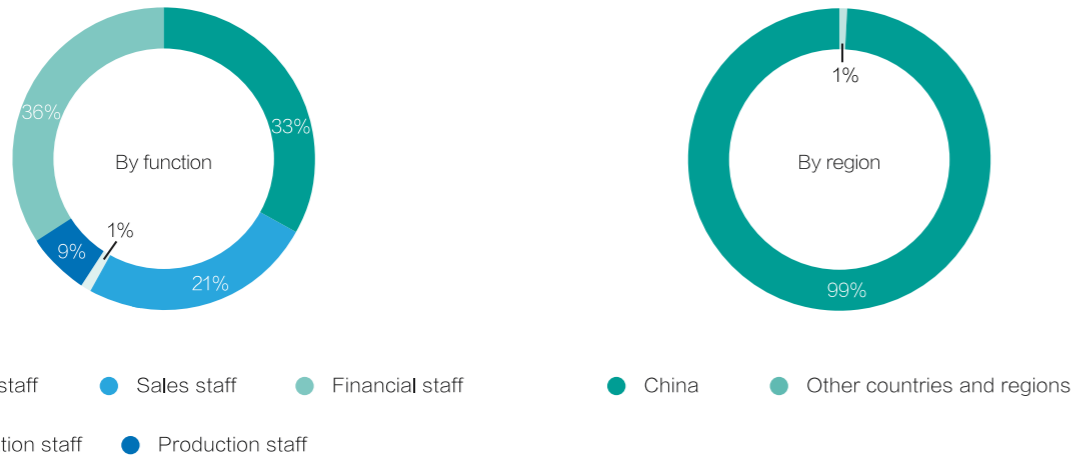
Supporting policies

External laws and regulations	Internal policies
<ul style="list-style-type: none"> Labour Law of the People's Republic of China Labour Contract Law of the People's Republic of China Employment Promotion Law of the People's Republic of China Social Insurance Law of the People's Republic of China 	<ul style="list-style-type: none"> Haier Biomedical Recruitment and Employment Policy Haier Biomedical Employee Development Policy Haier Biomedical Maker Development Policy Haier Biomedical Labour Contract Management Policy ...

Employee composition

Haier Biomedical believes that a diverse workforce will inspire employees' passion for innovation. Therefore, Haier Biomedical is committed to attracting diverse talents based on equal employment.



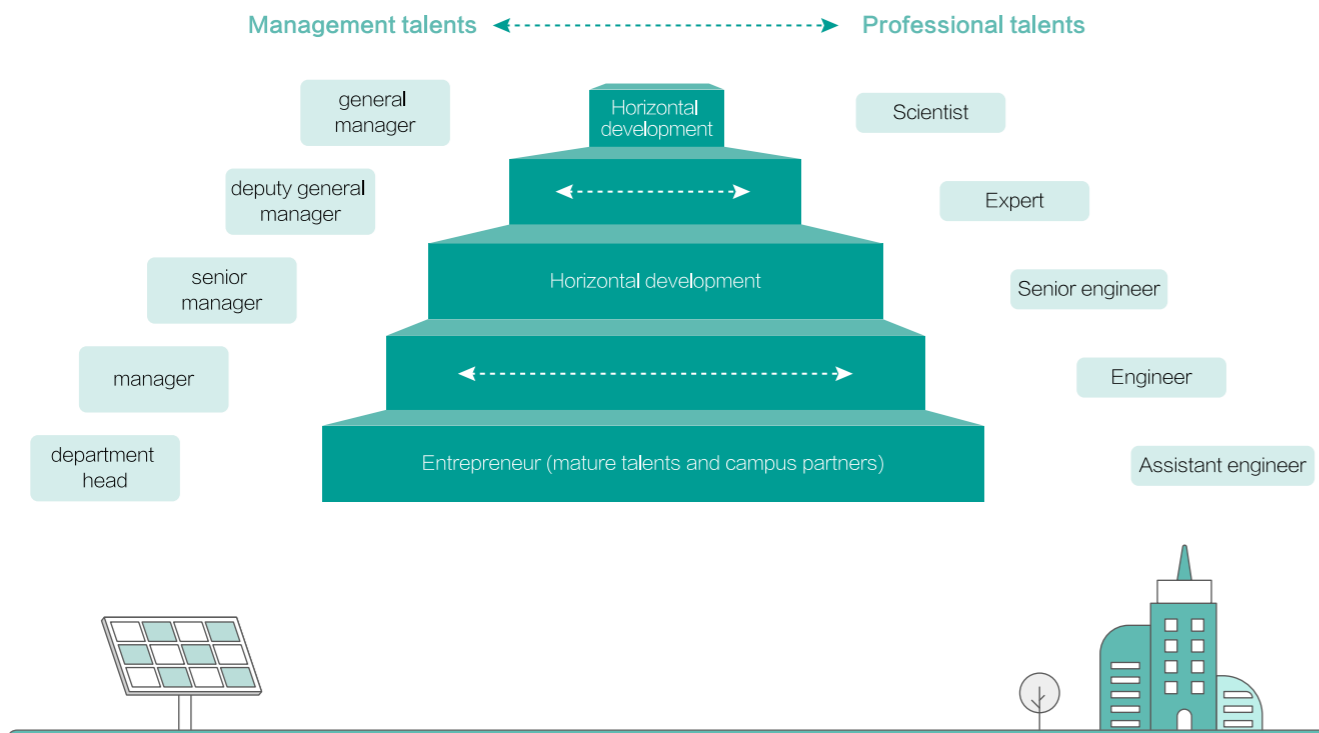


Promotion of employee growth

To build up an all-around talent acquisition system, Haier Biomedical encourages an open and inclusive culture. Meanwhile, the Company has established a mature talent training and development system, and kept improving the comprehensive incentive mechanism and diversified welfare system for employees.

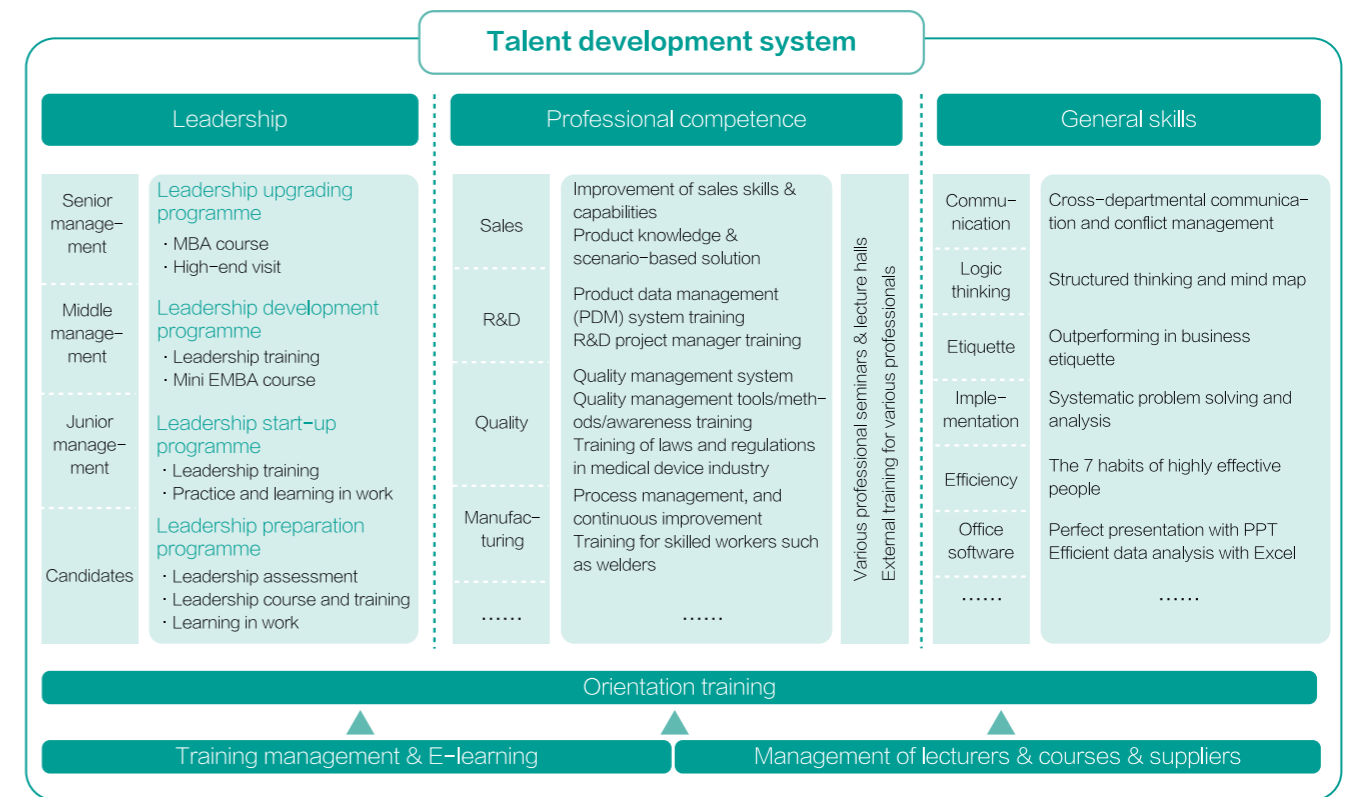
Employee development

Concerned about the development of employees, Haier Biomedical has established a systematic talent development plan, and expanded career development channels for employees, in an effort to realise common development and progress with employees.



Employee training

Haier Biomedical values the improvement of employees' capabilities, and has established a multi-level employee training system to provide intellectual support for the sustainable development of the Company. The Company has formulated training plans based on job requirements. Based on the 3 training systems, i.e., leadership, professional competence and general skills, the Company organises various training sessions such as orientation training, pre-service training, on-the-job training, and rotation. In 2022, Haier Biomedical's total hours of employee training were **89,416** hours, with a coverage of **100%**.

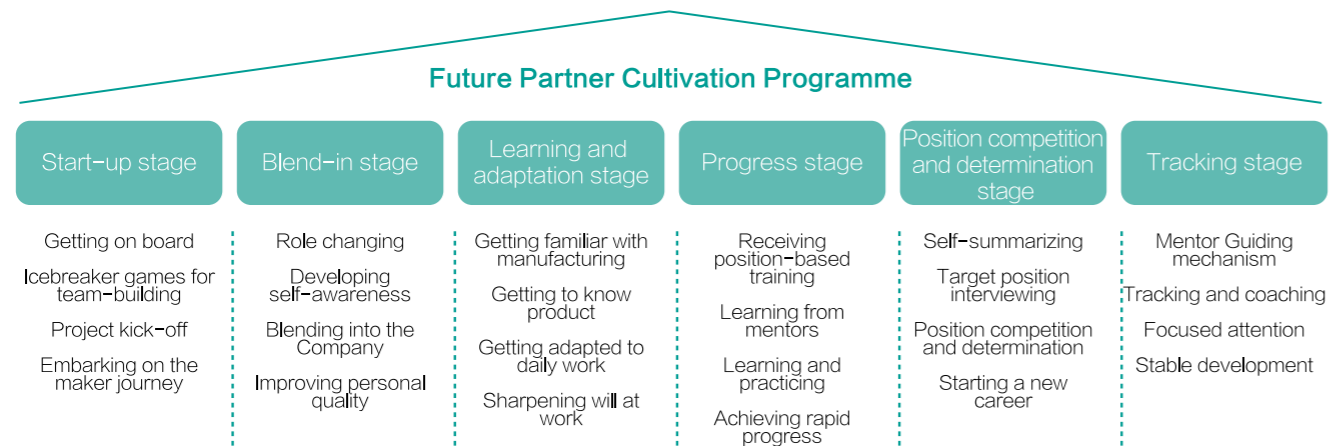


New employee training









Future Partner Cultivation Programme

The Future Partner Cultivation Programme helps campus makers understand our corporate culture and sparks their passion for entrepreneurship and innovation. In addition, it helps them quickly adapt to the shift of their role from student to employee, thus enhancing cohesion of makers after joining the Company.





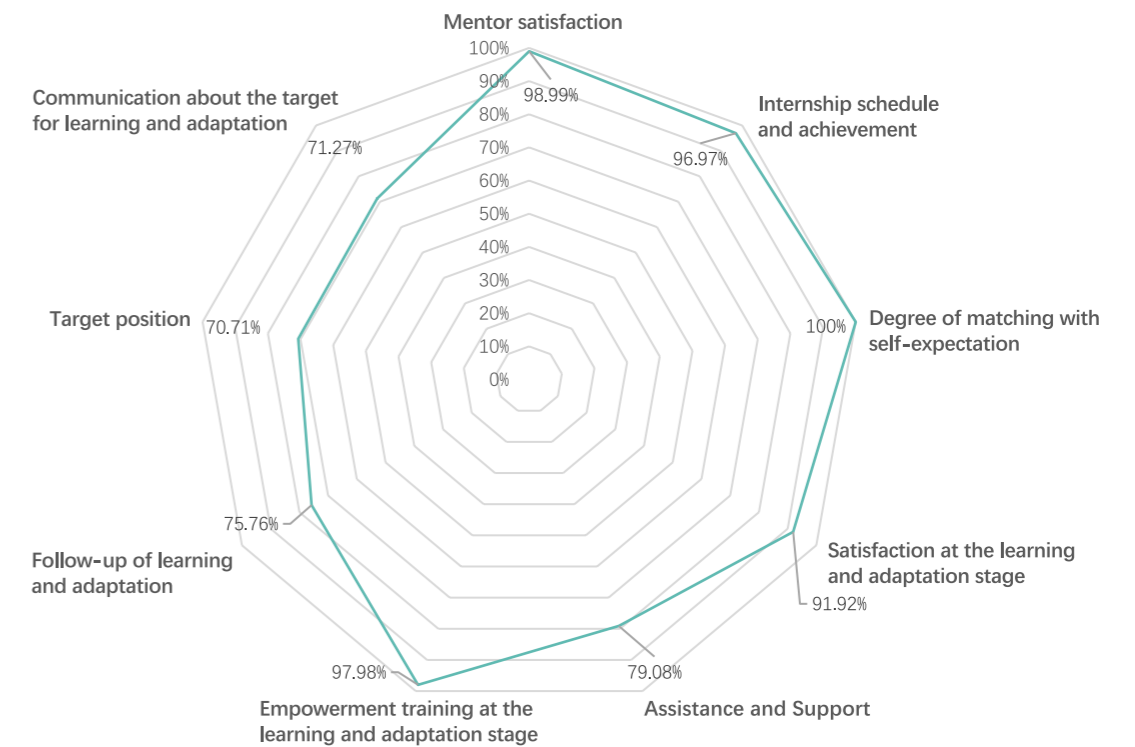
Future Partner training activities

<p>Cultural Integration</p>  <p>Campus Makers of 2022 Class Visit Haier Culture Exhibition</p>  <p>Corporate Culture Exchange Event</p>
<p>General abilities cultivation</p>  <p>Teamwork Skill Development</p>  <p>Quality Development</p>
<p>Experiential Learning</p>  <p>"Gold of the Desert King" Activity</p>  <p>Team Profile</p>
<p>Special Professional Ability Training Camp</p>  <p>Vaccine Business Sharing Session</p>  <p>Automation Business Sharing Session</p>

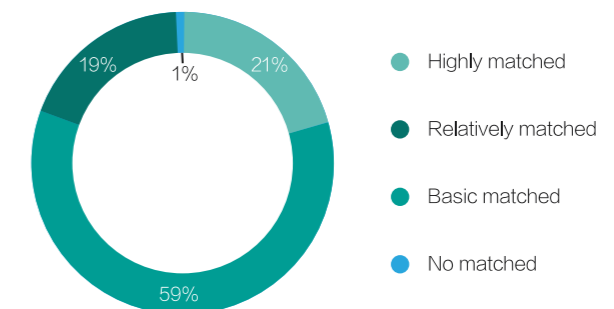
New employee survey

Haier Biomedical tracks every stage of campus makers' cultivation. In 2022, we conducted an anonymous survey among 81 campus makers at the learning and adaptation stage of the Future Partners, from dimensions such as work experience, work goals, work results, and mentor satisfaction. The survey results showed that makers were highly satisfied with the programme in all dimensions, with generally good experience. We continue to follow and conduct survey at the progression stage of future partners. Through employee self-assessment, we have a deep understanding of makers' working conditions such as familiarity with their work duties, teamwork skills, and career planning and matching, enabling the Company to help them better adapt to their work. Meanwhile, Haier Biomedical formulated tailored improvement measures based on the survey results to help makers get closer to us.

Satisfaction survey for campus entrepreneurs at the learning and adaptation stage



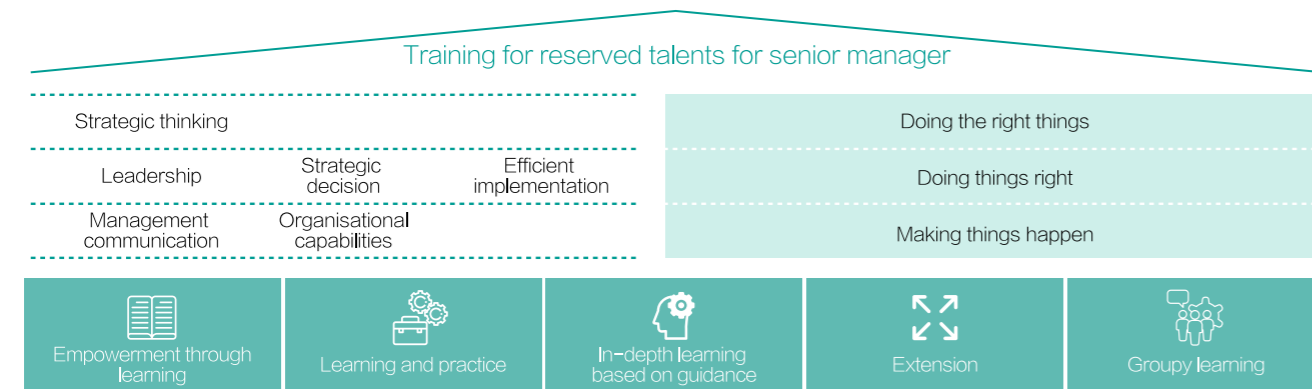
Self-assessment on the matching degree of current position with career planning¹



Note: 1. The chart only shows the survey results at the progress stage from one dimension

Leadership development

Haier Biomedical focus on developing the leadership and management capabilities of reserved talents. Specifically, we provide knowledge and skills support for employees through online and offline courses, combining knowledge and practice. We also designate dual mentors for employees, help them gain a deeper understanding of knowledge and practice, and strengthen community learning. By doing so, we are devoted to helping reserved talents become leaders who excel in decision-making, operation and management as soon as possible.

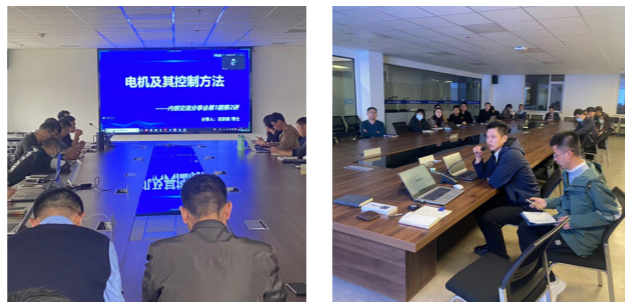


Professional competence training

Makers are the backbone for our development. Our training for on-the-job makers is aimed at promoting in-service makers to keep learning and improve professional competence, so as to help them explore personnel potential and realise career development.

Case Haier Biomedical held an internal sharing session on motors and their control methods

To enhance the business ability and professional competence of makers, Haier Biomedical has held a number of internal sharing sessions to create a mutual learning culture within the Company. Through such activities, the Company's experienced and professional talents share high-quality knowledge and skills with all makers. In 2022, the Company's experts brought an internal sharing session on motors and their control methods to enhance the professional competence and technical skills of makers in relevant department.



General skill training

We have established a general skill training system to help all employees quickly adapt to their work, improve work efficiency and promote employee development. We provide employees with courses from various aspects such as employee communication, logical thinking, problem solving, and productivity to improve their comprehensive capabilities.



Employee incentive mechanism

Haier Biomedical implements appropriate incentive policies for all employees. The Company has established the incentive mechanism of high-value creation and high reward, and offers competitive remuneration compared with other companies based on company-wide maker training system and equity incentive plans. The Company's employee performance management system supports high-performance work based on the "Rendanheyi and win-win" concept. Based on the concept, the Company adopts performance management measures including the evaluation, assessment and feedback of employee performance.

Company-wide maker training system

Haier Biomedical actively explores the company-wide maker training system under the "Rendanheyi" model. Based on the principle of "Rendanheyi", and "pay based on user value creation", through high-value creation and high reward, Haier Biomedical maximises personal value of employees. In this way, employees can share capital gains while earning regular pay, which greatly inspires their enthusiasm for entrepreneurship and innovation.

Equity incentive plan

To establish a sound long-term incentive mechanism, attract and retain outstanding talents, fully motivate employees, combine the interests of shareholders, the Company and the core team, and make all parties focus on the long-term development of the Company, Haier Biomedical has formulated an equity incentive plan based on relevant laws, regulations and normative documents, under the premise of protecting the interests of shareholders and following the principle of equal income for equal contribution. In 2022, the Company completed the first vesting period for the equity incentive recipients.

Creating a happy workplace

Haier Biomedical is committed to creating a happy workplace. The Company keeps improving employee benefits, and has established a diversified welfare system and a sound remuneration incentive mechanism. Meanwhile, the Company attaches importance to employee experience and the retention of talents, gives all-around care to employees, and arranges a variety of recreational activities, so as to inject new vitality into the work and life of employees.

Employee benefits

A sound employee welfare system is the cornerstone of a happy workplace. In addition to benefits required by laws and regulations, Haier Biomedical provides employees with paid holidays, meal stipends, holiday benefits, free physical examinations and so on. In 2022, the Company's social insurance and physical examination coverage rate for employees were both 100%.

Supplementary to major social insurance and housing fund

In addition to five major social insurance programs (i.e., endowment insurance, medical insurance, unemployment insurance, employment injury insurance and maternity insurance) and housing provident fund, the Company offers enterprise annuity to boost employees' income after retirement; the Company also provides employees with more comprehensive medical and accident protection insurance schemes through the purchase of supplementary commercial insurance.

Paid leave

In addition to statutory holidays, the Company provides annual leave, leave for parent-teacher meeting, leave for employee children' entrance examinations for senior high school and university, parental leave, parent-care leave, etc. The Company also provide 3 days of makers' leave and 2 days of spring break for fresh graduates

Meal stipend

The Company provides rich and safe meals, and meal stipends for employees, and holds food festivals from time to time to enrich staff diet.

Diverse benefits

The Company offers diverse benefits such as high-temperature allowance in summer, heating allowance in winter, clothing allowance, childcare allowance, business anniversary bonus and corresponding holiday benefits

Physical examination

The Company provides physical examinations for employees every year

Employee communication

Haier Biomedical expand communication channels for employees and conduct effective employee communication. With channels such as email, anonymous letter, WeChat group, and informal talks, we listen to voice of employees to understand and solve their problems in a timely manner and protect their human rights.

Employee care

The Company's sustainable development is based on the healthy development of employees. Haier Biomedical is concerned about the happiness of employees both in work and family life. We collect information on employees' living conditions through visit, and help them solve difficulties in work and life.

Haier Charity Assistance

To create a happier life for employees, Haier Biomedical continues to assist employees in need through Haier Charity Fund. Part of the fund comes proportionally from the Company's distributable profits, depending on the previous year's operations, the remaining is from voluntary contribution by employees. Haier Charity Fund is available for Haier Biomedical employees and their immediate and jobless family members (parents, spouse and children). It is designed to assist eligible employees and their immediate family members in the event of major illness or accidental injuries.

Employee activities

Recreational activities can adjust employees' work pace to help them relax, and establish closer relationships between employees, as well as between employees and the Company. In 2022, the trade union of Haier Biomedical held various recreational activities, and knowledge and skill competitions, showing the good spirit of Haier Biomedical makers and enriching their life.



Winter food festival and lucky draw

Consolidating the safe barrier

Target

Zero accident, zero occupational disease

certification

Obtained ISO45001 certification

Safety management

In 2022, 1,163 potential hazards were identified, which were 100% rectified in a closed-loop manner

In 2022, the Company organised 49 emergency drills and 24 fire safety training sessions

In 2022, all employees participated in the three-level safety training and education

In 2022, the Company conducted 12 fire drills and maintenance activities, handled 36 faults, and achieved zero fire risk

The work safety inspection was implemented once a week

Occupational health

The Company organises occupational health examinations for employees twice a year

In 2022, the Company engaged occupational health management personnel to provide 2 special training sessions for the main staff in charge of production

The Company organises occupational health and safety training for all employees once a year

The Company invites third party institutions to conduct on-site occupational hazard detection once a year

In 2022, the Company had no confirmed occupational disease and food safety incidents



Prioritising health and safety of employees, Haier Biomedical strictly abides by the Work Safety Law of the People's Republic of China, Labour Law of the People's Republic of China and other relevant laws and regulations. To realise zero accident and zero occupational disease, we conduct relevant training and drills, and create a workplace free from health and safety hazards.

Safety management

Guided by the principle of "safety first, lives first", Haier Biomedical has built the "139" safety management system with 1 core objective (zero accident), 3 key factors (zero hazard, zero negligence and zero violation), and 9 safety management measures (full-participation, full-coverage, whole-process, prevention, in-process control, post-event closed-loop management, real-time identification, real-time closed-loop management and non-occurrence). During the reporting period, Haier Biomedical reported zero major safety incident.

Safety management system



Production safety

To improve production safety work on an on-going basis, Haier Biomedical raises employees' safety awareness and promote production safety through production safety month campaign, fire safety month campaign, "100-day action" for major hazards, and safety measures around year-end. By implementing production safety work, safety hazards identified during production throughout the year were 100% rectified by the Company.

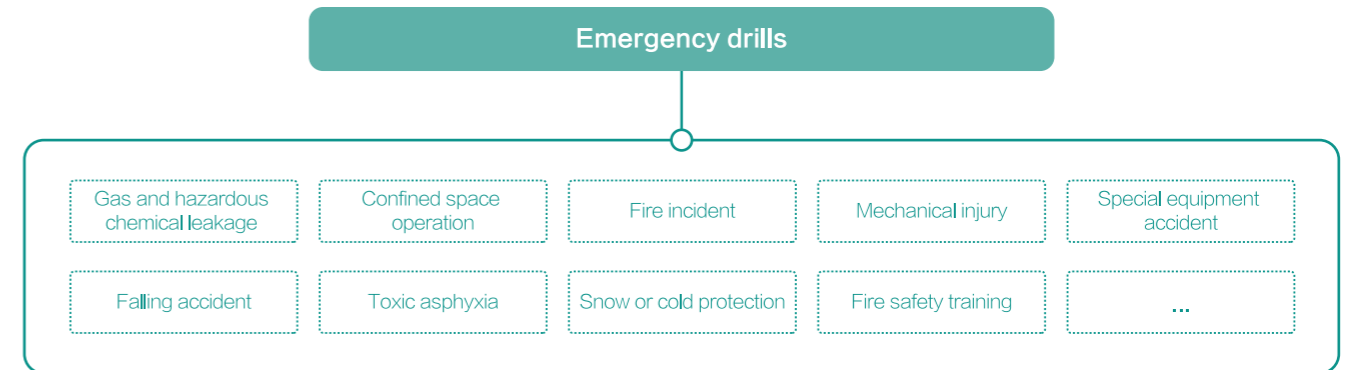
Case Haier Biomedical launched the Safety Production Month campaign themed "comply with the work safety law and be the first responsible person"

June of 2022 marked the 21st National Production Safety Month, with the theme of "comply with the Work Safety Law and be the first responsible person". To create a safe, healthy, and stable environment for production and living, the Security Department organised the Production Safety Month campaign, including knowledge contest, photo scavenger hunt of safety hazards and fire safety theme competition. In doing so, we aim to raise employees' safety awareness and offer sufficient knowledge and skills to enable them to utilize what they learned and promote production safety together.



Emergency drills

In response to a series of emergencies, such as fire risks, hazardous chemical leakage, and extreme weather, we have formulated emergency plans and organised training and drills. Based on the analysis of drill results, we further promote safety awareness in the workplace and equip employees with emergency response capabilities to keep them safe. In 2022, Haier Biomedical conducted a total of 49 emergency training sessions and drills.



Case Haier Biomedical organised training and exercise on the first-aid treatment of heatstroke

In June 2022, staff from low-temperature equipment assembly workshop were provided with training on the first-aid treatment of heatstroke. We introduced the common symptoms of heatstroke and instructions for medicine use, and conducted on-site emergency response and treatment simulation exercises. The training and exercise helped our employees acquire more skills and methods for treating people with heatstroke, and become familiar with emergency plan for heatstroke. This ensures that people will receive treatment promptly with minimised secondary injuries in the event of heatstroke.

Case Haier Biomedical conducted a drill on the handling of hazardous waste leakage

In October 2022, the Security Department organised a special drill on the response plan for hazardous waste leakage. The Security Department trained employees on handling processes and emergency materials, before simulating a leakage accident at the hazardous waste storage site. This drill enhanced employees' ability to handle emergencies and will greatly reduce the probability of accidents.



Case Haier Biomedical assisted China University of Petroleum with hazardous chemical leakage drill

With the aim of comprehensively improving emergency response capabilities of universities, in November 2022, Haier Biomedical instructed China University of Petroleum to conduct the hazardous chemical leakage drill. In the form of "exercise + observation", the drill achieved the dual objectives of inspection and demonstration and improve the emergency handling capacity of hazardous chemicals of the university.



Occupational health

In order to guard the physical and mental health of employees and avoid safety hazards, the Company builds an occupational health and safety practice system to strengthen health and safety management. Moreover, the Company conducts various safety training and hazard investigation to secure risk prevention, organises diversified and targeted lectures and provides physical examination to ensure health and safety of employees.

Occupational health and safety practice system

Occupational health and safety practice system						
Caring for physical and mental health of employees			Implementing occupational health improvement projects			Safeguarding working environment
Provision of special physical examinations for female employees and staff at positions involving occupational hazards	Provision of mental health services covering assessment, counselling, and training	Creation of occupational health and safety files for employees	Separation between employees and toxic substances	Separation between employees and electricity	Separation between employees and machinery	Monitoring indoor air quality to ensure health of employees

Care for female employees

Haier Biomedical cares for physical and mental health of every employee. For female employees' physical and mental health, we have launched a series of policies to guarantee their benefits, including special physical examination and mental health services, and offer maternity leave and breastfeeding leave according to the law. In addition, on Women's Day, female employees may choose to take a half-day paid leave or receive cash bonus. On Mother's Day, the Company's female employees will receive exquisite gifts and sincere wishes.

Creating a healthy and happy life for people

Relying on our core strengths in life science and medical innovation, Haier Biomedical joins hands with global partners in healthcare and public welfare undertaking. To build a community of common health for mankind, we strive to fulfil our responsibilities as a corporate citizen, respond to stakeholders' needs, and continue to provide smart healthcare solutions.



Our principles of public welfare

Healthcare for all

Healthcare has always been a necessity to China's large population. Leveraging our advanced technology and industry experience, we provide intelligent and digital scenario solutions for the medical industry. Meanwhile, we work with other parties in promoting inclusive healthcare by taking social responsibilities and engaging in public welfare programmes.

Inclusive healthcare

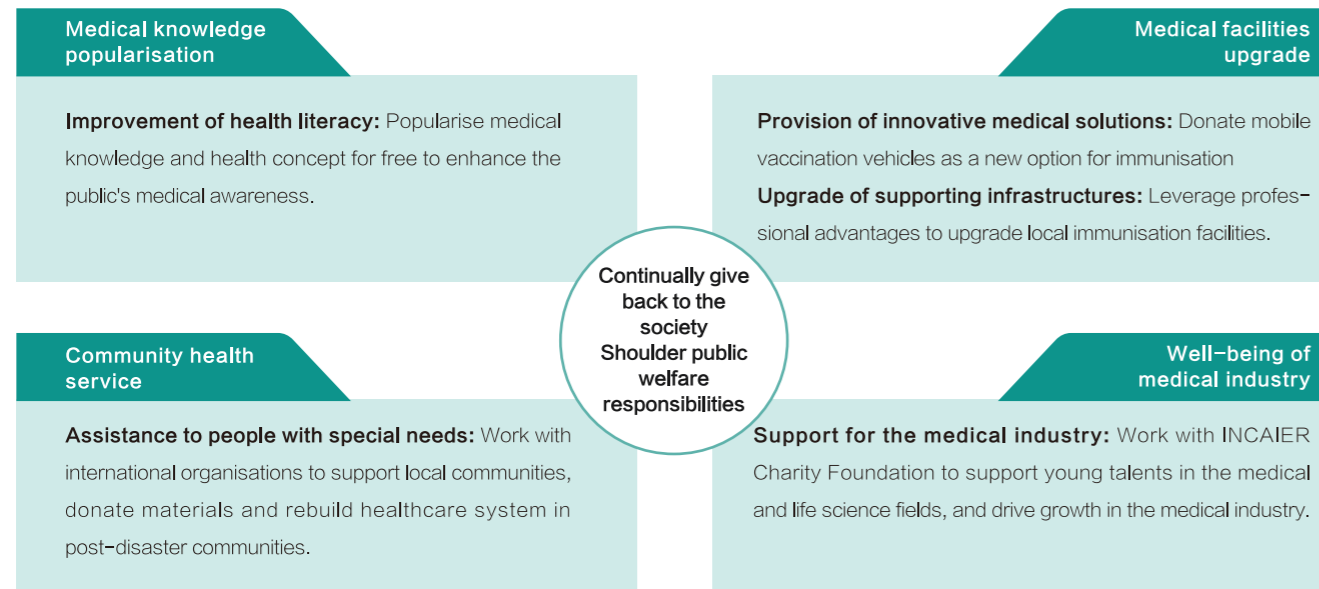
- Donated RMB **3,679** thousand of cash, materials and equipment
- Donated RMB **612.4** thousand of other medical products/services
- Offered services to over **10,000** hospitals, over **5,500** disease control and prevention units, over **3,400** biopharmaceutical companies, over **1,700** universities and scientific research institutions, over **1,100** testing agencies, and over **460** blood centres
- Provided storage services for **400** million rare biological samples
- Stored **200** million drugs and reagents and **100** thousand high-value consumables
- The intelligent blood safety management solution was adopted in over **1,300** grade-A tertiary hospitals in more than **20** provinces across China, with **300** tonnes of blood managed annually

Pandemic prevention and control

- The intelligent vaccination solution served over **23** million people from over **100** cities across **31** provinces, municipalities, and autonomous regions, covering over **4,000** intelligent vaccination clinics and over **20,000** digital vaccination clinics

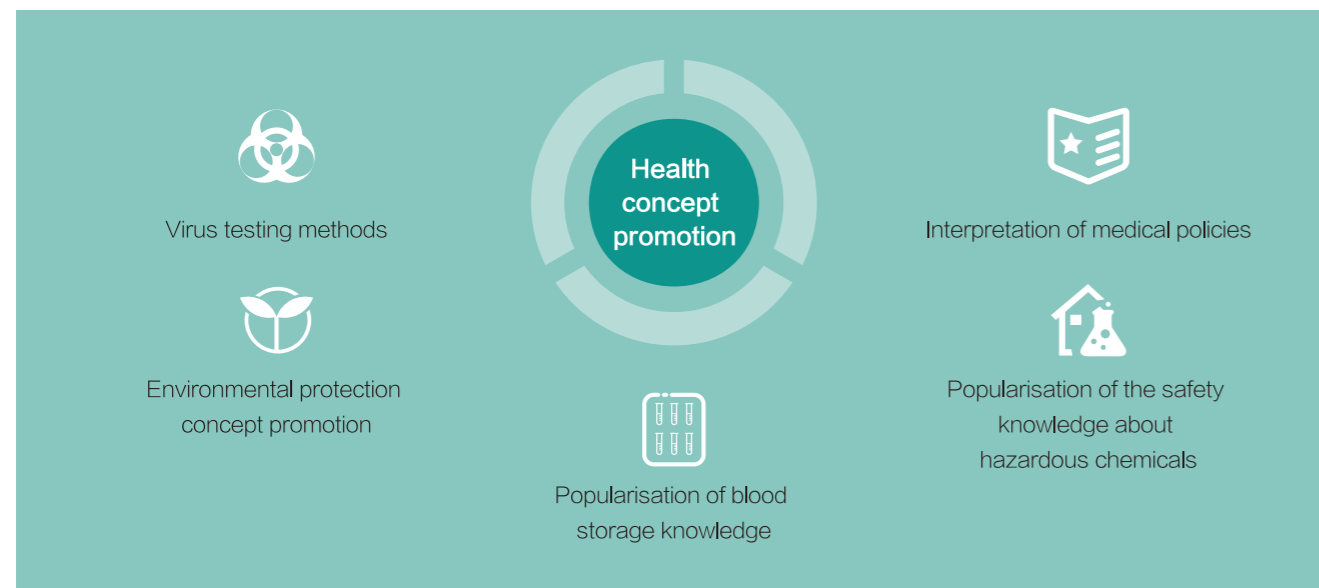
Note: The data above is as of 31 December 2022 and taken from the Haileimiao big data platform, excluding data of Cybermax's area without supporting IoT devices and a few devices in the government network.

Scope of public welfare:



Health concept promotion

Giving full play to our digital platform, Haier Biomedical aims to improve medical literacy by promoting health concept, providing useful professional information and passing on health knowledge to a wider group.



Medical facilities upgrade

Haier Biomedical offers a variety of innovative medical solutions, including hundreds of equipment such as nucleic acid sampling chamber, mobile vaccination vehicles and medical refrigerators, as well as medical services such as vaccine transportation, vaccination and nucleic acid sampling. In addition, we leverage our technological advantages in upgrading local immunisation facilities, to make healthcare more accessible in all regions, especially remote areas.

Case Haier Biomedical's mobile vaccination mode supported the building of medical and health security system in mountain areas of Qianxi'Nan Buyei and Miao Autonomous Prefecture

Vaccination in Qianxi' Nan Buyei and Miao Autonomous Prefecture, Guizhou is challenging due to its geographical location and other factors. On 5 March 2022, with Haier Biomedical's mobile vaccination mode as a key component, the medical and health security system in mountainous areas for Qianxi'Nan Buyei and Miao Autonomous Prefecture was officially launched. In order to meet the demand for vaccination and improve the quality of immunisation services, the mobile vaccination mode developed by Haier Biomedical will be incorporated into the primary healthcare service system of Qianxi'Nan Buyei and Miao Autonomous Prefecture as an important initiative for building digital healthcare infrastructure. This will greatly contribute to the "Healthy Guizhou" strategy.



Case Haier Biomedical helped Guangzhou launch the first mobile rapid testing mode



On 15 September, 2022, Haier Biomedical nucleic acid rapid test vehicles set off for Guangzhou, to help build the mobile rapid testing mode of "nucleic acid + antigen". In case of sudden COVID-19 outbreak, these vehicles may drive into lockdown zones and precautionary zones by flexible schedules to offer quick and efficient nucleic acid/antigen sampling and testing services with rapid results and full coverage. As a supplementary choice for fixed testing sites, rapid test vehicles effectively enhance the emergency response and detection service capacity of the frontline of public health protection network.

Assistance to people with special needs

Haier Biomedical takes an active part in community health services. Deeply caring about regions and groups with special needs, we actively support the post-disaster communities, make donations to rebuild healthcare system, and provide sufficient medical assistance.

Donation of equipment worth of RMB **1,457** thousand to the Red Cross Society of Qingxiu District, Nanning City, Guangxi Province for the regional upgrade of Maoqiao Community Health Service Centre of Qingxiu District

Donation of anti-pandemic supplies worth of RMB **162** thousand to the Red Cross Society of Laixi, Qingdao

Donation of product plan worth of RMB **552.4** thousand, and safety training and emergency drill plan worth of RMB **30** thousand to Qingdao University of Science and Technology

Donation of safety training and emergency drill plan worth of RMB **30** thousand to China University of Petroleum

Donation of RMB **10,000** to the care for the elderly in distress programme through Sichuan Red Cross Foundation

Case Haier Biomedical supported pandemic prevention and control in Laixi



On 14 March, 2022, Haier Biomedical promptly arranged resources upon Laixi's request for anti-pandemic supplies. The next day, nucleic acid sampling stations, transfer boxes and other materials donated by Haier Biomedical arrived at Laixi, and were immediately put into use at the Laixi People's Hospital on the same day. Haier Biomedical also provided remote technical guidance to relieve the workload of nucleic acid testing to improve the local mobility to support the pandemic prevention and control.



Well-being of medical industry

Haier Biomedical does its bit to promote public health and the well-being of medical industry by offering high-quality medical solutions and medical equipment. We value and support young talents in the medical and life science fields, and work with INCAIER Charity Foundation to drive growth in the medical industry.

Case Haier Biomedical worked with China Foundation for Youth Entrepreneurship and Employment to set up INCAIER Charity Foundation

In 2022, heading to the call of Healthy China, and aiming to promote the high-quality development of medical and life science industries and foster young innovative and entrepreneurial talents in the fields, Haier Biomedical worked with China Foundation for Youth Entrepreneurship and Employment to set up INCAIER Charity Foundation. This foundation intends to encourage young people in the fields of medicine, life science and public health to get employed or start their own business to innovate and strive for excellence. Moreover, it facilitates talents cultivation and access to medical services at the community level, promotes related public welfare activities, and carries out cooperation and exchanges with countries and regions along the Belt and Road.

A community of common health for mankind

With an international vision, Haier Biomedical carries out public welfare programmes around the globe to contribute to building a community of common health for mankind. Tapping the potential of the biomedical field, we bring smarter, safer and more reliable solutions to users worldwide to fuel the medical industry. Meanwhile, we make joint efforts with the United Nations, and other international organisations to inject China's strength to the global public healthcare sector.

Medical and health empowerment

Staying active in the international market, we present our achievements in the biomedical field to the world. We not only offer innovative technologies and scenario solutions, but also work with local parties and international NGOs, such as WHO and UNICEF, to promote medical knowledge and conduct training on medical services. In doing so, we help build the capacity of global healthcare services to improve local health literacy and medical service quality.



Case Haier Biomedical West Africa Technology Training and Experience Centre was established

In 2022, Haier Biomedical invested a cold chain equipment showroom with an area of 600 square metres and 6 vaccine safety technology training classrooms in Nigeria. Each training classroom is installed with display and teaching equipment, and may contain over 40 health workers. The training centre filled the shortage of local vaccination infrastructure, and trained more skilled local health workers. On top of that, operated by local staff, the training centre provides after-sales services, such as delivery, installation and maintenance, in accordance with the local operational standards, and has created over 100 jobs since the centre was established.



Case Haier Biomedical Supports Senegal with Pandemic Prevention and Control

Emerging infectious diseases are a major public health problem in developing countries. Through international transport and trade, these diseases also pose a threat to developed countries. Over the past five years, the resurgence of emerging and re-emerging diseases has been reported around the world, and three of them were declared by the WHO as public health emergencies of international concern.

To overcome these obstacles, the Pasteur Institute chose to cooperate with Haier Biomedical upon repeated comparisons with competitors across the globe, to achieve instant disease detection and control in power-starved areas of Senegal, thus quickly locating the source and cutting off the transmission, through the Solar-Powered Laboratory Solution and the advanced solar technology.

Haier Biomedical has successfully delivered the solar-powered mobile laboratory as expected. In terms of product design, Haier Biomedical's R&D team has pre-built and fitted the laboratory with all professional and advanced internal systems, from circuits to water pipes to ensure faster use. For optimized functional zoning, the solar-powered mobile laboratory sets up two core laboratories, a buffer room, and an equipment room. The product also comes with the IoT technology to monitor the whole process of sample collection and storage and the solar direct-drive vaccine refrigerator to provide a double guarantee for reagent and sample storage.

Haier Biomedical's products and services have transformed Senegal's pandemic prevention and control from "passive acceptance" to "active defence" and received high recognition and sincere gratitude from Institute Pasteur.

Global anti-pandemic assistance

With growing attention paid to pandemic prevention worldwide, safe storage of vaccines has become a common challenge to global immunisation and health. Haier Biomedical upgrades the cold chain system and contributes China's strength to the global public health by leveraging its high-quality medical solutions and medical equipment. At present, we have participated in COVAX (COVID-19 Vaccines Global Access), CCEOP (Cold Chain Equipment Optimisation Platform) and other international initiatives.

Case Haier Biomedical assisted Morocco in upgrading its cold chain system

Through the UNICEF international procurement programme, Haier Biomedical provided Morocco with the first batch of vaccine refrigerators, upgrading the Moroccan cold chain system. Apart from meeting the needs of the Moroccan health centres, Haier Biomedical's vaccine refrigerator is also combined with Remote Temperature Monitoring Device ("RTMD"). It can detect, record, and manage the temperature in real time, and guarantee vaccine safety to the greatest extent. In addition, Haier Biomedical's overseas after-sales team has conducted professional training for professionals in various health centres in Morocco to ensure that they can independently manage the vaccines during the use of the vaccine refrigerators.



Contributions to medical development

Haier Biomedical is committed to advancing medical development worldwide and solving health issues for mankind through its equipment and solutions. Our medical equipment is applied in top research universities, research institutes and laboratories, helping research teams and personnel build high-quality innovation platforms and provides reliable scientific research equipment to drive the global medical industry.

Case Haier Biomedical supported Italian university in cell storage

The University of Naples Federico II is the oldest public non-sectarian university in the world. It currently offers 157 courses in various fields, including pharmaceutical science, surgery, and biotechnology science. As one of the most famous universities in Italy, the University has made great contributions to the biomedical research field. In November 2022, Haier Biomedical's -150°C Cryogenic Freezer was installed and used in the biological laboratory of the University of Naples Federico II. The laboratory commented that "During the experiment, every cell is valuable, but some samples need to be stored for a long time, and they have higher requirements on the storage environment. The Haier Biomedical DW-150W209 Cryo Freezer can ensure the safety of our cells effectively." As a national brand, Haier Biomedical adheres to self-dependent innovation and focuses on providing customers with a better product experience. Additionally, relying on the leading advantages in ultra-low temperature refrigeration, Haier Biomedical safeguards the scientific research projects worldwide all the time.



Commitment to the Belt and Road Initiative

In response to the national call, Haier Biomedical assisted countries in industry upgrade and livelihood improvement on the journey pursuing high-quality development of the Belt and Road Initiative. Currently, our products and services have reached more than 130 countries and regions along the Belt and Road, contributing to the public health in countries of the initiative.

Case Haier Biomedical passes on kindness from China along the Belt and Road

Haier Biomedical actively contributes to the Belt and Road Initiative, vigorously supports the healthcare undertaking in countries and regions along the Belt and Road. In 2022, Haier Biomedical achieved cooperation of plasma separator with Nigeria for the first time to help this country safeguard blood safety. With professional technology and reliable product quality, Haier Biomedical has successfully brought blood solutions to the African market, taking primary healthcare conditions to the next level. In the future, Haier Biomedical will continue to fulfil social responsibilities, and contribute to the Belt and Road Initiative by delivering more innovative products and new scenarios to the world.



04 | Ecosystem

Building a green homeland

LIFE

- Supporting carbon reduction with policies
- Driving carbon actions by technology innovation
- Pursuing a green future through cooperation

Concept and Vision:

2022 is a critical year for the global sustainable development and the implementation of China's "carbon peaking and carbon neutrality" goals. As an enterprise focusing on science and technology innovation, Haier Biomedical responded to The Communist Party of China's 20th National Congress's call of planning development in the context of promoting harmonious co-existence between man and Nature. Additionally, leading green transformation in the industry, Haier Biomedical sticks to green and low carbon technology innovation and refines the life-cycle carbon reduction path. Leveraging technology strengths, we aim to build a beautiful China with lush mountains, lucid water and fresh air, and create a brighter future.

Carbon reduction of **865.69** tonnes from photovoltaic power generation

Energy consumption intensity of **45.72** kWh/RMB 10,000

Annual carbon reduction of **109,500** tonnes from solar powered vaccine refrigerators

GHG emission intensity of **23.74** kg CO₂e/RMB 10,000



Key environmental performance in 2022:

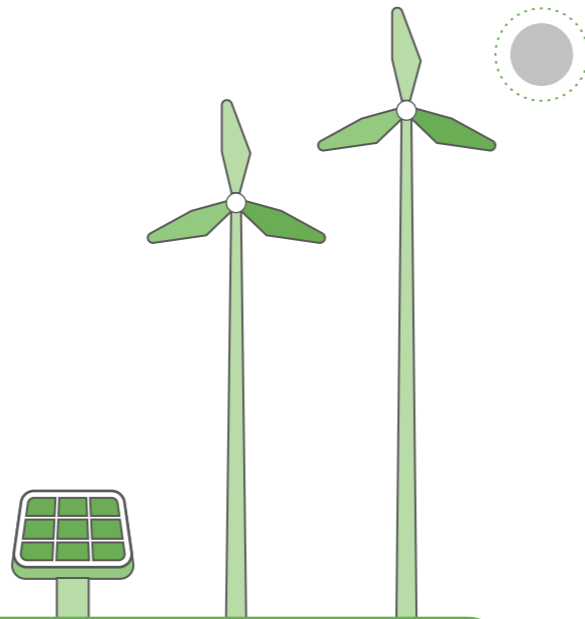
Awarded **National Green Factory**

Carbon reduction by approximately **152** tonnes over the previous year through energy-saving transformation projects

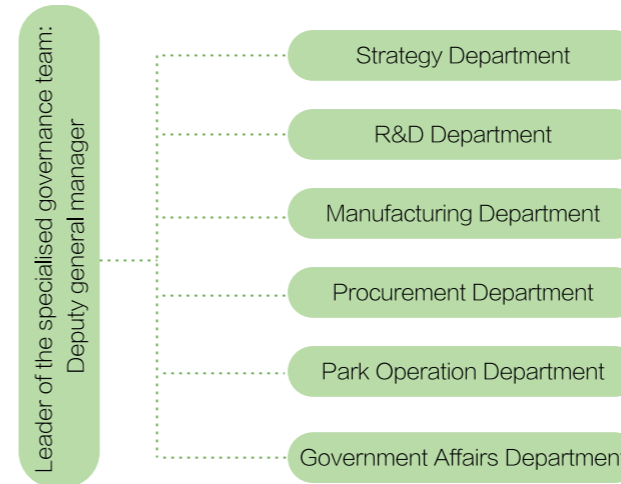
Energy consumption intensity of **45.72** kWh/RMB 10,000

GHG emission intensity of **23.74** kg CO₂e/RMB 10,000

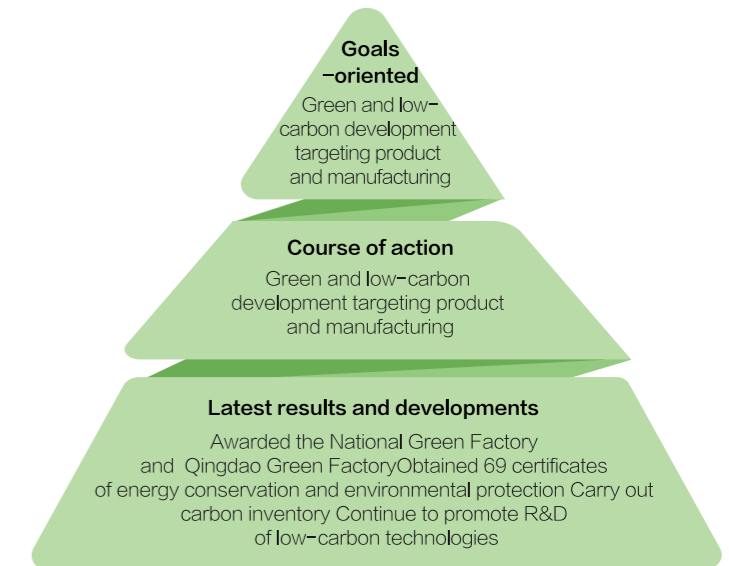
Annual carbon reduction of **2** tonnes per unit of low energy solar vaccine refrigerator **100%** compliance of waste disposal



"Carbon peaking and carbon neutrality" specialised governance team



Path of "carbon peaking and carbon neutrality"



Haier Biomedical "carbon peaking and carbon neutrality" roadmap

Carbon neutrality target

Achieving carbon peaking by 2030 and carbon neutrality before 2060 for Scope 1 & 2 GHG emissions

Course of action

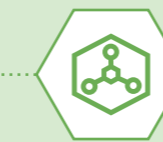


Stakeholder engagement

Sustainable operation

Green and low-carbon technology and product

Path of carbon reduction throughout product life cycle



Green building /construction

- Energy-efficient buildings
- Eco-friendly factory construction
- Construction waste management
- Use of green equipment
- Investment in photovoltaic electricity

Green design

- Energy-saving technology
- Eco-friendly technology
- Increase the environmental attributes of products
- Continuous R&D investment

Green procurement

- Green partnership
- Strict material procurement

Green manufacturing

- Regulated production rhythm
- Optimisation of production process
- Upgrade of metering system
- Adherence to circular economy

Green logistics

- Optimisation of driving routes
- Increase of full load rate
- Use of new energy vehicles
- Creation of eco-friendly fleet

Green office

- Enhancement of environmental awareness
- Conservation of energy/water/paper

Haier Biomedical

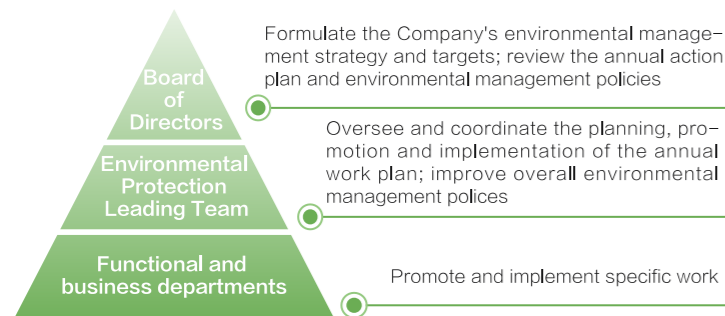
Supporting carbon reduction with policies

Haier Biomedical keeps abreast of climate change related impact and takes action to reduce carbon emissions. Under the sound environmental management system, Haier Biomedical has engaged the low-carbon team in data calculation, and thus customised a green factory strategy and green development plan towards the key task of energy saving and carbon reduction.

Environmental compliance management

Haier Biomedical embeds the concept of environmental protection in all aspects of its operations, and strictly complies with relevant laws and regulations and industry standards. It strives to practise the concept of energy saving and emission reduction and alleviate the impact on external environment by establishing an environmental management structure, refining the environmental management system, as well as setting and implementing environmental targets. In 2022, we passed the ISO14001 environmental management system certification. During the reporting period, Haier Biomedical was not aware of any legal sanctions due to ecological and environmental issues.

Establishing the environmental management structure



Refining environmental management policies



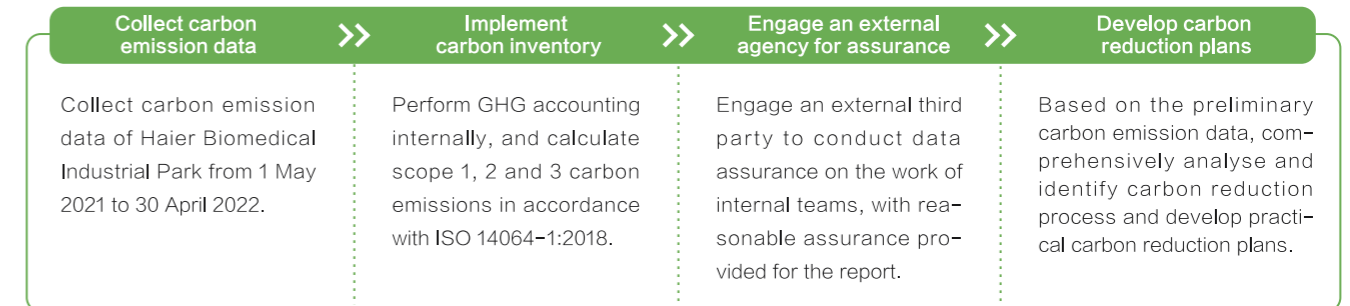
Implementing environmental targets

Type of environmental targets	Environmental target	Environmental metric
Compliant operation	100% compliance with laws and regulations and relevant requirements	Achieved
	0 potential chemical leakage incident	Achieved
	0 potential fire	Achieved
Energy and resource saving	Energy efficiency improvement	Energy consumption intensity of 45.72 kWh/RMB 10,000 after the life-cycle energy saving and carbon reduction action
Emissions reduction	100% compliance of waste disposal	Achieved
	100% compliance of exhaust emissions at factory boundary	Achieved
	100% compliance of noise emissions at factory boundary	Achieved

Environmental targets and metrics in 2022

Carbon emissions review

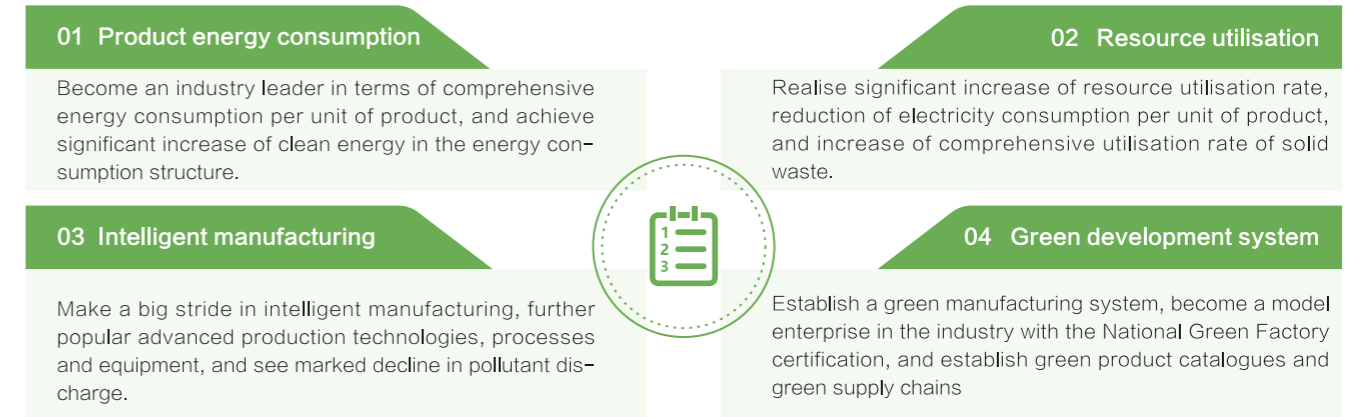
In 2022, led by the "carbon peaking and carbon neutrality" specialised governance team, Haier Biomedical made great efforts to achieve carbon peaking and carbon neutrality, and selected outstanding talents from R&D, manufacturing, marketing and procurement departments to promote energy saving and emission reduction. Also, the team performed carbon accounting for the whole process of "design - R&D - production - transportation" of different projects, to get a clear view of carbon footprint and make practical carbon reduction plans based on local conditions.



Green factory strategy

Regarding green development as the strategic direction, Haier Biomedical endeavours to build a new engine of green manufacturing and new advantages in international competition, and take green development to the next level. Following principles of intensive use of land, harmless raw materials, clean production, waste recycling, and low-carbon energy, the Company also aims to establish a whole-chain green development system, and build green factories with industry features, high efficiency, clean and low-carbon production.

Medium- and long-term planning of green factories



Green factory initiatives



Case Haier Biomedical was awarded the National Green Factory

In 2022, Haier Biomedical was recognised as the National Green Factory. Relying on the green and intelligent construction of the factory, the Company has deeply integrated green and intelligent features into our factories, and quickly established a safe, efficient, and resilient green and intelligent manufacturing system, and achieved refined management and green production of the whole process. In this way, we have made remarkable achievements in green and low-carbon development.

Case Haier Biomedical Life Science and Medical Innovation Industrial Park met one-star green building standard



The main body of Haier Biomedical Life Science and Medical Innovation Industrial Park had been completed by the end of 2022. The park will be put into operation in 2023 as the production base for products in the life science and medical innovation fields, R&D base for scenario solutions, laboratory base and cloud data centre. With a variety of green designs adopted during the construction, factories in the park have met one-star green building standard and passed ISO 14001 certification.

Driving carbon actions by technology innovation

With "green science and innovation" in its development, Haier Biomedical formulates a development strategy driven by green technology and innovation. Drawing on experience in sustainable development, Haier Biomedical continuously upgrades its equipment and innovative technology in a green and low-carbon way, forms a technology strategy that embraces green growth, and builds a green development model covering the whole life cycle of procurement, design, manufacturing, transportation and office. Further, Haier Biomedical leads the green transformation in the industry by making breakthroughs in low-carbon technologies.

Key performance in 2022

Overcome the technical difficulties of large cooling capacity Stirling and open the green "zero carbon" development stage of the industry

Breakthrough hydrocarbon refrigeration key technology, the first "energy saving core" series of ultra-low temperature refrigerator can improve cooling efficiency by **30%** and save up to **50%** of energy, with annual carbon reduction of **2** tonnes per unit

Solar vaccine refrigerator series products can reduce carbon **109,500** tonnes per year, equivalent to **4,500** acres of full-grown forest carbon neutral

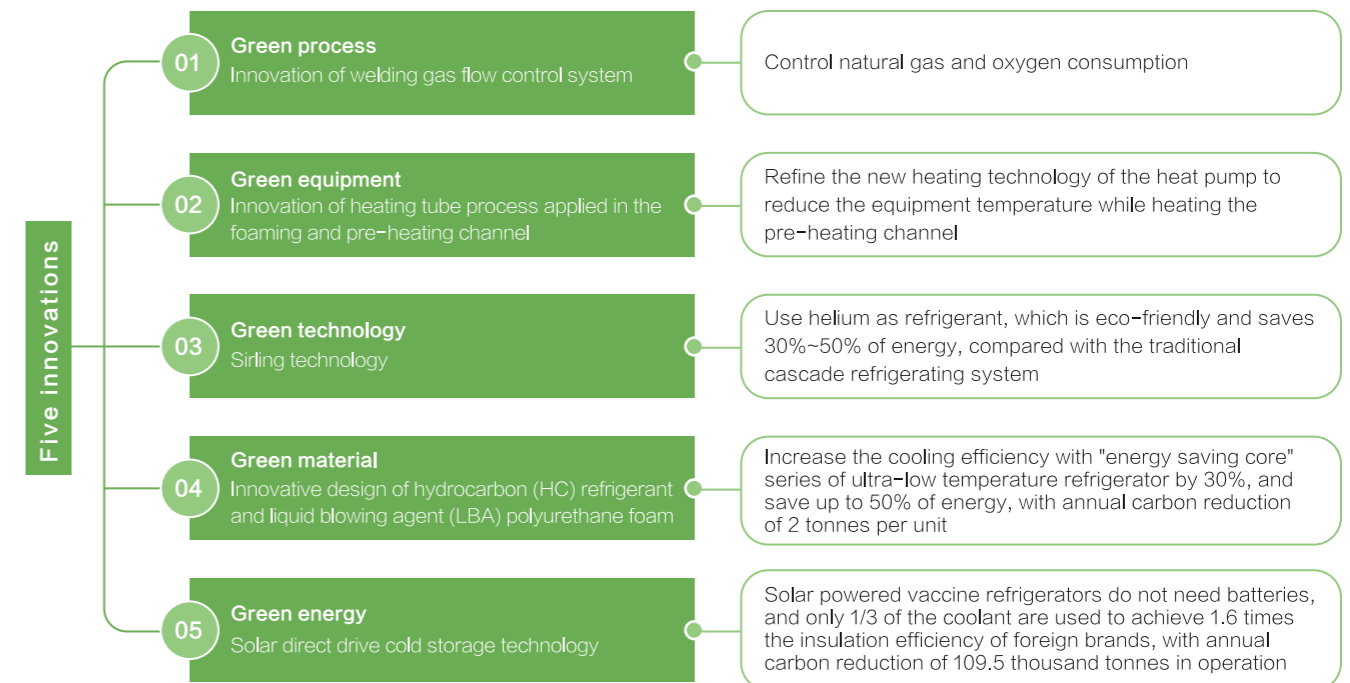
Owning the **First** energy-saving and environmental protection certificate for medical refrigerator within the industry

Owning **69** certificates of energy-saving and environmental protection certificates including **51** models.

Green design

In terms of product design, Haier Biomedical adopts energy-saving and low-carbon designs from the very beginning, and emphasises on process innovation and the use of low-carbon technologies. Upholding the green management concept throughout the product life cycle, and following the principles of minimising energy and resource consumption, reducing environmental impact and maximising recycling rate, Haier Biomedical adjusts the product structure, and actively develops green products with high added-value and low emission, to improve the market share of green products.

Innovation in green and low-carbon technology



Case Haier Biomedical's -150 °C Hydrocarbon IoT Cryogenic Freezer was launched

Spearheading the R&D in the cryogenic refrigeration field, Haier Biomedical focuses on the core technologies, including the design of refrigeration system, refrigerant ratio determination, low-temperature heat exchange and temperature stability. With these core technologies, the world's first -150°C Hydrocarbon IoT Cryogenic Freezer was developed, providing a solution for biological sample storage that is environmentally friendly and energy saving with superior stability and uniformity. In terms of environmental protection and energy saving, with the self-developed hydrocarbon refrigeration as its core, the freezer adopts hydrocarbon refrigerant with zero ozone depletion potential ("ODP") and global warming potential ("GWP") close to zero, so as to improve the refrigeration efficiency and reduce the carbon emission from the use of products.



Green manufacturing

Adhering to lean production and actively responding to the national policy of energy saving and emission reduction, Haier Biomedical efficiently allocates production resources, and reduces carbon emissions by upgrading production technologies and using renewable energy. At the same time, through the strict management of energy and control of waste, exhaust and GHG emissions, we endeavour to reduce the adverse impact on the environment, and firmly observe the ecological bottom line.

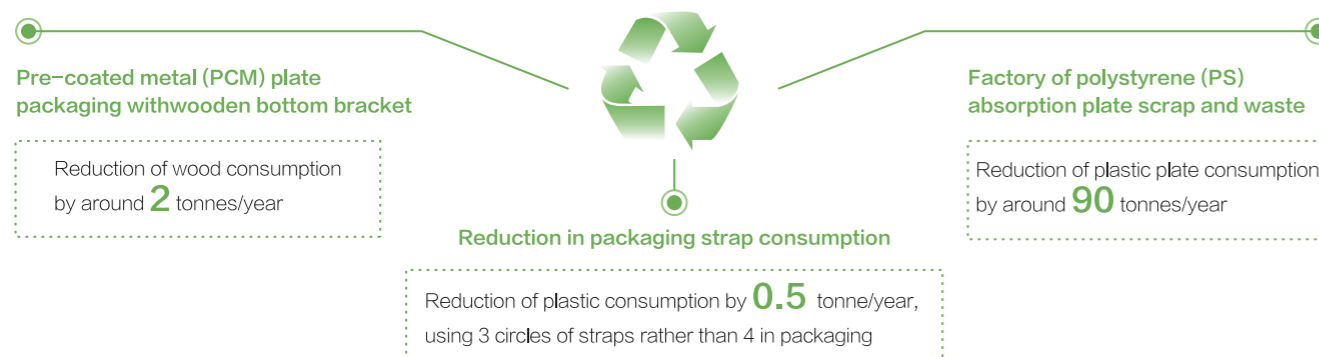
<p>Energy saving and carbon reduction measures</p> <p>Select energy-saving equipment with energy efficiency labels of grade 2 and above, when choosing transformers, air conditioners, air compressors, high-efficiency motors, new energy-saving lamps, etc.</p> <p>Recover waste heat for heating the circulating water tank and keeping workshops warm in winter.</p>	<p>Water-saving measures</p> <p>Strictly control the water supply for each process of production and upgrade technologies to reduce water consumption.</p> <p>Recycle and reuse water during production and make sure water is used for multiple purposes.</p>	<p>Use of new energy</p> <p>Make full use of roofs for distributed solar photovoltaic ("PV") power generation, and promote staggering power consumption according to peak-valley time-of-use mechanism.</p> <p>Increase the efficiency of PV power generation. In 2022, electricity generated by solar PV equipment of the Company was 1.489 million kWh.</p>	<p>Exhaust treatment measures</p> <p>Use cloth bag filter and high-efficiency fume scrubbers to deal with welding dust in workshop and lampblack in canteen.</p> <p>Adopt UV photo-oxygen plasma purifier + activated carbon adsorption technology, efficiently purifying 95% volatile organic compounds.</p>
---	---	--	--

Green recycling

The Company closely follows the national circular economy policies, to build a resource-saving and environment-friendly society as defined in the Scientific Outlook on Development. Therefore, we attach great importance to resource recycling, and improve its efficiency by waste recycling management and other recycling measures, in a bid to promote sustainable development.

Haier Biomedical strictly abides by waste-related laws and regulations, and develops a series of internal management policies as well as waste treatment and disposal measures, to ensure that its emissions meet the local environmental requirements.

Domestic sewage is the primary source of the Company's wastewater, which will be discharged to the municipal pipe network for treatment, while certain water is recycled by rainwater collection and other ways. The exhaust from the production process is discharged up to standards through various filter devices. Moreover, hazardous wastes from production are collected by qualified third parties for treatment or disposal, with a series of measures taken to reduce hazardous wastes. Haier Biomedical mainly generates five types of wastes during production, i.e., scrap iron, wastepaper, wood waste, waste box and unsortable industrial materials. We refine treatment for different wastes to increase recycling and reusing rate. For solid waste, Haier Biomedical achieves efficient use of resources through sorting, recycling and other means.



Green office

With emphasis on employees' awareness of responsibility and environmental protection, Haier Biomedical creates a culture that promotes energy saving and environmental protection and encourages our employees to lead a green and low-carbon lifestyle consciously. In conducting refined management, Haier Biomedical strengthens management over details, such as electricity, water and office supplies. Additionally, we advocate paperless office, electronic contracts, online communication and online meetings, and encourage using supplies for multiple purposes. In doing so, we intend to improve working efficiency and support energy saving and carbon reduction with the green and low-carbon office mode.

<p>Saving paper</p> <ul style="list-style-type: none"> Double-sided printing to save paper, and using blank space for note-taking Paperless office; Paperless communication 	<p>Saving energy</p> <ul style="list-style-type: none"> Using air conditioning scientifically, and turning off the air conditioner when leaving the office; Switching off any unnecessary lights and making the most of natural light; Upgrading the lighting system, and promoting energy-saving lights
<p>Saving water</p> <ul style="list-style-type: none"> Making full use of reclaimed water; Turning off taps promptly 	<p>Other green habits</p> <ul style="list-style-type: none"> Ordering meals on demand, and eating up what ordered Choosing eco-friendly modes of transport

Pursuing a green future through cooperation

Green procurement

In strict accordance with laws and regulations, Haier Biomedical carefully reviews qualifications of suppliers, and further improves the procurement process and mechanism. Specifically, for the manufacturing of products and components, Haier Biomedical gives priority to renewable and recyclable materials in procurement and increases their portion to mitigate adverse impact on the environment.

- Work with high-quality and honest suppliers**
Audit suppliers' qualifications such as product capability, performance, and financial position
- Clarify social responsibilities such as green procurement**
Require suppliers to sign the Letter of Commitment to Safety Responsibility and the Letter of Commitment to Environmental Protection
- Audit the toxicity and harmful effects of materials**
Strictly check the Restriction of Hazardous Substances (ROHS)/the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) testing reports for different materials

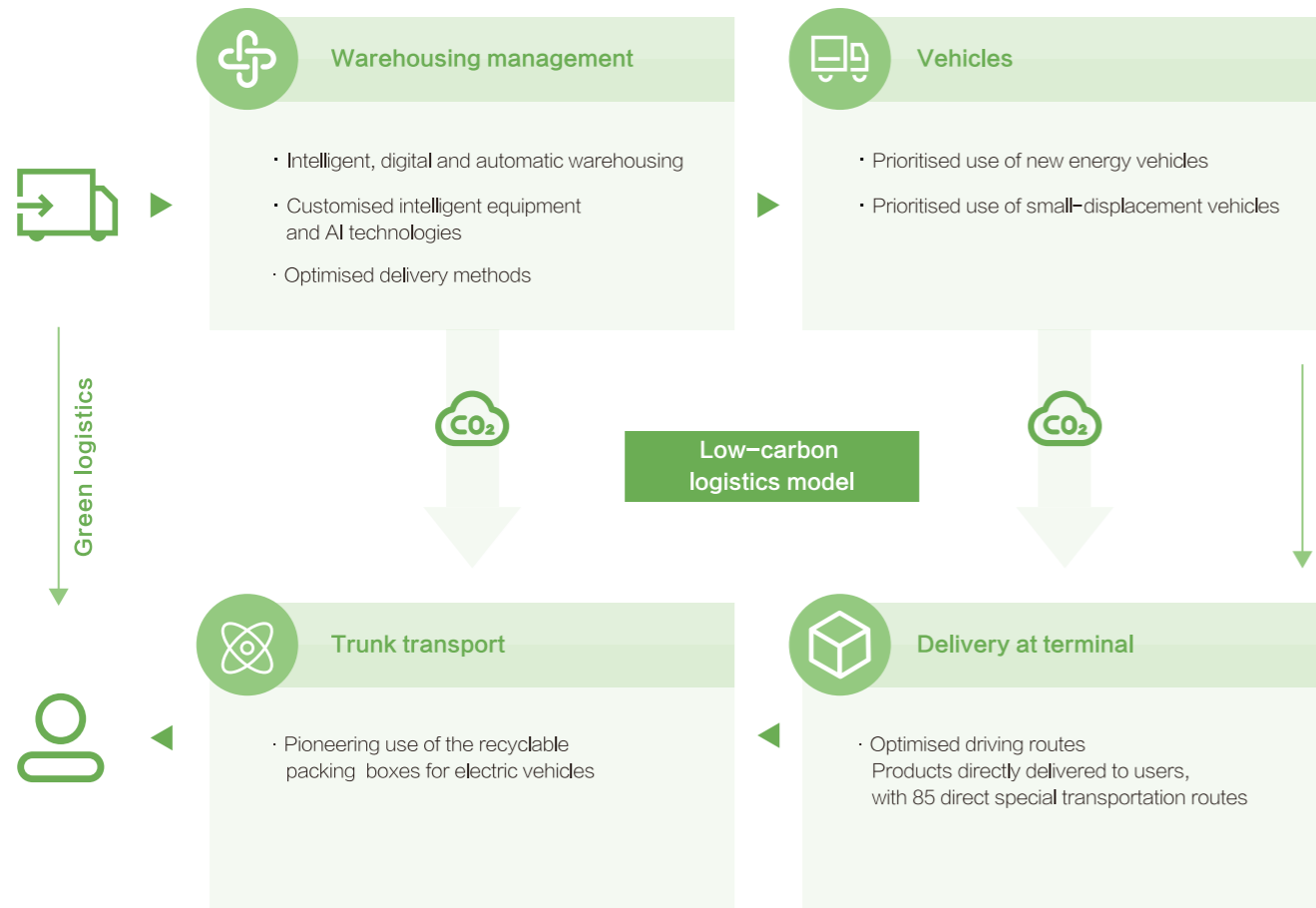
Case Haier Biomedical cooperated with Tianneng Group to explore green scenarios of medical equipment

On 8 February 2023, Haier Biomedical entered into a strategic cooperation with Tianneng Holding Group Co., Ltd. to create green scenarios for medical equipment. Both parties will exploit their strengths to carry out in-depth cooperation in the development and production of solar energy storage systems and solar cells, driving the green transformation of the medical equipment industry. This cooperation is an important step for Haier Biomedical to turn to green technology and solutions, which will further make green and high-quality healthcare services accessible worldwide.



Green logistics

Determined to minimise carbon emissions from production and transportation, the Company, together with logistics companies, explores low-carbon transportation and logistics modes for the whole process of transportation from warehouse to end-customers.



Outlook 2023

Looking back at 2022, with a focus on scenario ecology strategy, Haier Biomedical went deeper into digital scenario solutions for life science and medical innovation through continuous technology upgrade, and maintained growth despite repeated waves of COVID-19 and a complex and severe environment. In 2022, we built a "LIFE" social responsibility system to guide our CSR practice, and improve our management in areas of Leadership, Integrity, Future and Ecosystem to stay ahead in the industry.

In the future, Haier Biomedical will step up efforts in CSR practice, refine the "LIFE" social responsibility system and make innovative breakthroughs, enabling the system to play a better role in helping the Company thrive.

Leadership: In 2023, Haier Biomedical will strive to be an industry leader that provides scenario solutions by digging deeper into life science and medical innovation, strengthening R&D and innovation and strictly controlling product quality. In addition, we will take an active part in making industry standards and align efforts with industry peers to ensure health of mankind.

Integrity: In the next year, we will stick to the whole-process quality management to conduct honest operation following the highest standards of business ethics and corporate governance, and build trust in society with our good image, stringent corporate governance and high reputation among customers. Meanwhile, we will continue to work with suppliers and partners that share our mission, to deliver the best customer experience and bring benefits to all.

Future: By improving the maker training system, we aim to build a happy and diverse workplace for makers to unleash their vitality and potential, and enable co-creation and knowledge sharing between the Company and makers. Also, we will create value for all stakeholders and respond to their needs, moving towards a sustainable future together.

Ecosystem: Considering that climate change will be an increasingly urgent issue, Haier Biomedical actively responds to the national call for carbon reduction. To that end, we will improve policies and develop innovative technologies, carry out product life cycle management, to address climate change and build green ecology for sustainable development of enterprises and the society.



Appendix

Appendix 1: Key Performance Indicators

Economic performance

Indicators	Unit	2022
Operating income	One hundred million RMB	28.64
Total assets	One hundred million RMB	54.89
Global total tax payment	One hundred million RMB	2.1

Environmental performance

Indicators	Unit	2022
environmental protection input¹		
Investment in environmental protection	Ten thousand RMB	105.02
Energy^{2, 3}		
Total energy consumption	MWh	13,095
Direct energy	MWh	352
Indirect energy	MWh	11,254
Purchased electricity	MWh	9,965
Purchased heat	MWh	1,289
Renewable energy consumption	MWh	1,489
Total energy use in facilities that produce products for UNICEF	MWh	535
The proportion of renewable energy consumed	%	13
Energy intensity	kWh/ten thousand RMB	45.72

Notes:

¹ The investment in environmental protection this year includes hazardous waste storage construction, hazardous waste treatment, environment-related system audit and environmental impact assessment.

² The data includes the office building of Qingdao Haier Biomedical Co., Ltd. and factories that have been put into operation.

³ Energy consumption is calculated according to the conversion factor in the General Principles for Calculation of the Comprehensive Energy Consumption (GB/T 2589-2020) of the People's Republic of China.

Indicators	Unit	2022
Water⁴		
Total water consumption	m ³	46,000
Water intensity	m ³ /ten thousand RMB	0.16
Greenhouse gas⁵		
Total GHG emission	Ton CO ₂ e	6,798.62
Direct GHG emissions (stationary combustion)	Ton CO ₂ e	63.625
Indirect GHG emissions (input energy)	Ton CO ₂ e	6,734.995
GHG intensity	Kg CO ₂ e/ ten thousand RMB	23.74
Waste		
General waste ⁶	Ton	767.06
Hazardous waste ⁷	Ton	7.34

Notes:

⁴ The water mainly comes from municipal tap water, and there are no problems in obtaining suitable water source.

⁵ Based on the nature of Haier Biomedical business, our major gas emissions are greenhouse gas emissions. The major types of greenhouse gases included carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), HFCs, etc. are from stationary combustion and input energy sources, etc. The sources of emission factors we use are from: Guidelines on Accounting Methods and Reporting of Greenhouse Gas Emissions by Enterprises Power Generation Facilities (Revised 2022 Edition), issued by the Ministry of Ecology and Environment, PRC, The United Nations Intergovernmental Panel on Climate Change (IPCC) 2019 Refinement to the IPCC 2006 Guidelines for National Greenhouse Gas Inventories, China Energy Statistical Yearbook 2021 and other authoritative references.

⁶ General wastes mainly come from waste electrical appliances, waste metal components and waste foam generated during production and dismantling and other stages.

⁷ Hazardous wastes mainly include waste drums contaminated with waste sealant, waste liquid pressure oil, waste isopropyl alcohol and waste paint, waste liquid pressure oil and waste activated carbon, etc., all of which are recycled and processed by qualified third parties.

Social performance

Indicators	Unit	2022
Product and service		
Domestic customer satisfaction	%	99.83
The percentage of domestic customers covered by customer satisfaction	%	93.23
Customer complaint resolved rate	%	100
Number of products recall	/	0
Number of suppliers		
China	/	437
Other countries and regions	/	6
Occupational health and safety		
The proportion of trainees	%	100
Number of work-related fatalities	/	0
Number of working days lost due to work-related injury	%	0
Lost time injury frequency rate LTIFR ¹	%	0
Safety serious violation rate	%	0
The completion rate of risk rectification	%	100
Emergency response rate	%	100
Employment		
Number of employees	/	2,690
Male	/	1,944
Female	/	746
By region		
China	/	2,661
Other countries and regions	/	29
By age group		
Number of employees under 30	/	1074
Number of employees between 30-50	/	1513
Number of employees above 50	/	103

Notes:

¹Lost time injury frequency rate LTIFR= Number of work-related injuries X 1000000/total working hours X 100%.

Indicators	Unit	2022
Employment		
By function		
Technical staff	/	897
Sales staff	/	569
Financial staff	/	31
Administration staff	/	234
Production staff	/	959
Total number of new hires ²	/	778
Male	/	687
Female	/	91
Training		
Average training hours	Hour/person	33.24
Training coverage	%	100
Training coverage by gender		
Male	%	100
Female	%	100
Average training hours by gender		
Male	Hour/person	33.54
Female	Hour/person	32.49
Anti-corruption training coverage	%	100
Fair competition training coverage	%	100
Public welfare		
Charitable donations	Ten thousand RMB	367.90

Notes:

²The data include Qingdao Haier Biomedical Co., LTD., but do not include merger and acquisition companies.

Appendix 2. GRI content index with reference

Statement of use	Qingdao Haier Biomedical has reported the information cited in this GRI content index for the period January 1, 2022 to December 31, 2022 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021

GRI Standards	Disclosure	Location and additional information (including Ten Principles from UNGC)
---------------	------------	--

GRI 2: General Disclosures 2021

GRI Standards	Disclosure	Location and additional information (including Ten Principles from UNGC)	
1. The organization and its reporting practices	2-1	Organizational details	P5
	2-2	Entities included in the organization's sustainability reporting	P1
	2-3	Reporting period, frequency and contact point	P1-2
	2-4	Restatements of information	There are no restatements of information during the report period.
2. Activities and workers	2-6	Activities, value chain and other business relationships	P5
	2-7	Employees	P57-59
	2-8	Workers who are not employees	There are no workers who are not employees.
3. Governance	2-9	Governance structure and composition	P39
	2-10	Nomination and selection of the highest governance body	See the 2022 annual report.
	2-11	Chair of the highest governance body	Tan Lixia
	2-12	Role of the highest governance body in overseeing the management of impacts	P40
	2-13	Delegation of responsibility for managing impacts	P5
	2-14	Role of the highest governance body in sustainability reporting	P6
	2-15	Conflicts of interest	See the 2022 annual report.
	2-16	Communication of critical concerns	P7
	2-17	Collective knowledge of the highest governance body	P6
	2-19	Remuneration policies	See the 2022 annual report.
	2-20	Process to determine remuneration	See the 2022 annual report.
2-21	Annual total compensation ratio	Confidentiality Restriction: Such disclosure is commercial and competitive sensitive information and personal privacy information of employees, and therefore will not be disclosed.	

GRI Standards	Disclosure	Location and additional information (including Ten Principles from UNGC)	
4. Strategy, policies and practices	2-22	Statement on sustainable development strategy	P3-4
	2-27	Compliance with laws and regulations	There were no major violations of laws and regulations in 2022.
	2-28	Membership associations	P3
5. Stakeholder engagement	2-29	Approach to stakeholder engagement	P7
	2-30	Collective bargaining agreements	All local employees are members of trade unions.

GRI Standards	Disclosure	Location and additional information (including Ten Principles from UNGC)
---------------	------------	--

GRI 3: Material Topics 2021

3-1	Process to determine material topics	P6-9
3-2	List of material topics	P8
3-3	Management of material topics	Please refer to the following table.

Disclosure	Location and additional information (including Ten Principles from UNGC)
------------	--

GRI 201: Economic Performance 2016	GRI 3: Topic management disclosures	How it manages economic performance	See the 2022 Annual Report.
	Topic disclosures	201-1 Direct economic value generated and distributed	Please refer to the 2022 Annual Report for financial information related to operations. Other information is subject to confidentiality requirements and will not be reported.
GRI 202: Market Presence 2016	GRI 3: Topic management disclosures	How it manages market presence	P46, P51 <Principle 6>
GRI 204: Procurement Practices 2016	GRI 3: Topic management disclosures	How it manages procurement practices	P48
GRI 205: Anti-corruption 2016	GRI 3: Topic management disclosures	How it manages anti-corruption	P44 <Principle 10>
	Topic disclosures	205-2 Communication and training about anti-corruption policies and procedures	P45
		205-3 Confirmed incidents of corruption and actions taken	No related reports were received during the reporting period.

Disclosure		Location and additional information (including Ten Principles from UNGC)	
GRI 206: Anti-competitive Behaviour 2016	GRI 3: Topic management disclosures	How it manages anti-competitive behaviour	P44
	Topic disclosures	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	No relevant actions involved during the reporting period.
GRI 302: Energy 2016	GRI 3: Topic management disclosures	How it manages energy	P81 <Principle 7, 8, 9>
	Topic disclosures	302-1 Energy consumption within the organization	P89
		302-3 Energy intensity	P79
		302-4 Reduction of energy consumption	P10, P83-86
		302-5 Reductions in energy requirements of products and services	P83-86
GRI 303: Water and Effluents 2018	GRI 3: Topic management disclosures	303-1 Interactions with water as a shared resource	P85 <Principle 7, 8, 9>
	Topic disclosures	303-2 Management of water discharge-related impacts	P85
		303-4 Water discharge	P85
		303-5 Water consumption	P90
GRI 304: Biodiversity 2016	GRI 3: Topic management disclosures	How it manages biodiversity	P32 <Principle 7, 8, 9>
	Topic disclosures	04-2 Significant impacts of activities, products and services on biodiversity	P33
GRI 305: Emissions 2016	GRI 3: Topic management disclosures	How it manages emissions	P82 <Principle 7, 8, 9>
	Topic disclosures	305-1 Direct (Scope 1) GHG emissions	P90
		305-2 Energy indirect (Scope 2) GHG emissions	P90
		305-4 GHG emissions intensity	P79
		305-5 Reduction of GHG emissions	P79

Disclosure		Location and additional information (including Ten Principles from UNGC)	
GRI 306: Waste 2020	GRI 3: Topic management disclosures	306-1 Waste generation and significant waste-related impacts	P81 <Principle 7, 8, 9>
	Topic disclosures	306-2 Management of significant waste-related impacts	P85
		306-3 Waste generated	P90
GRI 307: Environmental Compliance 2016	GRI 3: Topic management disclosures	How it manages environmental compliance	P81 <Principle 7, 8, 9>
	Topic disclosures	307-1 Violation of environmental laws and regulations	P81
GRI 308: Supplier Environmental Assessment 2016	GRI 3: Topic management disclosures	How it manages supplier environmental assessment	P48 <Principle 1, 2, 3, 4, 5, 6, 7, 8, 9, 10>
	Topic disclosures	308-2 Negative environmental impacts in the supply chain and actions taken	Substandard suppliers are required to conduct rectification and would be eliminated if the rectifications proved to be below our standards.
GRI 401: Employment 2016	GRI 3: Topic management disclosures	How it manages employment	P57-58 <Principle 3, 4, 5, 6>
	Topic disclosures	401-1 New employee hires and employee turnover	P92
		401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P64
GRI 403: Occupational Health and Safety 2018	GRI 3: Topic management disclosures	403-1 Occupational health and safety management system	P67-68
		403-2 Hazard identification, risk assessment, and incident investigation	P69
		403-3 Occupational health services	P69
		403-5 Worker training on occupational health and safety	P67-69
	Topic disclosures	403-6 Promotion of worker health	P69
		403-8 Workers covered by an occupational health and safety management system	The occupational health and safety management system applies to all employees.
		403-9 Work-related injuries	P91

Disclosure		Location and additional information (including Ten Principles from UNGC)	
GRI 404: Training and Education 2016	GRI 3: Topic management disclosures	How it manages training and education	P60 <Principle 6>
	Topic disclosures	404-1 Average hours of training per year per employee	P92
		404-2 Programs for upgrading employee skills and transition assistance programs	P61, P63
		404-3 Percentage of employees receiving regular performance and career development reviews	Performance and career development checks cover all employees.
GRI 405: Diversity and Equal Opportunity 2016	GRI 3: Topic management disclosures	How it manages diversity and equal opportunity	P57 <Principle 3, 4, 5, 6>
		405-1 Diversity of governance bodies and employees	P39-40, P58
GRI 406: Non-discrimination 2016	GRI 3: Topic management disclosures	How it manages non-discrimination	P58 <Principle 6>
	Topic disclosures	406-1 Incidents of discrimination and corrective actions taken	No incidents of discrimination against employees in 2022.
GRI 408: Child Labour 2016	GRI 3: Topic management disclosures	How it manages child labour	P58 <Principle 5, 6>
	Topic disclosures	408-1 Operations and suppliers at significant risk for incidents of child labour	No incidents of child labour in 2022.
GRI 409: Forced or Compulsory Labour 2016	GRI 3: Topic management disclosures	How it manages forced or compulsory labour	P58 <Principle 4>
	Topic disclosures	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	No incidents of forced or compulsory labour in 2022.
GRI 412: Human Right Assessment 2016	GRI 3: Topic management disclosures	How it manages human right assessment	P45 <Principle 1, 2>
GRI 414: Supplier Social Assessment 2016	GRI 3: Topic management disclosures	How it manages supplier social assessment	P48 <Principle 1, 2, 3, 4, 5, 6, 7, 8, 9, 10>
		414-2 Negative social impacts in the supply chain and actions taken	No negative event of supply chain to society in 2022.
GRI 418: Customer Privacy 2016	GRI 3: Topic management disclosures	How it manages customer privacy	P43
	Topic disclosures	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	No major complaints concerning breaches of customer privacy and losses of customer data received in 2022.
GRI 419: Socioeconomic Compliance 2016	GRI 3: Topic management disclosures	How it manages socioeconomic compliance	P42
	Topic disclosures	419-1 Violating laws and regulations in the social and economic fields	In 2022, there were no major cases of fines or penalties for violations of relevant laws and regulations.

Reader feedback

Dear readers:

Thank you for reading "Haier Biomedical 2022 Corporate Social Responsibility Report". In order to provide you and other stakeholders with more professional and valuable corporate social responsibility information, please help us to complete the relevant questions in the feedback form, so as to help us further improve social responsibility and sustainable development management in the future.

Please rate the following questions on a scale of 1 to 5 (1 is the lowest, 5 is the highest).

1. Your general comments on this report

1 2 3 4 5

Name: _____

2. Do you think this report reflects the significant impact of Haier Biomedical on the economy?

1 2 3 4 5

Telephone: _____

3. Do you think this report reflects the significant impact of Haier Biomedical on the environment?

1 2 3 4 5

Email address: _____

4. Do you think this report reflects the significant impact of Haier Biomedical on society?

1 2 3 4 5

Company: _____

5. Do you think this report can reflect the corporate governance of Haier Biomedical?

1 2 3 4 5

Position: _____

6. Your overall evaluation of the degree of information disclosure in this report:

1 2 3 4 5

Fax number: _____

7. Your overall evaluation of the literal expression in this report:

1 2 3 4 5

8. Your overall evaluation of the design style in this report:

1 2 3 4 5

You can call, email or send feedback to us, our contact information as follows:

9. What issues in this report concern you most?

1 2 3 4 5

Address: 280 Fengyuan Road, High-tech Zone, Qingdao, Shandong

10. Do you have any other comments or suggestions on this report?

1 2 3 4 5

Postcode: 266000

Email address: haierbiomedical@haierbiomedical.com

海尔 生物医疗
Haier Biomedical

Shares code: 688139

QINGDAO HAIER BIOMEDICAL CO., LTD.

Address: 280 Fengyuan Road, High-tech Zone, Qingdao, Shandong

Telephone: : 0532-88935566



扫描二维码关注海尔生物医疗
官方网站, 让生命更美好



扫描二维码关注海尔生物医疗
微信公众号, 让生命更美好