

2023

Environmental, Social and Governance (ESG) Report

Shenzhen Envicool Technology Co., Ltd.



Contents

| | |
|---|-----------|
| About This Report | 01 |
| Envicool in 2023 | 03 |
| About Us | 03 |
| Statistics of 2023 | 08 |
| ESG Strategy and Management | 10 |
| ESG Model | 10 |
| ESG Management Structure | 11 |
| Stakeholders Communication and Engagement | 12 |

Spotlight

More Than Cooling for New Development

| | |
|--------------------------|----|
| High-quality Innovations | 14 |
| Digital Wave | 21 |
| New Energy Revolution | 24 |
| A Better New Life | 27 |

Environmental

To Be a Practitioner of Green Development

| | |
|---------------------------------|----|
| Environmental Management System | 31 |
| Green Operation System | 31 |

Social

To Be a Conveyor of Public Welfare Value

| | |
|--------------------------|----|
| Customer Satisfaction | 34 |
| First-rate Team | 39 |
| Responsible Procurement | 44 |
| Public Welfare & Charity | 46 |

Governance

To Be a Trustworthy Issuer

| | |
|-----------------------|----|
| Corporate Governance | 48 |
| Responsible Operation | 51 |

| | |
|-------------------------------|----|
| Appendix | 60 |
| ESG Key Performance Indicator | 60 |
| GRI Standards Index | 64 |

About This Report

This report is the annual Environmental, Social and Governance Report released by Shenzhen Envicool Technology Co., Ltd. Adhering to materiality, quantifiability, balance, and consistency, it discloses the philosophy, significant progress, achievements, and future plans of Shenzhen Envicool and its affiliates in relation to environmental, social and governance (ESG) priorities. The information presented in this report covers our activities from January 1, 2023, to December 31, 2023, unless otherwise noted.

Basis of Preparation

In the process of preparing this report, we identified important stakeholders, analyzed and ranked important topics related to the environment, society, and governance, set the boundaries of the report, and collected, summarized, organized, and reviewed the material information and financial reports of the company's actual operations, which ultimately led to the formation of this report.

This report was compiled in accordance with the following standards and requirements:

- » "Self-Regulatory Guidelines No. 1 for Companies Listed on Shenzhen Stock Exchange—Standardized Operation of Companies Listed on the Main Board"
- » "Guidelines No. 2 for Handling Business Affairs Related to Listed Companies on Shenzhen Stock Exchange—Matters Related to the Disclosure of Regular Reports" with Annex 1 "Requirements for the Disclosure of Listed Companies' social Responsibility Reports"
- » "Self-Regulatory Guidelines No.17 for Companies Listed on Shenzhen Stock Exchange - Sustainable Development Report (for Trial Implementation) (Exposure Draft)"
- » "Global Sustainability Standards Board (GSSB) - GRI Reporting Standards"
- » "United Nations Sustainable Development Goals (SDGs) and the Ten Principles of the Global Compact"
- » "International Organization for Standardization (ISO) - ISO 26000:2010, Guidance on social responsibility"

Scope and Boundary of the Report

Unless otherwise specified, the policies, statements, and data in this report cover the actual scope of business of Envicool and its subsidiaries, consistent with the Company's annual report.

List of companies within the scope of the report

| | |
|--|---|
| Shenzhen Envicool Technology Co., Ltd. | Suzhou Envicool Environmental Control Technology Co., Ltd. |
| Beijing Feifan Hongsheng Technology Development Co., Ltd. | Shenzhen Cooltek Electric Vehicle Cooling Technology Co., Ltd. |
| Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd. | Henan Cooltek Transport Refrigeration Equipment Co., Ltd. |
| Changchun Cooltek Huineng Transport Refrigeration Technology Co., Ltd. | Shenzhen Envicool Information Technology Co., Ltd. |
| Shenzhen Envicool Software Technology Co., Ltd. | Beijing Envicool New Energy Technology Research Institute Co., Ltd. |
| Shenzhen Envicool Precision Technology Co., Ltd. | Shenzhen Envicool Health Environment Technology Co., Ltd. |
| Hebei Envicool Technology Co., Ltd. | Guangdong Envicool Technology Co., Ltd. |
| Shenzhen Envicool Smart Connection Technology Co., Ltd. | Henan Envicool Technology Co., Ltd. |
| Shenzhen Envicool Aviation Temperature Control Co., Ltd. | Envicool Technology (Hong Kong) Limited |
| Envicool MALAYSIA SDN. BHD | Envicool Singapore Pte. Ltd |

Unless otherwise stated, the currency mentioned in this report is denominated in RMB.

Title Clarification

For ease of presentation and reading, abbreviations are used for the subjects of information disclosed in this report, and their correspondence to the companies or subsidiaries they refer to is as follows:

| Name of company or Affiliates | Abbreviation in the Report |
|--|-----------------------------|
| Shenzhen Envicool Technology Co., Ltd. | Envicool ¹ |
| Suzhou Envicool Environmental Control Technology Co., Ltd. | Suzhou Envicool |
| Beijing Feifan Hongsheng Technology Development Co., Ltd. | Beijing Feifan |
| Shenzhen Cooltek Electric Vehicle Cooling Technology Co., Ltd. | Shenzhen Cooltek |
| Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd. | Shanghai Cooltek |
| Henan Cooltek Transport Refrigeration Equipment Co., Ltd. | Henan Cooltek |
| Changchun Cooltek Huineng Transport Refrigeration Technology Co., Ltd. | Changchun Cooltek |
| Shenzhen Envicool Information Technology Co., Ltd. | Envicool Information |
| Shenzhen Envicool Software Technology Co., Ltd. | Envicool Software |
| Beijing Envicool New Energy Technology Research Institute Co., Ltd. | Beijing Envicool |
| Shenzhen Envicool Precision Technology Co., Ltd. | Envicool Precision |
| Shenzhen Envicool Health Environment Technology Co., Ltd. | Envicool Health Environment |
| Hebei Envicool Technology Co., Ltd. | Hebei Envicool |
| Guangdong Envicool Technology Co., Ltd. | Guangdong Envicool |
| Shenzhen Envicool Smart Connection Technology Co., Ltd. | Envicool Smart Connection |
| Henan Envicool Technology Co., Ltd. | Henan Envicool |
| Shenzhen Envicool Aviation Temperature Control Co., Ltd. | Envicool Aviation |
| Envicool Technology (Hong Kong) Limited | Hong Kong Envicool |
| Envicool MALAYSIA SDN. BHD | Envicool MALAYSIA |
| Envicool Singapore Pte. Ltd | Envicool Singapore |

Unless otherwise indicated, the terms used in this report have the same meanings as defined in the Company's 2023 Annual Report.

Source of Information and Reliability Statement

The information used in this report is from Envicool and its subsidiaries, and the Board of Directors is responsible for the truthfulness, accuracy and completeness of the report content.

Confirmation & Approval

This report has been confirmed and approved by the Board of Directors for release.

Accessing and Responding to this Report

You can download an electronic version of this report at <https://www.envicool.com/>.

If you have any questions about the content of the report or the work of Envicool ESG, please contact us at:

Tel: 0755-66823167

E-mail: ir@envicool.com

¹ In addition, "Envicool", "the Company", "our company" and "we" in this report refer to Envicool and its subsidiaries.

Envicool in 2023

About Us

Shenzhen Envicool Technology Co., Ltd. ("Envicool"), a high-tech enterprise established in 2005 and headquartered in Shenzhen, is a leading provider of precise temperature control and energy conservation solutions and products. It was listed on the Shenzhen Stock Exchange on December 29, 2016 (Stock code: 002837).

Envicool has established businesses in multiple areas. Its products and services cover data center temperature control, energy storage temperature control, full chain liquid cooling and electronics cooling, cabinet air conditioning, data center integration, cold chain temperature control, new energy passenger vehicles and rail transit air conditioning, and indoor air environment control. These products and services are widely used in data centers, energy storage power stations, communication, smart grids, cold chain transportation, new energy vehicles, rail transit, smart education, household, medical and other industries.

Data Center Temperature Control

As a leading brand in the industry, Envicool provides leading technologies and complete solutions and products with significant energy-saving effects.

Data Center Integration

Envicool integrates the infrastructure equipment of data centers to provide full-chain and full life cycle project construction solutions, including one-stop design, construction, operation and maintenance.

Full Chain Liquid Cooling and Electronics Cooling

With a top-notch technical team in the industry, Envicool has a solid technical background and rich professional experience in heat transfer, materials, heat dissipation module design, process technology design and other fields, accelerating industrial evolution with independent full-chain technology.

Cabinet Air Conditioning

With solid technical capabilities, excellent product quality and a reliable reputation, Envicool maintains a leading position in communication and manufacturing applications.

Energy Storage Temperature Control

As a global leader in energy storage temperature control, Envicool has multiple products applied in sub-fields such as container energy storage temperature control and battery thermal management, leading the global market share with its sophisticated solutions for energy storage air-cooling and liquid-cooling temperature control.

Cold Chain Temperature Control

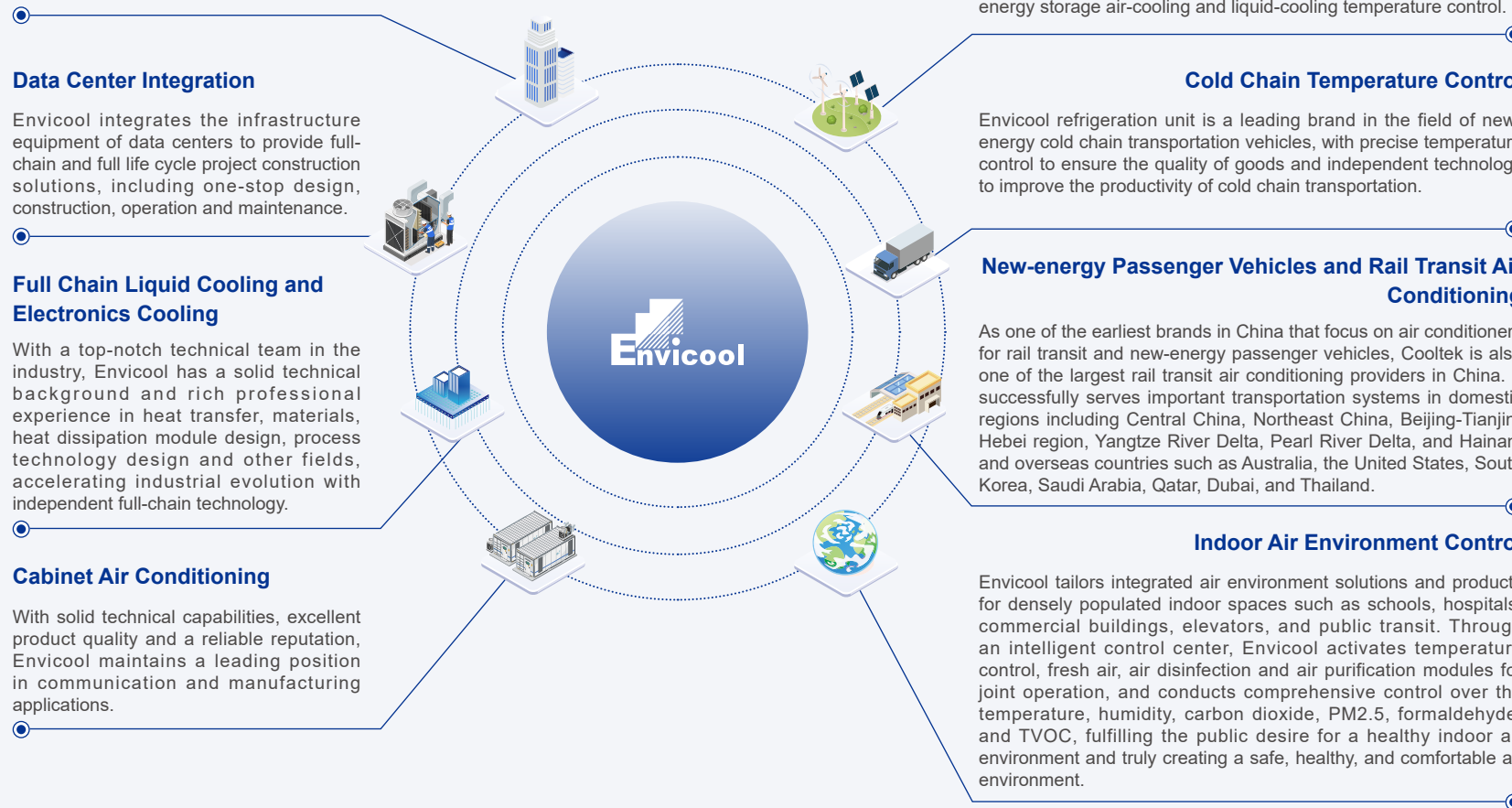
Envicool refrigeration unit is a leading brand in the field of new-energy cold chain transportation vehicles, with precise temperature control to ensure the quality of goods and independent technology to improve the productivity of cold chain transportation.

New-energy Passenger Vehicles and Rail Transit Air Conditioning

As one of the earliest brands in China that focus on air conditioners for rail transit and new-energy passenger vehicles, Cooltek is also one of the largest rail transit air conditioning providers in China. It successfully serves important transportation systems in domestic regions including Central China, Northeast China, Beijing-Tianjin-Hebei region, Yangtze River Delta, Pearl River Delta, and Hainan, and overseas countries such as Australia, the United States, South Korea, Saudi Arabia, Qatar, Dubai, and Thailand.

Indoor Air Environment Control

Envicool tailors integrated air environment solutions and products for densely populated indoor spaces such as schools, hospitals, commercial buildings, elevators, and public transit. Through an intelligent control center, Envicool activates temperature control, fresh air, air disinfection and air purification modules for joint operation, and conducts comprehensive control over the temperature, humidity, carbon dioxide, PM2.5, formaldehyde, and TVOC, fulfilling the public desire for a healthy indoor air environment and truly creating a safe, healthy, and comfortable air environment.



Taking Shenzhen Envicool Technology Co., Ltd. as the leading role, together with subsidiaries such as Envicool Information, Envicool Software, Envicool Precision, Envicool Healthy Environment, Envicool Smart Connection, Shanghai Cooltek, Shenzhen Cooltek, Henan Cooltek, Suzhou Envicool, Guangdong Envicool, Beijing Envicool, Hebei Envicool, Henan Envicool, as well as subsidiaries in Hong Kong and Malaysia, Envicool has formed long-term strategic partnerships with excellent enterprises in the industry with outstanding technological innovation capabilities and platform operation advantages, achieving a good reputation in the industry.

Envicool has built a market and after-sales service network covering key regions nationwide and globally by establishing markets and service institutions in various regions. As a major supplier for well-known domestic and foreign enterprises such as Huawei, ZTE, and Eltek, Envicool provides products that are widely used by communication operators such as China Unicom, China Telecom, China Mobile, Sprint, SoftBank, and BT, as well as customers such as Tencent, Alibaba, Baidu, Chindata, Shanghai @hub, and GDS. Efficient refrigeration and natural cooling products, totaling over three million sets, have been distributed worldwide.

7 Major Bases



Shenzhen Headquarters
Production and R&D Base



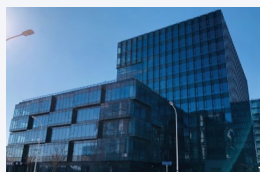
Shanghai
Production and R&D Base



Suzhou
Production and R&D Base



Zhongshan
Production and R&D Base



Beijing
R&D Base



Hebei
Production Base

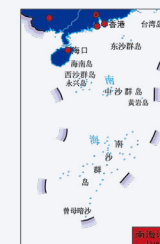


Henan
Production and R&D Base

7 major sales and after-sales service regions in China

39 customer service centers and 61 spare parts centers

- Covering all provinces, autonomous regions, and municipalities
- Providing customers with fast, efficient, and high-quality services
- 24/7 service hotline: 400-188-8966



Corporate Culture

Corporate Vision

Committed to becoming a world-class enterprise in the field of professional precision environmental control through constant accumulation and continuous efforts.

Professional

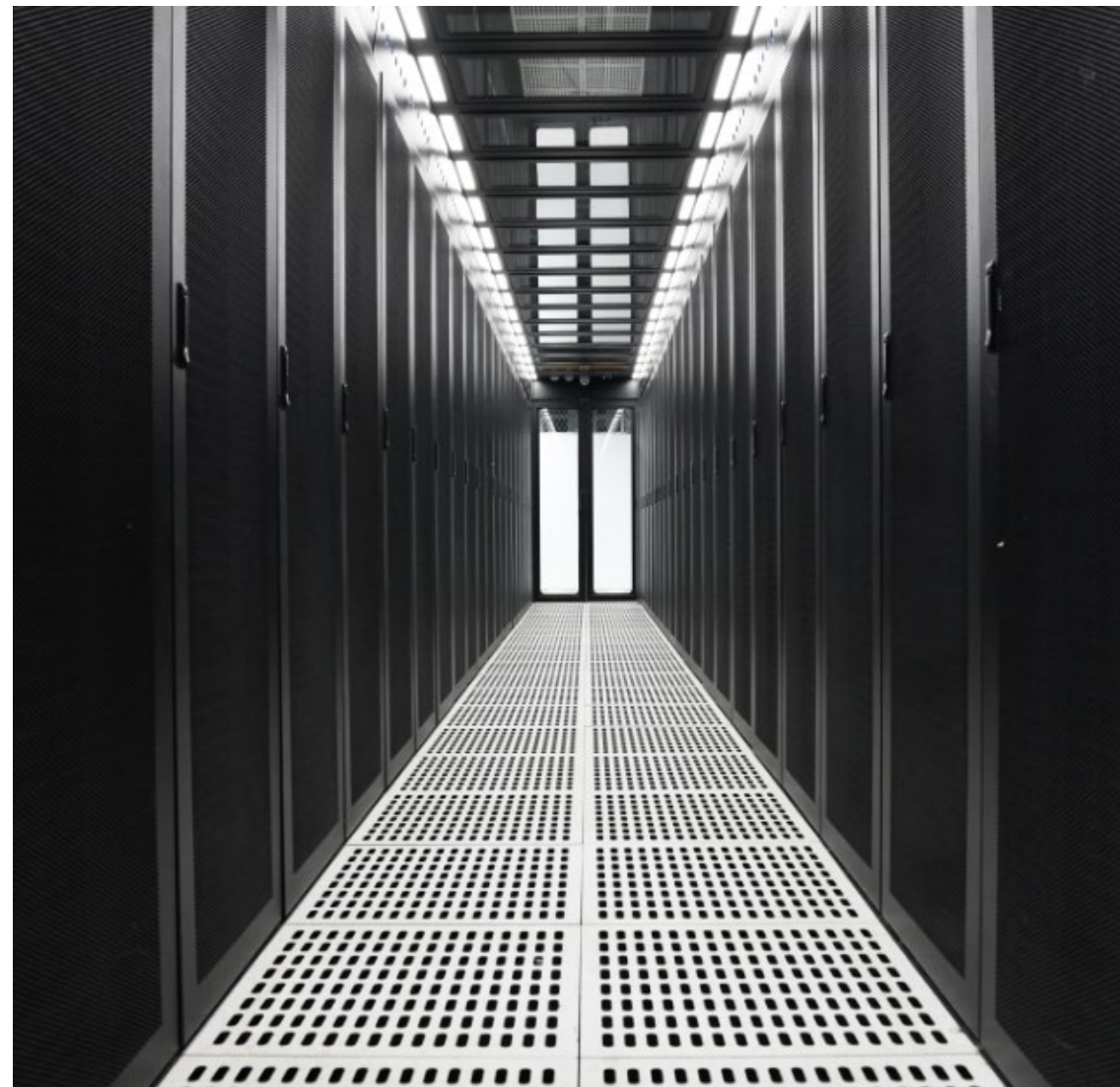
Leading Professional
Product & Service

Value

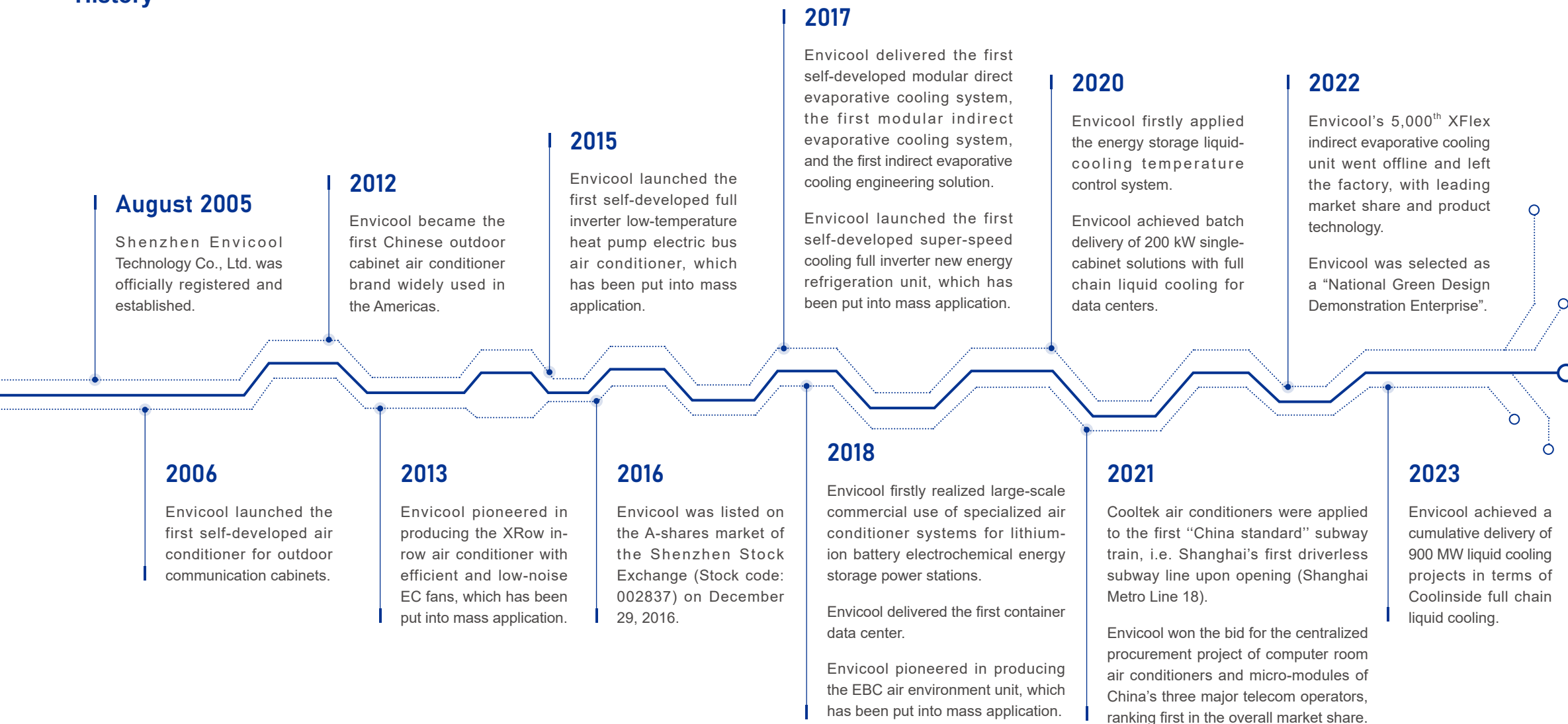
Value Creation is Envicool's
Foundation

Trust

Being the Customers'
Long-term Partner



History



Certification of Systems

Quality Management System Certification of Envicool and its Branches and Subsidiaries

| | |
|-------------------|--|
| ISO 9001:2015 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. Suzhou Envicool Environmental Control Technology Co., Ltd. Shenzhen Cooltek Electric Vehicle Cooling Technology Co., Ltd. Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd. Shenzhen Envicool Information Technology Co., Ltd. Shenzhen Envicool Precision Technology Co., Ltd. Shenzhen Envicool Health Environment Technology Co., Ltd. Hebei Envicool Technology Co., Ltd. Guangdong Envicool Technology Co., Ltd. Shenzhen Envicool Smart Connection Technology Co., Ltd. |
| ISO/TS 22163:2017 | <ul style="list-style-type: none"> Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd. |
| IATF 16949-2016 | <ul style="list-style-type: none"> Shenzhen Cooltek Electric Vehicle Cooling Technology Co., Ltd. Suzhou Envicool Environmental Control Technology Co., Ltd. |

Environmental Management System Certification of Envicool and its Branches and Subsidiaries

| | |
|----------------|---|
| ISO 14001:2015 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. Suzhou Envicool Environmental Control Technology Co., Ltd. Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd. Shenzhen Envicool Health Environment Technology Co., Ltd. Hebei Envicool Technology Co., Ltd. Guangdong Envicool Technology Co., Ltd. |
| ISO 50001:2018 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. |

Occupational Health and Safety Management System Certification of Envicool and its Branches and Subsidiaries

| | |
|----------------|---|
| ISO 45001:2018 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. Suzhou Envicool Environmental Control Technology Co., Ltd. Shenzhen Envicool Health Environment Technology Co., Ltd. Hebei Envicool Technology Co., Ltd. Guangdong Envicool Technology Co., Ltd. |
|----------------|---|

After-sales Service System Certification of Envicool and its Branches and Subsidiaries

| | |
|-----------------|--|
| GB/T 302-2016 | |
| GB/T 35966-2018 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. |
| GB/T 27922-2011 | |

Greenhouse Gas Verification and Certification of Envicool and its Branches and Subsidiaries

| | |
|------------------|--|
| ISO 14064-1:2018 | <ul style="list-style-type: none"> Shenzhen Envicool Technology Co., Ltd. |
|------------------|--|

Membership of Industry Organizations

| SN | Name of Association |
|----|--|
| 1 | Chinese Association of Refrigeration |
| 2 | China Communications Standards Association |
| 3 | China Association for Engineering Construction Standardization -China Data Center Committee (CDCC) |
| 4 | China Association for Engineering Construction Standardization - Urban and Rural Informatization Construction and Big-data Working Committee |
| 5 | China Refrigeration and Air-conditioning Industry Association |
| 6 | Cold Chain Logistics Professional Committee of China Federation of Logistics and Purchasing |
| 7 | Professional Committee of Living Environment Quality of China Association for Quality Inspection |
| 8 | China Educational Equipment Industry Association |
| 9 | China Energy Storage Alliance |
| 10 | Open Data Center Committee |
| 11 | Electrical Energy Storage Alliance |
| 12 | Green Data Center Industry Alliance |
| 13 | Jiangsu Energy Storage Industry Association |
| 14 | Shenzhen High-tech Industry Association |
| 15 | Shenzhen Postdoctoral Fellowship |
| 16 | Shenzhen Longhua District Top Talents Development and Promotion Association |
| 17 | Shenzhen Longhua District Charity |
| 18 | Shenzhen Longhua District Smart City Industry Promotion Association |
| 19 | Shenzhen Quality City Promotion Association |
| 20 | Shenzhen Software Industry Association |
| 21 | Shenzhen Industrial Internet Alliance |
| 22 | Shenzhen Industrial Internet Industry Association |

Highlights of 2023

Significant Progress in ESG

Environmental

- As of the end of 2023, Envicool has provided over **3** million sets of energy-saving products to customers, resulting in a cumulative reduction of **11** million tonnes of carbon emissions;
- The greenhouse gas emissions of Envicool totaled **9,960.17** tCO₂e in 2023;
- Envicool consumed **120,078.25** tons of water in 2023.

Governance

- The proportion of independent directors in Envicool exceeded **30%**, and that of female directors exceeded **40%**;
- In 2023, Envicool conducted compliance audits, found no violations and ensured full coverage of the annual audit;
- As of the end of 2023, Envicool has owned **1,026** patents in force and developed a patent portfolio in over **10** countries worldwide.

Social

- In 2023, Envicool invested **263** million RMB in R&D, with a year-on-year increase of **34.45%**;
- In 2023, the number of employees in Envicool was **3,863**, with an annual training attendance of **49,665**;
- Envicool actively promoted the review and management of conflict minerals, and no violations occurred throughout the year.

Business

- As of the end of 2023, the total assets of Envicool reached **5.091** billion RMB and the operating income was **3.529** billion RMB;
- The cumulative cash dividends paid out by Envicool since its listing will exceed **400** million RMB (cash dividend program for 2023 to be considered and approved by the General Meeting of Shareholders).

External Recognition and Awards

January 2023

Industry and Information Technology
Bureau of Shenzhen Municipality

**Shenzhen Manufacturing Single
Champion Product**

Industry and Information Technology Bureau of Shenzhen Municipality

**The temperature control and energy saving products for computer
rooms were included in the list of the first batch of Shenzhen
Manufacturing Single Champion Enterprises (Products)**

March 2023

Electric Energy Storage Alliance

**Golden Vine Award of Electric
Energy Storage Alliance**

WWW.BJX.COM.CN and
CHUNENG.BJX.COM.CN

**2023 "Polaris Cup" Energy Storage
Influential Supporting Supplier**

Department of Industry and Information
Technology of Guangdong Province

**Manufacturing Single Champion
Product of Guangdong Province**

May 2023

Energy Storage Application Branch of China Industrial
Association of Power Sources

**Top 10 Brands in the Energy Storage Industry
of China**

China Industrial Association of Power Sources

**The Best Liquid Cooling Technology Solution Award
for China's Energy Storage Industry in 2023**

July 2023

Energy Bureau of Guangdong Province

Four advanced technologies, i.e., the cold plate liquid cooling full chain solution, XMint efficient evaporative cooling composite multi-system air conditioning system, efficient inverter turbopowering heat pipe technology, and high-precision inverter control overhead passenger vehicle air conditioner, were included in the Guangdong Catalog of Recommended Energy-saving Technologies and Equipment (Products) (2023 Edition)

August 2023

Organizing Committee of China International Conference on
New Energy Storage Technology and Engineering Application
China Energy Storage Network

**2023 Innovation Award for New Energy Storage
Temperature Control System Enterprises in China**

Electric Energy Storage Alliance (EESA)

**2023 Award for the Best Energy Storage
Temperature Control Technology Solution**

November 2023

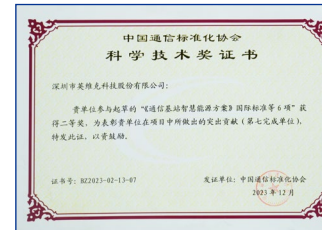
Development and Reform Commission of
Shenzhen Municipality

**Three technologies, i.e., full chain liquid cooling,
efficient inverter turbopowering heat pipe, and
XMint efficient evaporative cooling composite multi-
system, were included in Shenzhen Green and
Low-Carbon Technology, Equipment (Products)
Promotion Catalog**

December 2023

China Communications Standards Association

**Guide for Energy Saving Technology of
Power Supply and Room Environment for
Telecommunications along with six other
international and industry standards co-edited by
Envicool, won the "2023 Science and Technology
Award" (the second prize)**

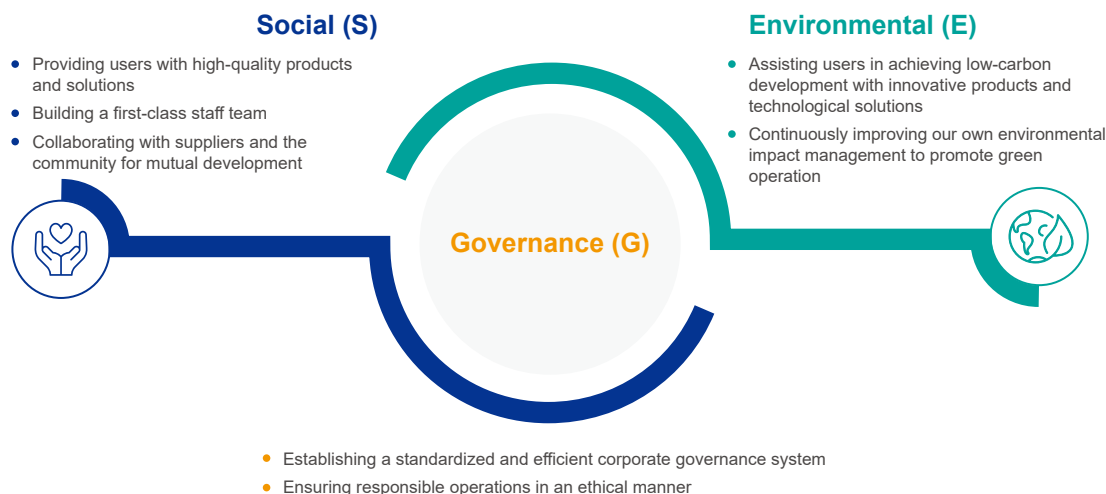


ESG Strategy and Management

In the new stage of high-quality development, ESG is an important force driving the transformation of enterprises from “big” to “great”. It provides enterprises with new risk identification and management perspectives and support for discovering new business opportunities, offers sustained environmental and social value to the public through business model innovation, and ultimately boosts the healthy development of enterprises.

ESG Model

Envicool regards ESG work as an important driving force for the sustainable development of enterprises and builds an ESG model of “one body and two wings.” We believe that a sound and standardized corporate governance system is the premise for a company to have excellent ESG performance, as well as the cornerstone for us to maintain a leading position in environmental and social performance.



Envicool's ESG Model of “One Body and Two Wings”

One Body: Governance

We have established a standardized corporate governance structure in accordance with relevant laws and regulations to ensure the professional and efficient performance of relevant personnel and promote the diversity and independence of management. We also advocate responsible operation, clarify the business ethics and code of conduct and promote compliant operations to guarantee our long-term stability and drive risk management and opportunity identification in environmental and social fields.



Two Wings: Environmental and Social

In the environmental field, we met the low-carbon development needs of users with innovative solutions, and continuously improved the level of green operations and reduced environmental impacts. In the social field, we gathered customers, employees, value-chain partners and communities, and drove the common growth and progress of stakeholders through healthy corporate development to create shared value.

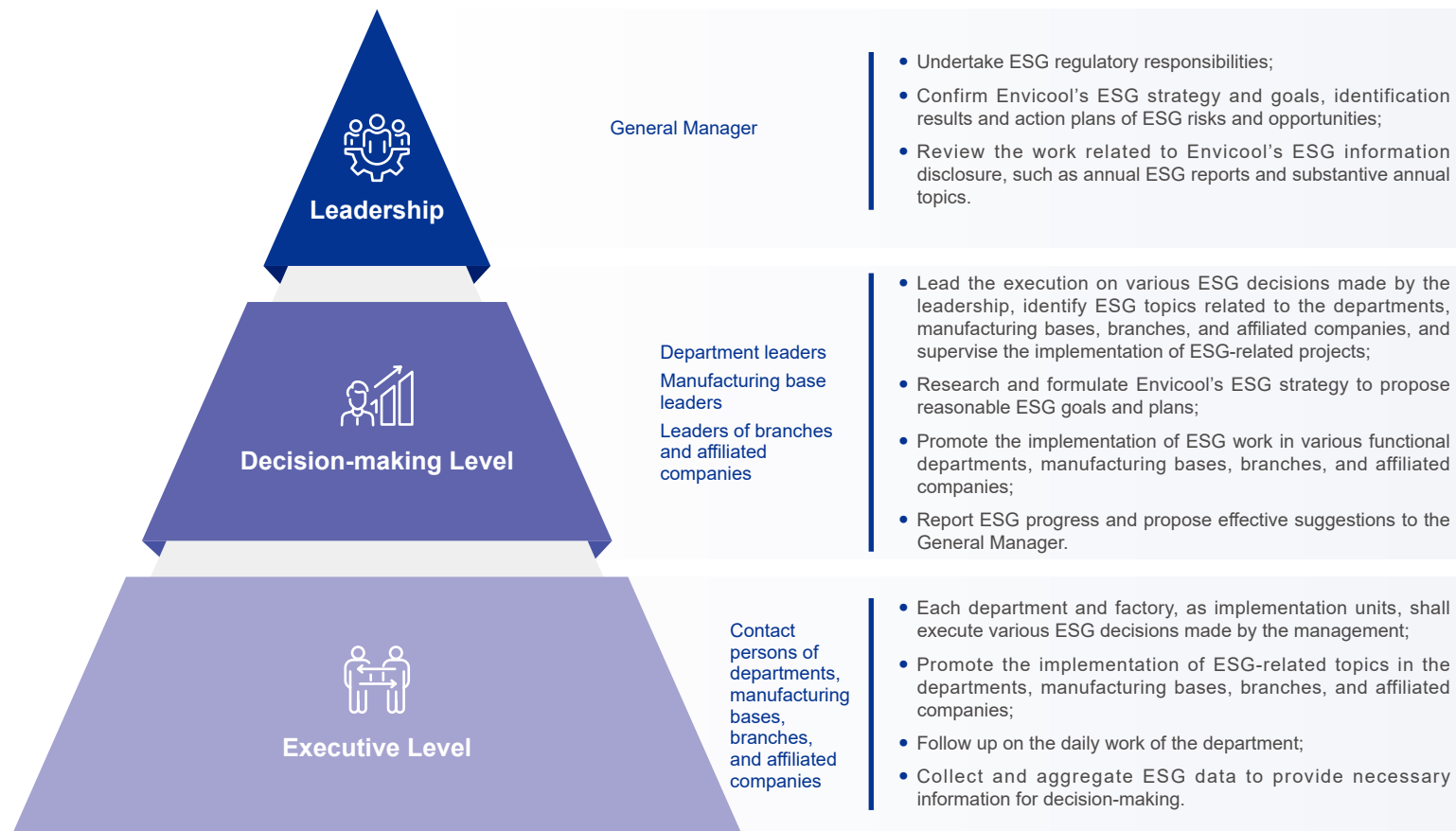


ESG Management Structure








A sound and effective organizational structure is the fundamental guarantee for good ESG performance. Based on the actual situation, Envicool has established a three-level ESG management framework to ensure the effective implementation of overall goals by vertically connecting Envicool's leadership, intermediate management and executive team.



Envicool ESG Management Structure

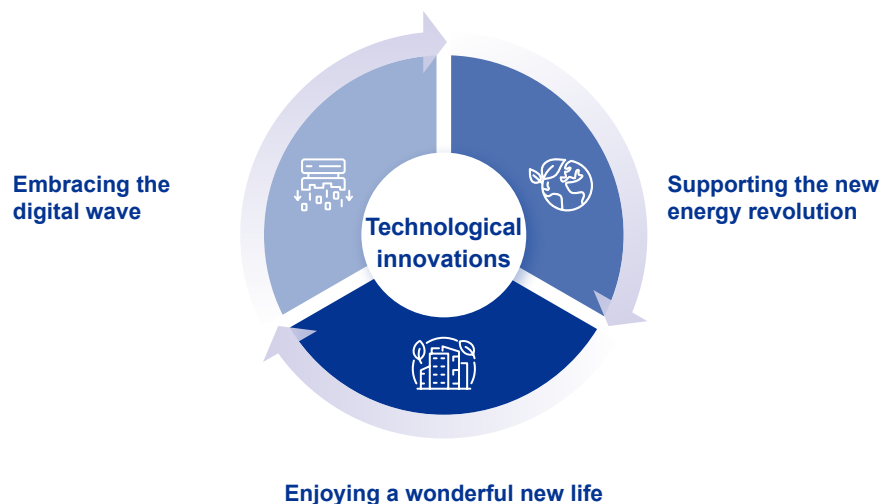


Stakeholders Communication and Engagement

| Stakeholders |  Governments and regulators |  Shareholders and investors |  Customers |  Employees |  Suppliers, contractors, and partners |  Communities |  Social organizations |
|--------------------------------------|--|---|--|--|--|---|---|
| Representative of Stakeholders | <ul style="list-style-type: none"> Governments and related authorities at all levels Shenzhen Stock Exchange China Securities Regulatory Commission | <ul style="list-style-type: none"> Investors | <ul style="list-style-type: none"> Domestic and international customers | <ul style="list-style-type: none"> All employees | <ul style="list-style-type: none"> Suppliers Contractors Partners | <ul style="list-style-type: none"> Communities around the base | <ul style="list-style-type: none"> Universities and research institutions ESG rating agencies Media Industry associations |
| Concerns of Stakeholders | <ul style="list-style-type: none"> Legal and compliant operation Carbon peaking and carbon neutrality strategy and climate change Rights and interests of employees, customers and other stakeholders Stable operation of products Economic growth driver | <ul style="list-style-type: none"> Business development plan of Envicool Financial performance and ESG performance Risk management system Investor communication and interaction | <ul style="list-style-type: none"> Excellent product performance Green products and environmental impacts Timely and efficient customer services Overall social responsibility performance | <ul style="list-style-type: none"> Compensation and welfare Competence building for personal development Open and transparent development path Work-life balance Stable enterprise development Workplace health and safety | <ul style="list-style-type: none"> Fair and transparent selection procedures Long-term and stable partnerships | <ul style="list-style-type: none"> Contribution to the sustainable development of the community Sharing of development achievements | <ul style="list-style-type: none"> Good cooperative relationship Timely sharing of company experience and practice Transparent information communication and sharing Common development of industries |
| Ways of Communication and Engagement | <ul style="list-style-type: none"> Regular information disclosure Participation in related meetings Communication through industry associations and other organizations. | <ul style="list-style-type: none"> Regular information disclosure General Meeting of Shareholders Investors' roadshows and meetings Communication via telephone and email Site visit Performance briefing | <ul style="list-style-type: none"> Pre-sales communication After-sales service Routine communication (e.g., customer visits) Third-party training Client review | <ul style="list-style-type: none"> Labor Union E-mail WeCom account Employee opinion box | <ul style="list-style-type: none"> Supplier training On-site review and communication Regular visits | <ul style="list-style-type: none"> Face-to-face communication Public welfare activities Complaint hotlines | <ul style="list-style-type: none"> Regular communication and feedback Project cooperation Official website, WeChat official account, and other open channels |

Spotlight: More Than Cooling for New Development

“More Than Cooling” is the corporate mission of Envicool. We hope to provide leading product solutions in the digital wave, new energy revolution, and a better new life through leading technological innovations. As of the end of 2023, Envicool provided over 3 million sets of energy-saving products to customers, resulting in a cumulative reduction of 11 million tons of carbon emissions, accelerating the industry’s low-carbon development and supporting the public’s pursuit of a better life.



By the end of 2023

Envicool has provided its
customers with over



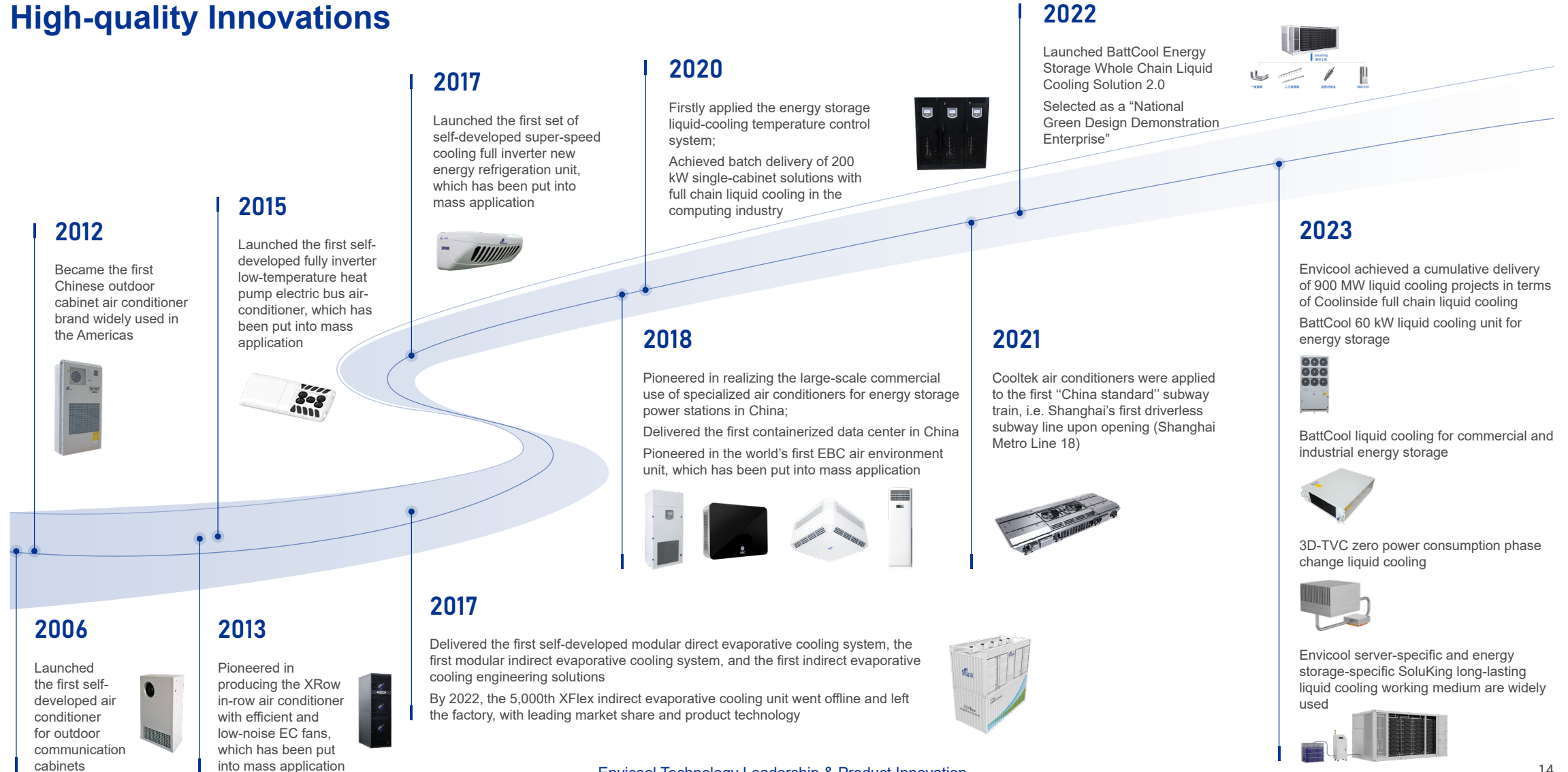
3 million energy-saving products



11 million tonnes
of carbon emissions
have been reduced



High-quality Innovations



Building Profound R&D Capabilities

As a high-tech enterprise, Envicool has developed comprehensive innovation and R&D capabilities.

In 2023, we invested 263 million RMB in R&D, with a year-on-year increase of 34.45% and owned 100 software copyrights and 1,026 patents. In terms of laboratory construction, our testing centers built in Shenzhen and Suzhou have been recognized by CNAS.

2023



We invested

263 million
RMB in R&D

With a year-on-year
increase of

34.45%

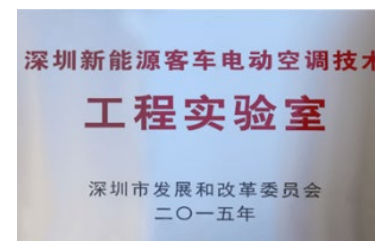


We owned

100 software
copyrights

and

1,026 patents



Strengthening Green Technology Innovations

Envicool has always regarded basic technology R&D as the core driving force for promoting corporate development. In this process, we provide rich scenarios for product innovations and industry applications by using relevant technologies, and empower customers to achieve energy conservation and emission reduction and explore zero carbon operations.

Our XFlex cooling system has three operating modes: efficient heat exchange natural cooling mode under dry conditions, evaporative cooling natural cooling mode under wet conditions, and combined mode of evaporative cooling and mechanical cooling. The first two are both natural cooling modes, under which the air conditioning system can fully utilize natural cooling sources and can save energy by more than 60%. The system can achieve a cooling capacity of 100-400 kW through basic modules and reduce on-site construction volume by 70%, significantly improving the reliability.

By using the XFreeCooling efficient inverter penumatic heat pipe technology, we integrate the traditional compression refrigeration system with the penumatic heat pipe system into an air conditioner that not only meets the requirements of outdoor high-temperature ratio and high-pressure ratio operation refrigeration, but also is compatible with the energy-saving refrigeration of penumatic heat pipes under low-temperature conditions, fully utilizing the natural cold source during transitional seasons and winter. In addition, the air conditioner can realize refrigeration with smaller temperature differences ($\leq 10^{\circ}\text{C}$) and an annual energy efficiency improvement of over 60%, saving energy by 26% compared with fluorine pump technology.

With respect to large capacity energy storage, we took into consideration safety, energy efficiency, and O&M, and developed the BattCool full chain liquid cooling solution. It integrates the characteristics of full chain liquid cooling, full process autonomy, and full cycle service to realize full adaptation to the energy storage environment, full adaptation to the power grid system, and global coverage of the service network.



BattCool Full Chain Liquid Cooling Solution Applied to a 100 MW-level Energy Storage Project in Ningxia

As the pioneer of full chain liquid cooling, Envicool is the first to launch the Coolinside full chain liquid cooling solution in the industry. From cold plates and pipelines, to quick couplings, manifolds, CDUs, SoluKing data center long-lasting liquid cooling working medium, and then to the primary loop cold source, Envicool facilitates the reliable operation of liquid cooling systems through independent research and development, independent production, independent delivery, and independent service, and ensures “zero risk” of liquid cooling systems through the “full chain”.

Envicool conducted basic research of heat exchanger core and possessed its fully independent intellectual property rights. We also developed the indirect evaporative cooling natural cooling technology based on automated production process research. Both of them are pioneering at home and abroad.

With the development of super-large data centers, cold water system solutions are being increasingly applied, which leads to large consumption of water resources and purification treatment of circulating water. From the perspective of energy utilization, it is difficult to fully and accurately assess the energy consumption level of data centers simply by PUE. To measure the performance of green data centers holistically and reasonably, the water use efficiency (WUE) has become another important rating dimension. While meeting the requirements of heat dissipation and environmental control in application scenarios, Envicool has made continuous breakthroughs in the utilization efficiency of water resources with excellent achievements.



| Refrigeration technology | Leading energy-saving performance | Leading water-saving performance | Quantitative data of energy-saving and water-saving effects |
|--|--|--|---|
| Indirect evaporative cooling | Low face velocity design, with an actual energy conservation of 15% for Huailai users | WUE as low as 0.6 in data centers; save 60% of water compared with similar data center projects using cooling towers | A data center in Huailai PUE: 1.18 WUE: 0.6 |
| Liquid cooling | By employing the chip-level heat dissipation, secondary heat transfer, integrated high-efficiency variable frequency pump, and warm water cooling techniques, the Cold Plate Liquid Cooling Full Chain Solution achieves a CLF of 0.06 for data centers | No water consumption | A liquid cooling data center in Qingyuan PUE: 1.11 |
| In-row air conditioner | More than 20% energy saving thanks to proximal heat dissipation, large area V-coil, and efficient axial flow fan | No water consumption | PUE: 1.25 |
| Turbopowering heat pipe technology | The combination of refrigeration system and compressor control technology enables efficient operation in spring and autumn; more than 45% of energy was saved in an operator project in Jiangsu | No water consumption | An operator project in Jiangsu PUE: 1.2 |
| Quick cooling of cold chain refrigeration unit | The integration of stepless variable frequency technology and an AI algorithm enables intelligent control and intelligent adjustment of the operating state to ensure a constant optimal operating condition. Energy efficiency increased by more than 25% | No water consumption | Energy efficiency increased by more than 25% |



Representative achievements in the R&D of green technology

Turbopowering heat pipe and fluorine pump natural cooling technology

won the Second Prize of the 2022 Data Center Science and Technology Achievement Award

Evaporative cooling composite multi-connected air conditioning solution

won the Third Prize of the 2021 Data Center Science and Technology Achievement Award

Cold plate liquid cooling full chain solution

won the First Prize of the 2021 Data Center Science and Technology Achievement Award

The indirect evaporative cooling unit was included for three consecutive years

in the Ministry of Industry and Information Technology (MIIT) *Product Catalog of Advanced Applicable Technologies for Green Data Center*

Envicool was selected

as a National Green Design Demonstration Enterprise

Four advanced technologies, i.e., the cold plate liquid cooling full chain solution, XMint efficient evaporative cooling composite multi-system air conditioning system, efficient inverter turbopowering heat pipe technology, and high-precision inverter control overhead passenger vehicle air conditioner, were included

in the *Guangdong Catalog of Recommended Energy-saving Technologies and Equipment (Products) (2023 Edition)*

Three technologies, i.e., full chain liquid cooling, efficient inverter turbopowering heat pipe, and XMint efficient evaporative cooling composite multi-system, were included

in *Shenzhen Green and Low-Carbon Technology, Equipment (Products) Promotion Catalog (2023 Edition)*

Envicool got involved

in the Intel-led white paper *Innovation Practice in Green Data Centers: Design Reference for the Cold Plate Liquid Cooling System*

As a professional provider of full chain liquid cooling in data centers, covering key technologies such as "refrigeration elasticity" and "airflow optimization," Envicool helped China Telecom release

the white paper *Infrastructure Technology Solutions for New Generation Artificial Intelligence Data Center (AIDC)*

Meanwhile, as a leading enterprise in the industry, Envicool actively outputs its own technology to promote the common progress of the industry.

As a member of the China Data Center Committee (CDCC), the Chinese Association of Refrigeration (CAR), and the China Communications Standards Association (CCSA), Envicool actively engages in the formulation and revision of industry standards. Under the leadership of the National Refrigeration and Air Conditioning Equipment Standardization Technical Committee, Envicool took the lead in drafting JB/T 14641-2022 *Indirect Evaporative Cooling Air Conditioning Unit for Computer and Data Processing Room*.

Case: Patented technology drove exceptional performance of PUE and WUE of data centers

The continuous strengthening of energy conservation and emission reduction policies, such as carbon peaking by 2030 and carbon neutrality by 2060, has made low PUE and low WUE the future development trends. The increasing computing power brings higher power density and higher calorific value, posing challenges for mainstream universal air-cooled heat exchange systems.

In this context, Envicool has proposed the relevant technology and obtained patent licensing (CN220356126U), which cleverly integrates air cooling with spray water cooling systems. At low ambient temperature, it relies entirely on air cooling for heat transfer; at high temperature, it utilizes spray water cooling and relies on phase transition to achieve high heat transfer per unit of volume. Different cooling modes are optional during the transition season. Simultaneously, it can also be directly integrated with the liquid cooling circulation system to maximize energy saving and keep the PUE below 1.15.

This technology exerts an important influence on the improvement of energy conservation standards of China Data Center and industry standards, and provides solutions for the construction and application of data centers in the central and western regions with water scarcity and harsh environmental conditions.

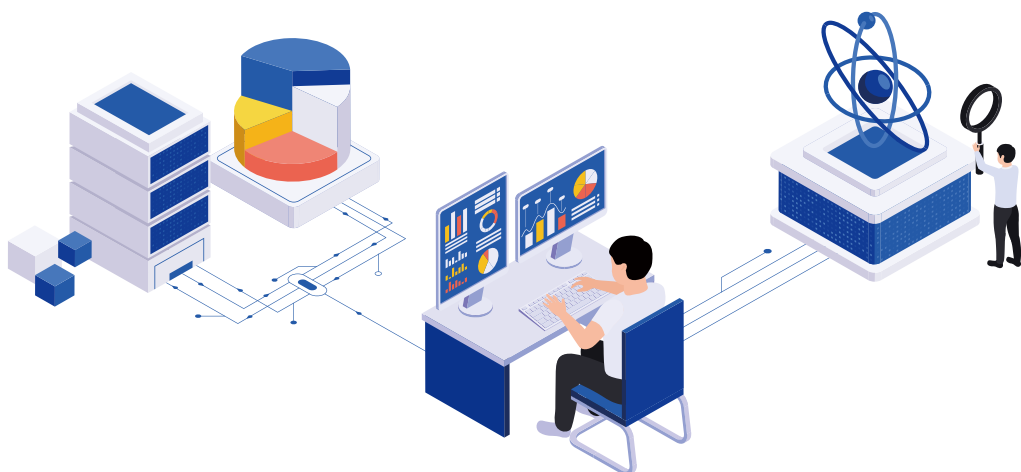


Promoting External Openness and Cooperation

We focus on R&D cooperation with external professional institutes, and promote the progress of precise temperature control technology and energy conservation and consumption reduction technology through complementary advantages, boosting the development of the industry.



Envicool Internal and External Cooperative R&D System Architecture



To date, Envicool's key industry-university-research collaboration projects include:

- May 15, 2021 to May 14, 2025**

Xi'an Jiaotong University
A Joint Laboratory of Thermal Environment Control Technology for Buildings and Equipment
- May 1, 2023 to April 30, 2026**

Xi'an Jiaotong University and CATARC (Tianjin) Automotive Engineering Research Institute Co., Ltd.
R&D of supercritical CO₂ wide-temperature-range heat pump air conditioning systems for vehicles and R&D of heat pump air conditioning systems for vehicles jointly
- June 2023 to June 2026**

Harbin Institute of Technology and Guangzhou Energy Research Institute (Shenzhen)
Joint research on high-temperature heat extraction technology for high-power chips, with related R&D achievements successfully implemented
- December 1, 2020 to November 30, 2022**

Hefei General Machinery Research Institute Co., Ltd.
Research and application demonstration on quality evaluation technology system of cooling equipment for data centers and 5G base stations and the research on condition performance testing and reliability detection technology for cooling equipment
- On July 29, 2023**

At the Opening Ceremony of the Intel Greater Bay Area Technology Innovation Center
Envicool, as the only enterprise in the field of liquid cooling, signed a memorandum of project cooperation with Intel to accelerate the testing, evaluation and promotion of liquid cooling solutions. Envicool became a member of the Intel OCSP Community Cooling Module working group



Digital Wave

Based on digital technology, digitization has revolutionized people's perception of the world, and also made the disruption of the technological paradigm inevitable. Enterprises and social governance are embarking on digital transformation, coupled with the rapid escalation of computing power and the rapid increase in computing power consumption and heat. Envicool provides reliable and efficient temperature control for digital transformation of enterprises and social governance.

Supporting Green Computing Power

According to the 2023 *White Paper on the Development of China's Data Center Industry*, by the end of the "14th Five-Year Plan" period in 2025, the number of data center racks will grow to 14 million, quadrupling that of 2021. The rapid escalation of computing power has also resulted in increasing heat density.

In terms of data center temperature control, Envicool has introduced iFreecooling series natural cooling system, CyberMate series efficient refrigeration system, XStorm series fan wall cooling system, XFlex series modular indirect evaporative cooling system, etc. Envicool keeps advancing the development of green data centers, evidenced by the advent of indirect evaporative cooling technology, advanced turbopowering heat pipe technology, and full chain liquid cooling technology. We play a crucial part in energy conservation and emission reduction for customers, and offer Envicool's wisdom for promoting the "carbon peaking and carbon neutrality strategy."

The XFlex series modular indirect evaporative cooling system

adopted by Chindata, Tencent, GDS, China Mobile, China Telecom, China Unicom, ZDATA, China Railway Construction, UCloud, SenseTime, VNET, China Power Investment Corporation and other customers.

Coolinside full chain liquid cooling solutions

jointly innovated and launched xLAB liquid cooling clusters with xFusion, which support the construction of data centers and computing power centers of several Internet head enterprises and telecommunication carriers.

The iFreecooling series natural cooling system

has greatly reduced the power consumption of computer rooms in multiple data centers such as China Unicom, China Mobile, China Telecom, CNPC, and CNOOC.

The CyberMate series efficient CRAC system

used in multiple ultra-large data centers of China Unicom, China Mobile, China Telecom, Tencent, Alibaba, ICBC, CCB, ABC, State Grid, CNPC, and CNOOC.

The XRow series row-based air conditioning system

adopted by Tencent, Alibaba, China UnionPay, Supreme People's Court, CCB, Sing Tel, China Mobile, China Telecom, China Unicom and many other domestic smart city projects.

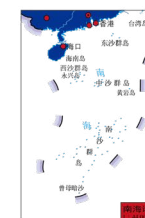
The XSpace series micro-module data center and X Rack series micro-module cabinet solutions

adopted by China Mobile, China Telecom, China Unicom, Tencent, CCB, and a number of customers in finance, government, education, public security organs, and enterprises.



Envicool seen all over China

- » At multiple data centers in the national data center cluster in Zhangjiakou, Hebei, our XFlex series modular indirect evaporative cooling system is applied, achieving a PUE as low as 1.15, which is over 60% more energy-efficient compared with traditional air conditioning systems. Additionally, with modular, engineered and productized design, on-site construction work is reduced by 70%, significantly enhancing the reliability of the decentralized cooling architecture and facilitating maintenance and management. Concurrently, some data centers utilize our XStorm series direct natural cooling large fan wall system, achieving a low PUE;
- » At a large data center in Beijing, our XFlex series modular indirect evaporative cooling system installed on the roof enables natural cooling for over 75% of the year, saving over 50% of the energy consumption compared with traditional air conditioning systems and conserving more than 60% of water annually;
- » At a major data center in Shanxi, our XFlex series modular indirect evaporative cooling system and XEC series composite evaporative chilled water system are applied, achieving a PUE as low as 1.15, with natural cooling available for over 85% of the year, and saving more than 60% of the energy consumption compared with traditional air conditioning systems and more than 60% of water annually;
- » At multiple data centers in the Inner Mongolia Helinger National Data Center Cluster, our XFlex series modular indirect evaporative cooling system is applied, achieving low PUE and WUE;
- » At multiple data centers in the Ningxia Zhongwei National Data Center Cluster, our XStorm series indirect evaporative natural cooling and direct natural cooling large fan wall systems, along with our XFlex series modular indirect evaporative cooling system, are utilized. By integrating the cooling system into the architectural design and employing a combination of cooling methods while considering location, we achieve low PUE and WUE without being affected by air quality;
- » At the China Unicom Plateau (Kumbum Monastery) National Big Data Base in Qinghai, we achieve operation of indirect evaporative cooling system in low temperature at high altitude, enabling natural cooling for over 90% of the year, with high energy efficiency and a special anti-condensation design for winter operation to ensure stable performance in low temperature;
- » At a large data center in Jiangsu, our XFlex series modular indirect evaporative cooling system is applied, achieving a PUE below 1.2, with natural cooling available for over 65% of the year, and saving over 50% of energy consumption compared with traditional air conditioning systems; and over 50% of water annually;
- » At a cloud base data center in the Chongqing National Data Center Cluster, we realize the first indoor application of the indirect evaporative cooling system with our XFlex series chilled water supplementary indirect evaporative cooling unit, significantly reducing the PUE;
- » At a cloud base data center in Guangdong, our XFlex series modular indirect evaporative cooling system is applied, achieving a PUE below 1.25, saving over 50% of energy and over 40% of water compared with traditional air conditioning systems.

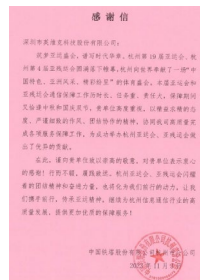


Supporting Information Communication

In terms of the application environment of 5G communication base stations, small and light units with strong cooling capacity are needed. For communication network base stations in outdoor hybrid sites, wind-solar complementary sites, remote areas and islands, Envicool satisfies the requirements of on-site DC power supply, effectively addresses heat dissipation requirements in the cabinet, and adopts highly energy-efficient variable frequency air conditioning system to reduce the allocation costs of solar panels.

The 2023 Asian Games in Hangzhou featured digitalization and intelligence. The communication room of Hangzhou Olympic Sports Center, which carried massive data operations, became a key infrastructure for the perfect application of “AI + 5G” technologies. During the events, Envicool provided CyberMate V+ series variable frequency CRAC units. Benefiting from the fully variable frequency design and self-developed energy-saving control logic, low-load dehumidification algorithm, self-developed AI control system and other technologies, our products provided a solid guarantee for communication temperature control, escorted the steady progress of the Asian Games, and were recognized by customers.

Envicool's 3D-TVC phase change liquid cooling solution of zero power consumption features temperature equalization performance increased by 80%, volume reduction by 30%, and weight reduction by more than 10%. It adapts to severe environments (e.g., mountains, forests, deserts, islands, high altitude, high latitude, and high salt spray) and extreme weather (extreme cold, extreme hot, heavy rain, fierce wind, rain and snow, etc.), making it a new choice for heat dissipation of 5G communication devices.



Food & beverage industry



Textile industry



Automation industry



Environmental protection industry

Facilitating Manufacturing Upgrade

Industrial temperature control and energy saving solutions satisfy the heat dissipation requirements of single and combined cabinets. The cooling capacity ranges from 300 W to 4,000 W to satisfy the heat dissipation requirements of single and combined cabinets. The heat in the cabinet and the moisture in the air can be transferred to the outside to keep high temperature, dust, and corrosive gases from entering the control cabinet. These solutions are intelligent, diversified, user-friendly, and portable. They can ensure the safe operation of equipment to create a favorable production environment to enhance production capacity of the intelligent manufacturing industry and create high reliable value.

In terms of industrial temperature control, Envicool boasts profound technical accumulation, launches products and solutions for a variety of industrial scenarios, provides rapid cooling equipment for all walks of life, and renders equipment upgrading services for industrial workshops. We are endeavoring to meet customer requirements with quality products and efficient services, thus advancing the development of the industry.



Laser industry



Automotive industry

New Energy Revolution

With the further implementation of the national Carbon Peaking and Carbon Neutrality Strategy, climate, economic, political and other factors have prompted the outbreak of the new energy revolution. In 2023, China's consumption of clean energy (natural gas, hydropower, nuclear power, wind power, and solar power) accounted for 26.4% of the total energy consumption, which is still on the rise, according to the National Bureau of Statistics. Envicool's efficient temperature control technology has been maturely applied to the three core links of the new energy revolution: new energy storage, power transmission, and terminal battery management. We escort the new energy revolution throughout the chain.

Energy-storage Temperature Control Guarantee

New types of energy storage are developing rapidly to ensure the large-scale grid connection of wind and solar energy and to maintain the stability and reliability of the power grid. According to the preliminary statistics of Zhongguancun Energy Storage Industry and Technology Alliance (CNESA), China's new type of energy storage (mainly Li-ion battery energy storage) had a new installed capacity of 21.5 GW/46.6 GWh in 2023, with the power and energy scales exceeding 150% year-on-year. By the end of 2023, the cumulative installed capacity has reached 34.5 GW/74.5 GWh.

The rapid development of energy storage cannot be separated from the rapid iteration and all-round support of precise temperature control technology. Based on over 10 years of application experience in energy storage, Envicool's products are suitable for an ultra-wide temperature range, meet a variety of environmental application requirements, and have strong temperature control precision and stability. With a variety of sensor applications and monitoring functions, these products cover the cooling range of 0.6 kW to 80 kW, including air cooling and liquid cooling. Meanwhile, the modular design shortens the delivery cycle, and there are a variety of control methods to meet different thermal management requirements of BMS/EMS.

Domestically, Envicool's energy storage products have been successfully applied to the Qingyun Energy Storage Demonstration Project of Three Gorges Energy (the first large demonstration energy storage power station in China), Hebei Zhangjiakou Energy Storage Demonstration Power Station, Ningxia Muhe Energy Storage Power Station (400 MWh, the largest energy storage power station project in 2022), and Additional Energy Storage Project of Tibet Dangxiong Yangyi PV Power Station (4,700 m above sea level). Internationally, Envicool's energy storage products have been applied in large scale in the European Customer Energy Storage Project and California PV Power Station, and have been highly recognized by mainstream integrators at home and abroad.



Xinhua Power Generation Project



Nauru Frequency Regulation Project



Tianshun Energy



Ganfeng-Xinjiang Huadian Project


Qingyun Energy Storage Power Station Demonstration
Project of Three Gorges Energy


Ningxia Muhe Energy Storage Power Station Project

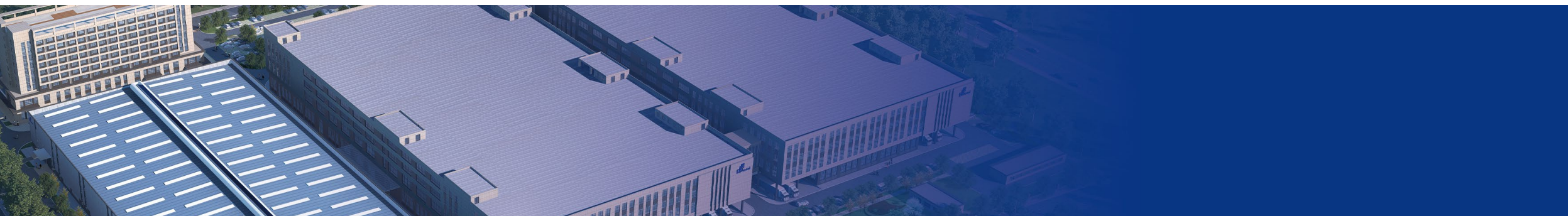
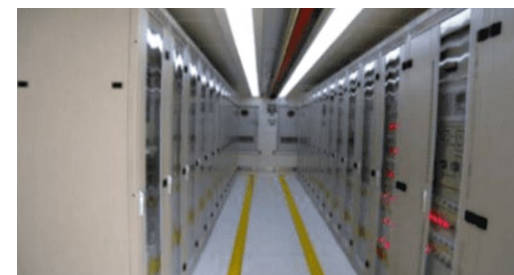
Power Temperature Control Guarantee

Amidst the national efforts to promote the construction of smart grids, we see a further increase in the demand for environmental control of parameters such as temperature and humidity in the operation of power equipment. Envicool continues to provide efficient temperature control and energy-saving solutions and products for power transmission and distribution environments such as outdoor power cabinets, power prefabricated substations, and power stations of smart grids. Our products can withstand all kinds of extreme hot and cold weather, and run uninterruptedly and stably around the clock to ensure the safety and stability of power transmission.

Envicool's power cabinet air conditioning, through the DC variable frequency air conditioning applied in new energy sites and solar panels and cells for energy efficient systems, achieves a high energy efficiency ratio and low noise. A complete series of outdoor cabinet temperature control products can be rinsed directly with a high-pressure water gun or purged by compressed air, keeping them easy to maintain. More than 100,000 sets of our products are running on the grid around the world every day.

In terms of temperature control of grid equipment, Envicool's special-purpose air conditioning for smart grid and power station equipment spans a cooling capacity of 0.6 kW to 25 kW, and can achieve rapid cooling through upward air supply design or long-distance air supply. The product is equipped with a professional dehumidification design, supplemented by a plurality of protection techniques, so as to adapt to various external harsh environments.

Envicool's power cabinet air conditioning offers temperature control and energy-saving solutions for outdoor cabinet or container applications such as power transmission and distribution equipment cabinets at all levels of smart grid, and energy storage power stations, with strong customization capabilities.



Temperature Control for New Energy Charging Piles and Battery Swapping Stations

Envicool has more than a decade of product and technical experience in the field of battery thermal management for heavy vehicles. Integrated cooling and heating functions enable precise management of the battery temperature, and accurate matching of the temperature requirements of batteries in different states to maintain the battery pack in optimal working condition, and ensure the safe and stable operation of the system. With state-of-the-art electronic expansion valve control technology, our products feature strong adaptability to extremely high and low temperature environments.

In terms of energy-saving temperature control for charging piles

Envicool provides solutions such as liquid cooling, dry cooler, air cooling, and combo air conditioner depending on the application scenarios of different charging piles, and pursues the integrated energy efficiency ratio throughout the year under the premise of ensuring the safety and cooling of charging piles. The temperature control solution of CSM combo air conditioner is suitable for efficient heat transfer under high heat density conditions, characterized by rapid heat dissipation and obvious cooling. It is internally integrated with a heat pipe and air conditioning refrigeration system to meet the heat dissipation requirements of different heat loads. Based on the heat load in the cabinet and the ambient temperature, the working mode can be intelligently selected, taking into account cooling, safety, and energy saving;

In terms of safe temperature control for battery swapping stations

Envicool's temperature control solution for battery swapping stations is a liquid cooling temperature control solution customized for the operation scenario of battery swapping stations. It can meet the temperature control requirements of equipment in high and low temperature scenarios: heat dissipation at high temperature, and heating at low temperature for safe temperature control. This effectively maintains the stability of equipment at battery swapping stations;

In terms of the efficient operation of vehicle battery swapping

Envicool, relying on the technology platform accumulation of Cooltek air conditioning in the automotive industry for more than 20 years, has launched battery thermal management solutions in the field of new energy vehicles and construction machinery to solve the problems in the battery charge/discharge and use, i.e., batteries are prone to thermal runaway at high temperature, and battery discharge performance deteriorates at low temperature. This has effectively improved the battery life and the endurance mileage of new energy vehicles, and enhanced the vehicle operation capability.

The temperature control solutions for charging piles and battery swapping stations meet the temperature control requirements in high and low temperature scenarios. With heat dissipation at high temperature and heating at low temperature, the solutions maintain the stability of charging piles effectively. They provide air cooling or liquid cooling temperature control solutions according to the loads of charging and battery swapping devices, satisfying the scenario that involves multiple structural changes in devices.



By adopting stepless variable frequency drive technology, plus the stepless adjustment of compressors, fans, and electronic expansion valves, Cooltek's independent battery thermal management unit meets accurately the temperature requirements of batteries in different states to keep the safety and reliability of batteries. With state-of-the-art electronic expansion valve control technology, our products feature strong adaptability to extremely high and low temperature environments.



A Better New Life

Envicool is committed to ensuring the quality of fresh food during transportation, the comfortable and healthy travel by subway, bus and other public transportation, as well as the air quality of family life. Envicool delivers a number of technology-leading solutions for logistics distribution, public services, rail trains, and life services, providing quality assurance and services for a better new life.

Precise Cold-chain Temperature Control

With the issuance of the development plan for cold-chain logistics spanning the 14th Five-Year Plan period, the cold-chain logistics industry has flourished, as a result of reasonable planning from objectives to facilities and from quality to supervision. For cold-chain logistics distribution, Envicool continues to provide industry customers with new products and solutions through continuous technological innovation. By taking advantage of long-term preservation, green and energy saving, precise temperature control, and lightweight, we fully guarantee the transportation quality of fresh food, medical drugs and other necessities related to people's health and life, without neglecting environmental friendliness.

To date, Envicool's cold-chain temperature control technology has achieved full coverage of different means of transport such as road, rail, and air, and is actively integrated into a variety of temperature-sensitive cargo transport and distribution scenarios.



Reefer container for air service



Cold-chain transport by rail



Cold-chain transport by road



Cold-chain transport in/among cities



Pure electric refrigerating unit



Non-independent refrigerating unit



Provide transport cold-chain solutions for urban distribution, trunk logistics, multimodal transport, railway, air freight service, etc.



Refrigeration products are applicable to both electric and fuel cold-chain logistics vehicles



GSP temperature field uniformity and stability tests in line with the requirements of pharmaceutical cold-chain transportation



We customized and developed refrigeration for our partners, boosting China's first active temperature-controlled aviation case to officially pass the airworthiness certification of the Civil Aviation Administration of China



Envicool's "Environmental Control Cloud" platform and mini program achieve remote management of units, with big data supporting preventive maintenance and rapid fault location

Public Transportation

Envicool has begun to focus on electric buses since 2013, completed the development and design of the first batch of products in 2014, and achieved mass sales and cooperated with mainstream bus manufacturers in 2015, becoming one of the mainstream air conditioning suppliers for electrification of public transport in Shenzhen. Known for high stability and energy-saving technology, our products enjoy a good reputation in the industry, leading the development of electric air conditioning industry. These products are applied to huge transit systems in Shenzhen, Shanghai, Guangzhou, Tianjin, Dalian, Sanya, Changsha, Nanchang and other major cities, contributing to energy saving and emission reduction of bus electrification.



Shanghai Pudong
Bus Company



Shenzhen Eastern
Bus Company



Shenzhen Double-
decker Bus in



Zhejiang Fenghua
Bus Company



Shenzhen Western
Bus Company



Shenzhen Metro Line 14



Suzhou Metro Lines 2 and 4



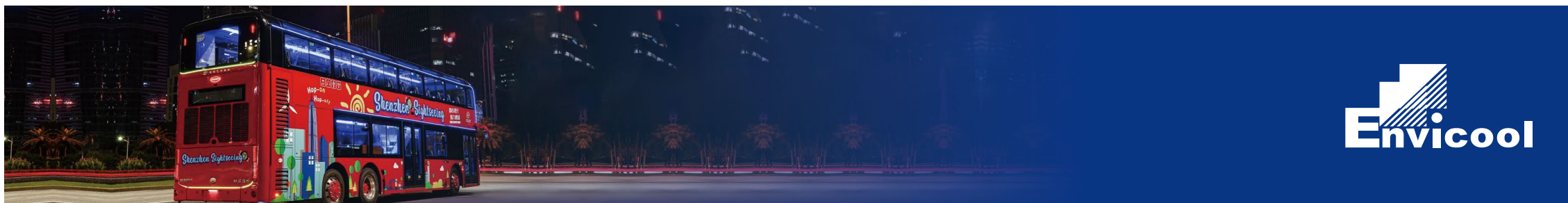
Wuxi Metro Line 4



Shanghai Metro Line 16 and 18



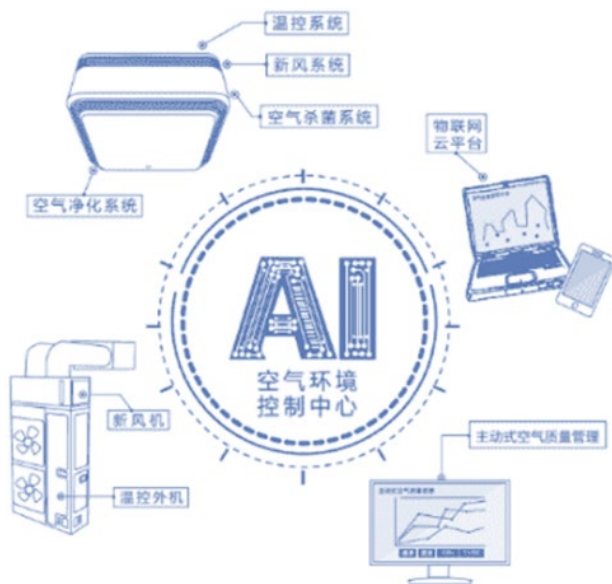
Shanghai Metro Line 8



Integrated Management of Indoor Air Environment

Based on the concept of “Healthy Air Environment for Human Settlements,” Envicool provides solutions and products to address indoor air temperature and humidity, particulate pollution, chemical gas pollution, oxygen-demanding pollution, and space odor, to provide a high-quality indoor air environment and create a better new life.

We create EBC series products and initiate an air environment machine integrating temperature control, fresh air, air sterilization, air purification and air monitoring. Recommended by multiple platforms as a new category, EBC series products use big data, AIOT, and high-precision sensor technology to monitor indoor air temperature, humidity, PM2.5, formaldehyde, CO₂, and TVOC in real time and achieve adaptive intelligent operation by calling and adjusting functional modules.



A senior high school in Shenzhen



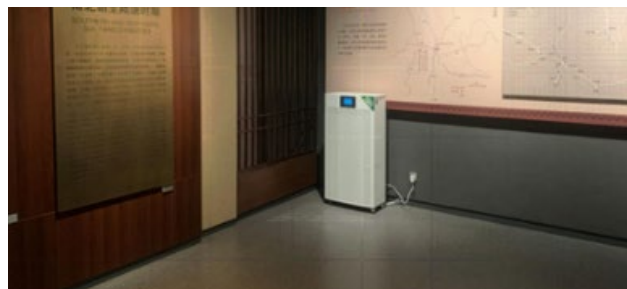
Business School in a university in Sichuan



A foreign language school in Shenzhen



Case of EBC portable sterilization and purification machine



Case of EBC portable sterilization and purification machine



Case of EBC sterilizer and deodorizer



Environmental

To Be a Practitioner of
Green Development

Our Progress

- Envicool Technology, Suzhou Envicool, Hebei Envicool, Guangdong Envicool, and Envicool Healthy Environment have all passed the certification of **ISO 14001:2015 Environmental Management System**;
- The total greenhouse gas emissions (CO₂e, Scope 1 and Scope 2) of Envicool in 2023 reached **9,960.17** tonnes;
- Envicool consumed **120,078.25** tonnes of water in total in 2023.

Supporting UN Sustainable Development Goals (SDGs)



Environmental Management System

Envicool promotes systematic management and construction based on environmental management system certification. Envicool Technology, Suzhou Envicool, Hebei Envicool, Guangdong Envicool, and Envicool Healthy Environment have all passed the certification of ISO 14001:2015 Environmental Management System.

In addition, Envicool has obtained the *Environmental Impact Assessment Report* for all construction projects in accordance with the *Law of the People's Republic of China on Environmental Impact Assessment* to ensure environmental compliance.

Case: Improving the environmental management of infrastructure projects

As the business continues to expand, Envicool has continuously seen an increase in infrastructure construction projects in recent years. To ensure continuously reduced impact of infrastructure on the environment, Envicool has developed comprehensive procedures for full life-cycle management.

- Prepare the *Soil and Water Conservation Scheme* for the construction process according to laws and regulations, submit it for approval as required, implement it after approval, and carry out inspection and rectification over the implementation of the *Soil and Water Conservation Scheme*.
- Discharge sewage and storm water generated from construction projects according to government directions. According to the government's requirements for the construction process, urge the construction contractor to implement the construction dust reduction measures, set up vehicle cleaning facilities, and clean the departure vehicles to prevent vehicles from polluting municipal roads.
- Comply with suspension orders imposed by government environmental controls.
- Supervise the construction contractor to transport construction wastes according to regulations.

Green Operation System

Strengthening the Efficient Utilization of Resources

Envicool has formulated the *Regulations on the Management of Water, Electricity and Paper*, advocated the new fashion of economy, and enhanced the good sense of saving “water, electricity, and paper” in all employees, helping them to develop good economy behavior.

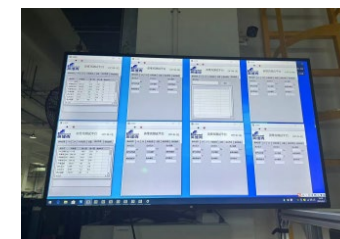
Improving the PUE

Currently, Envicool's major energy consumption lies in electricity and gasoline.

In terms of optimal use of electricity, we continuously reduce the greenhouse gas emissions from electricity consumption by improving the PUE and optimizing the power supply structure. Through the energy consumption management of MES, we make reasonable use of the power peak-valley difference, and heat large energy consumers (e.g., brazing furnace) at the valley-peak period.

In Suzhou, we completed 100% switch from manual testing to automated testing and optimized specific test items.

Gasoline is mainly used in logistics distribution. We arrange the production in a factory near the location of customer requirements, thus reducing logistics distance and costs.



Improving the WUE

Envicool carried out the circulating water flush testing project. After the flush testing, residual water is recycled for cycle tests to reduce the water discharge after flushing. The project saved 7,500 tons of water per year, and was promoted in Shenzhen Factory, Suzhou Factory and Zhongshan Factory in 2023. It will cover South China Base and Central Plains Base to further improve the WUE.

By renovating the rain test chamber, Hebei Factory saves 1,080 tons of water per month and 12,960 tons of water per year.

In terms of domestic water, we set up an automatic water-saving flushing device in the restrooms to save 100 tons of water each year.

Promoting the Paperless Office

With the help of information-based work, Envicool promotes the paperless innovation project in jobs. Zhongshan Base reduces the use of A4 paper by 200,000 pieces per year, thanks to automated test upgrade, equipment online operation, centralized process procurement, and MES system optimization.

With respect to paper recycling, we conduct daily supervision over the use of paper and have signed agreements with certified recycling companies to recycle and screen waste paper for reuse every day.



This project saves

7,500 tons
of water per year

Save

12,960 tons
of water per year



Reduce the use of A4
paper by

200,000 pieces
per year

Compliant Disposal of Waste Materials

In terms of waste management, we have formulated the *Hazardous Waste Management System*. The user departments shall collect the containers containing hazardous chemicals and the items contaminated with hazardous chemicals, and store them in special containers. Up to a certain amount, they shall be handed over to the person in charge of the disposal of hazardous wastes in the Administrative Services Department. When their hazardous wastes are stored to a certain amount, each department shall fill in the *Warehousing Entry for Hazardous Wastes* to go through the procedures. The warehouse keepers shall check the storage container for any damage or leakage, and check the product name, specification, model, and quantity before acceptance. They shall register the *Receiving and Distribution Logs of Hazardous Wastes*, and carry the hazardous wastes to the storage.

We have developed a management procedure document *Hazardous Chemicals Control Procedure* for hazardous chemicals, which is mainly for managing the warehousing entry, storage, receiving, and scrapping of hazardous chemicals.



Social

To Be a Conveyor of Public Welfare Value

Our Progress

- In 2023, the number of employees in Envicool was **3,863**, with an annual training attendance of **49,665**;
- Envicool actively promoted the review and management of conflict minerals, and **no violations occurred** throughout the whole year.

Supporting UN Sustainable Development Goals (SDGs)



Customer Satisfaction

Providing First-class Quality Products

Envicool makes “Quality First” the core of its corporate culture. With the goal of “zero defect”, we improve the quality organization structure, promote the quality improvement of all staff in routine work, and integrate quality awareness and methods into routine work through “quality training” and other ways. Little efforts every day will be rewarded with continual improvement.

Consolidating the Quality Management System

In 2023, Envicool further improved the organizational structure of quality management, and set up a Quality Management Committee to coordinate and plan our quality management. Members of the Quality Management Committee are heads of each business unit. They have strengthened the quality work of the chief responsibility system, and promoted quality management to a new level. All business units have further strengthened their quality awareness.

Meanwhile, we realize the systematization and standardization of quality management and optimization through relevant systems:

PLM (product lifecycle management) system

realizes the management from product creativity, planning and design, and manufacturing to after-sales service support, thus ensuring the centralized storage and consistency of all product-related information including design drawings and engineering documents;

MES (manufacturing execution system)

undertakes the delicacy management of the SAP system for production, enabling the full process control and traceability from the production planning. It has been deployed in Shenzhen, Zhongshan, and Suzhou manufacturing bases.



Promoting Quality Lean Improvement

In 2023, Envicool carried out 51 quality improvement projects, aiming to further improve quality performance.

We have actively promoted lean management for quality improvement, and realized an overall improvement in quality performance through lean production, focusing on details, and trickling efforts.

In addition, through the research and application of cable processing technology, we have improved the wiring efficiency of the unit by about 35%, while greatly shortening the production wiring man-hour. We have carried out activities to improve the total process efficiency, eliminating any waste and unnecessary actions in the process, which has increased the input-output ratio by about 15%, and optimized the work efficiency and product quality.

We also have initiated a proposal campaign for the improvement of production operations, where employees can submit proposals by scanning the QR code of the rationalization proposal, and the responsible unit shall reply with the improvement plan and time. After the management reviews the validity of proposals, a closed loop shall ensue and the proposer shall be rewarded. In 2023, we received more than 940 proposals from Shenzhen, Suzhou, and Hebei factories, and completed the closed-loop processing.

Meanwhile, we have actively promoted the system review at the NPI stage, regularly summarized the process of key products, formed a case, and improved the quality of new product introduction progressively.

Through zero-defect quality improvement and quality method training with full participation, we have formed QCC improvement project topics, and planned improvement activities according to the principles of PDCA to upgrade product quality.

We carried out
51
quality improvement projects

We received more than
940 proposals
from Shenzhen, Suzhou, and Hebei factories in 2023

Case: Boosting production automation and facilitating product quality improvement

Envicool 5G+ Intelligent Digital Workshop has been established in Zhongshan. Based on 5G+ Industrial Internet and digital technology, Envicool carried out intelligent transformation of production equipment and introduced high-precision testing equipment including ultrasonic defect detection, flow resistance testing, laser-based flatness detection, and helium leakage detectors. In addition, with the help of 5G+ digital intelligent technology, every product is 100% traceable.



Intelligent manufacturing production project

In 2023, Envicool continuously improved the automation of production, testing, and factory logistics based on intelligent manufacturing and in combination with the product and production characteristics. Shenzhen factory and Suzhou factory have built four automated assembly lines with in-depth integration of IT, advanced manufacturing, automation, communication, and AI technologies.

Automated testing project

Shenzhen, Zhongshan, and Suzhou factories independently developed their automated testing systems to improve product quality in delivery inspection and apply the MES system for data connection. to realize intelligent and digital management of the whole testing process. Meanwhile, the testing efficiency has been increased by more than 30%.

AOI visual inspection project

It refers to optics-based detection of common appearance defects encountered in production. The machine automatically scans the product appearance interface through the camera for automatic inspection, collects images, and compares the detected product appearance with the qualified parameters in the database. Through image processing, the machine detects the defects of the product appearance and displays/marks the defects through the monitor or the automatic sign. The project further improves the inspection capability of the appearance quality of the products leaving the factory.

Ensuring Product Environmental Safety

In accordance with RoHS, REACH and other domestic and international laws and regulations, as well as customer requirements regarding the control of toxic and hazardous substances, Envicool has established toxic and hazardous substances control systems and mechanisms to achieve full coverage of processes including R&D and design control, material introduction, supplier accreditation, procurement control, warehousing control, in-process quality control, monitoring and measurement, nonconformity management, and change management.

Envicool standardizes the supplier management through the following aspects:

- the signing of environmental agreements (e.g. RoHS, REACH) and PCN agreements with suppliers;
- a hazardous substance process assurance system established by the supplier;
- annual third-party testing reports on materials from the supplier;
- corresponding testing reports for material change(s) from the supplier;
- supplier product environmental system audits;
- supplier performance appraisal.

Additionally, we have improved the testing capability of toxic and hazardous substances. The conformity of the material is ensured by suppliers' annual third-party testing reports and internal sampling and testing. We have formulated the *RoHS Sampling and Inspection Operation Guideline* to classify the materials into different hazardous levels with corresponding sampling plans and management requirements.

We are equipped with the XRF spectrometer, liquid chromatograph, etc. Testers with professional training from the equipment factory share the ability to carry out tests according to the latest RoHS standards.

Actively Developing Green Products

Apart from the R&D of equipment and technology, we proactively promote the R&D of environmentally friendly, non-toxic, and safe liquid cooling working medium with no greenhouse gas emission.

In
Guangdong

Our server-specific liquid cooling working medium applied by the liquid cooling system of a data center in Guangdong, with all-organic additives, is free of molybdate, phosphate and other environmentally harmful substances and is in line with national environmental policies;

In
Ningxia

The energy storage-specific liquid cooling working medium applied by the liquid cooling system of a power station project in Ningxia ensures the long-term safe operation of the system and improves resource utilization.

Thorough cleaning before injection ensures the safety of the liquid cooling system and the long-term reliable operation of the liquid cooling working medium. Currently, phosphate-based inorganic cleaners and strong acid and alkaline cleaners are commonly used, which require special recovery and disposal due to large amount of phosphate residue after their application. In September 2023, we started the development of an environmentally friendly and efficient cleaning agent that contains all-organic additives. When the cleaning process is finished, there will be no negative environmental impact after simply adjusting the pH to neutral. Up to now, related tests and examinations regarding the reagent have been completed.



Creating a Quality Culture with Full Participation

Zero-defect Quality Culture Development: Creating value for customers and ensuring customer satisfaction.

The path to quality management begins with a change in mindset. We consistently foster a zero-defect quality culture and raise awareness about the importance of zero defects. Through new employee training, internal company propaganda, and the sharing of excellent practice cases, a consensus that zero defects can be achieved is reached.

We implement a top-level quality management project where the head of each business unit is responsible for quality and leads by example in practicing a zero-defect quality culture.



Improving Customer Service Experience

With a customer-oriented principle, Envicool focuses on product quality and safety with a commitment to providing customers with a complete, safe and sound service experience.

In accordance with GB 50174-2017 the *Code for Design of Data Centers*, GB 50738-2011 the *Code for Construction of Ventilation and Air Conditioning*, GB 50243-2016 the *Code of Acceptance for Construction Quality of Ventilation and Air Conditioning Works*, the *HVAC Engineering Construction Organization and Design Plan*, Envicool chooses the appropriate installation location as required to ensure the energy efficiency, optimized air distribution, and effective performance of the product.

In use

We have established systems such as the *Injection-based Fluorine System Leakage Detection* and the *Prevention and Emergency Management Procedures for Refrigerant Leakage* in use;

During installation

According to the *Environment Health Safety (EHS) Requirements for Engineering Construction Projects*, our employees pay attention to the method of handling heavy objects and wear protective equipment to avoid electric shock, cuts, and other safety accidents during the installation process.

After installation

After the installation process, we organize safety operation training for users on how to prevent electric leakage, and electric shock, and avoid high-rise littering. Furthermore, in accordance with the *Safety Training Procedures for the Use and Maintenance of Products*, we conduct systematic training and assessment to ensure user safety and normal product functioning.

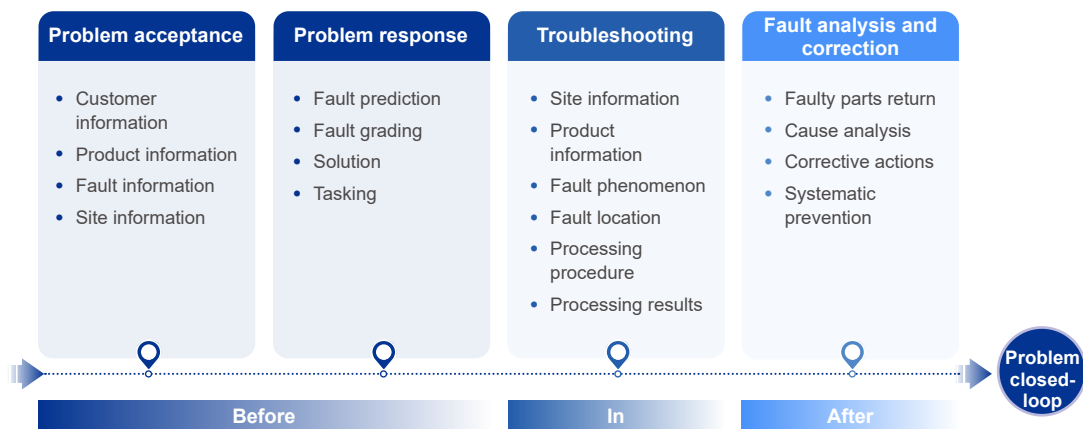


Responding Efficiently to Customer Needs

Customer Communication Channels and Handling Mechanism

Envicool has established multiple communication channels including 400 call center, WeChat official account, work phone, e-mail, and Whatsapp to timely respond to customer needs. We set up a major customer service team to meet customer needs in a targeted manner.

In 2023, Envicool established a customer service evaluation system, which would forward a link to customers upon completion of each work order for objective evaluation of the service quality. We regularly feed customer satisfaction questionnaires and survey summary reports in the management review meeting back to the departments to analyze the reasons for projects failing to meet the target and put forward solutions promptly as a reply to the customer. The corresponding mail records are served as references for improvement in future production and processing/delivery/service, constantly boosting corporate and service quality.



Customer Communication Procedures of Envicool

Envicool follows the principle of internal and external double closed-loops for handling customer complaints, and the fast closed-loop for market problems means solving the on-site problems quickly. Envicool opened multiple channels for feedback and immediate response. Field engineers make efficient online records to report field conditions and the problem phenomenon. The ITR process enables immediate handling of difficult problems on site. With the support and assistance of a dedicated technical team at the back-end and multiple departments including R&D and quality, temporary solutions can be formulated with quick judgment and rapid closed-loop of site problems can be achieved. The temporary closed-loop of site problems enters the internal closed-loop process to allow the company to carry out TRC, MRC dual-path analysis and correction for an ultimate internal complete closed-loop. By doing so, we can prevent the recurrence of the problems and continuously improve product quality and quality management capabilities.

Customer Satisfaction Survey

We regularly conduct questionnaire surveys on customer satisfaction every year and make targeted improvements in response to the findings.

In 2023, the survey showed that the feedback from customers centered on product delivery timeliness and installation portability, failure-cause analysis and response, and timeliness of troubleshooting. We summarized and analyzed 17 customer feedback or suggestions in the customer satisfaction survey and improved them jointly with relevant departments.



First-rate Team

Protecting Employees' Rights and Interests

Protecting the Legitimate Rights and Interests of Employees

Envicool strictly abides by the *Labor Law of the People's Republic of China* and local labor regulations of the operating location and firmly protects the legitimate rights and interests of employees with the formulation of *Social Responsibility Management Policy*.

Our company prohibits any form of discrimination, abuse, and coercion. When formulating and implementing policies related to hiring, wages, benefits, training, promotion, dismissal or retirement, etc., we adhere to the principles of fairness and equality and will never discriminate against or otherwise unfairly treat an employed person due to age, disability, race, gender, sexual orientation, marital status, ethnicity, nationality, religion, or other factors.

In addition, our company strictly prohibits the hiring of minors (under 18 years old) and respects employees' rights to freedom of employment and resignation. We provide female employees with safeguards, such as lactation rooms, pregnancy check-up leave, maternity leave, parental leave, breastfeeding leave, etc.



Building Equal and Diverse Workplaces

Envicool recruits strictly in accordance with the national and local labor laws and regulations, as well as the relevant corporate regulations. We recruit among the public with equal assessment to select the best and sign labor contracts with them. We conduct orientation and training for interviewers and personnel responsible for recruitment to enhance their expertise and establish a more science-based recruitment process. In 2023, Envicool organized three offline interviewer empowerment training with interviewers attending both online and offline and proven to be qualified.

Our company establishes various recruitment channels including internal recommendations, offline advertisements, online recruitment platforms, and campus recruitment. In 2023, we introduced the Recruitment System to improve recruitment data analysis and recruitment efficiency. In the same year, Envicool signed Tripartite Agreements with more than two hundred new graduates and reached the goal of high-quality employment.

Ensuring Workplace Health and Safety

With the "people-oriented" principle, we consider the health and safety of employees as our priority and are committed to building a comprehensive, rigorous, and effective employee health and safety management system to ensure that each employee can work in a healthy and safe working environment.

We have set up a production safety management committee with the chairman as the committee director, head of production safety as the deputy director, and the heads of the relevant functional departments and production bases as the committee members to ensure that the implementation of production safety is in line with the strategic plan.



Improving the Management Systems

In reference to ISO 45001:2018 standard, our company has been continuously improving the occupational health and safety management system and issues a series of safety systems, including the *Occupational Disease Hazard Detection and Evaluation Management*, the *Occupational Health Operation Procedures for Occupational Disease Hazard Prevention and Control Position*, the *Occupational Health Guardianship and Records Management*, the *Occupational Disease Hazard Warning and Notification*, the *Publicity and Training for Occupational Disease Prevention and Control*, and the *Occupational Disease Hazard Declaration*, etc., to institutionalize and standardize the focus on employees' health and safety.

Meanwhile, we have employed a third-party occupational health technical service organization with testing qualifications to test the hazardous factors at the work site once a year. On the occasion of new, renovated, and expanded construction projects and technological transformation projects that may generate occupational disease hazards, our company will carry out pre-evaluation of occupational disease hazards, design of occupational disease protection facilities, and evaluation of the effectiveness of occupational disease hazards control according to the relevant requirements.



Safe Working Environment

Noise is generated in the production processes involving electric screwdrivers and welding torches. In terms of protection, we have reduced noise impacts by distributing labor insurance supplies such as earplug for every employee working on related posts. On the other hand, we have provided noise-canceling solutions including low-noise electric screwdrivers and high-frequency welding upgraded from manual torch brazing.



Emergency Management and Training

We continue to improve the emergency management system and conduct regular fire safety training for our employees.



We have formulated the *Work-related Injury Management Procedures* to standardize the process of work-related injury rectification, risk control and maturity assessment, conducted investigation and analysis and determined the rectification plan and warning training. The *Comprehensive Emergency Response Plan* has been formulated and documented in the Emergency Management Department to record the emergency drills and emergency plans.

Apart from regular fire safety training, we have organized comprehensive emergency drills twice a year, daily inspections by full-time security officers for fire hazard detection, 24-hour patrols by security guards, fire fighting equipment testing monthly by the qualified maintenance units, and daily routine inspections. We have installed automatic alarm/fire extinguishing devices in key locations/places and conducted regular testing and routine inspections for production equipment fire prevention.

In 2023, we organized 24 emergency drills including forklift accidents handling, hazardous material leakage disposal, fire-fighting, and evacuation, thus effectively enhancing our employees' capability of emergency self-rescue.

Facilitating Employees' Smooth Communication

Envicool has formulated the *Open Communication Policy* to establish an all-round and diversified employee communication mechanism, which requires supervisors and managers at all levels to support and respect the communication right of employees through regular and irregular communications, regular employee opinion surveys, the OA platform, etc. Employees shall receive no penalization for engaging in honest communication.

-  HR E-mail (hr@envicool.com)
-  Audit Center E-mail (audit@envicool.com)

When facing improper behaviors such as sexual harassment, discrimination, forced labor, and health and safety risks, employees can complain to department heads, senior leaders or HR, or give feedback through public channels, OA system, and other channels. Our company will close the loop as required by relevant policies to protect the legitimate rights and interests of employees.

In 2023, we conducted two anonymous questionnaire surveys on employee satisfaction among all employees of the Group, carefully analyzed the results, and proposed improvement measures to improve satisfaction and continuously standardize the management with employee feedback.

Giving Full Play to the Labor Union

The Labor Union is an important way to protect the rights and interests of employees and facilitate labor-management communication. Envicool has 4 labor unions across China with 1,433 real-name authenticated members. The work performed by the Labor Union and its achievements in 2023 included:



Envicool has

4

labor unions nationwide



1,433 real-name
authenticated members



Recognize and recommend labor model

One member was successfully selected to win the Shenzhen May Day Labor Medal.



Obtain employee support fund

An employee support fund of 300,000 RMB was obtained to support those in financial difficulties, with work-related injuries, and those in need of care.



Assist management standardization

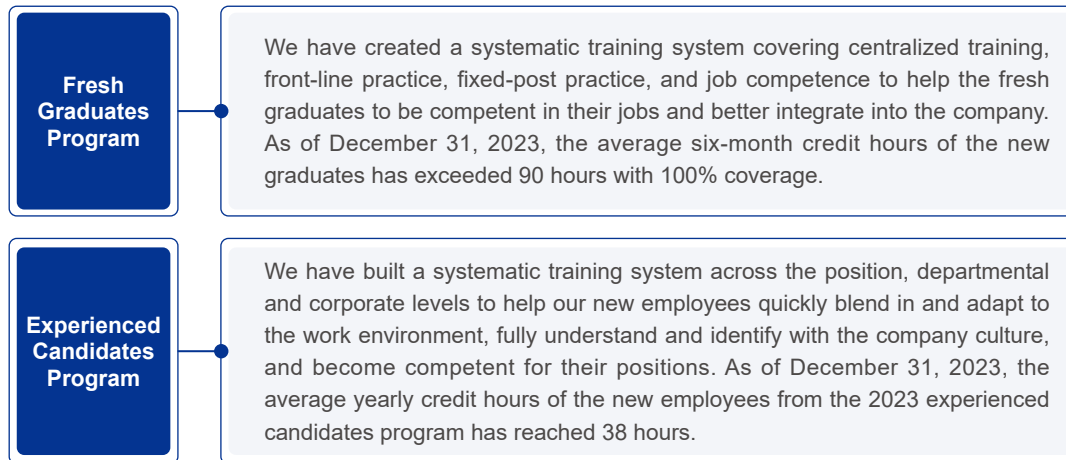
The union assisted our company in the review and improvement of two important rules and regulations. It facilitates our company to upgrade its standardized management, promote harmonious and stable labor relations, and protect the legitimate rights and interests of employees.

Boosting Continuous Employee Development

We focus on employee training and development and have established a refined training development and promotion incentive mechanism, which aims to unleash the potential of employees and advance their expertise and comprehensive quality. Through systematic training programs and personalized career planning guidance, we provide employees with various learning opportunities and broad development space to help them achieve self-worth and grow with the company.

Improving Employee Training System

Envicool has established the *Training Management System* to categorize the training into new employee orientation training, pre-job training and on-the-job training. All departments conducted research on training needs and formulated annual training plans according to their development goals and employee competency and promoted the implementation of the plans.



We tailored training programs for different production line posts at all levels and their responsibilities:



In 2023, We organized 288 online skill training courses for production employees, with an attendance of 7,221 and a total training hours of 9,678.5.

Building an Equitable Development System

Envicool takes the quality model as the core to build the human resources ability development system. The open and transparent rank standards and job requirements unlock the development potential of employees and facilitate the simultaneous progress of individuals and corporation.

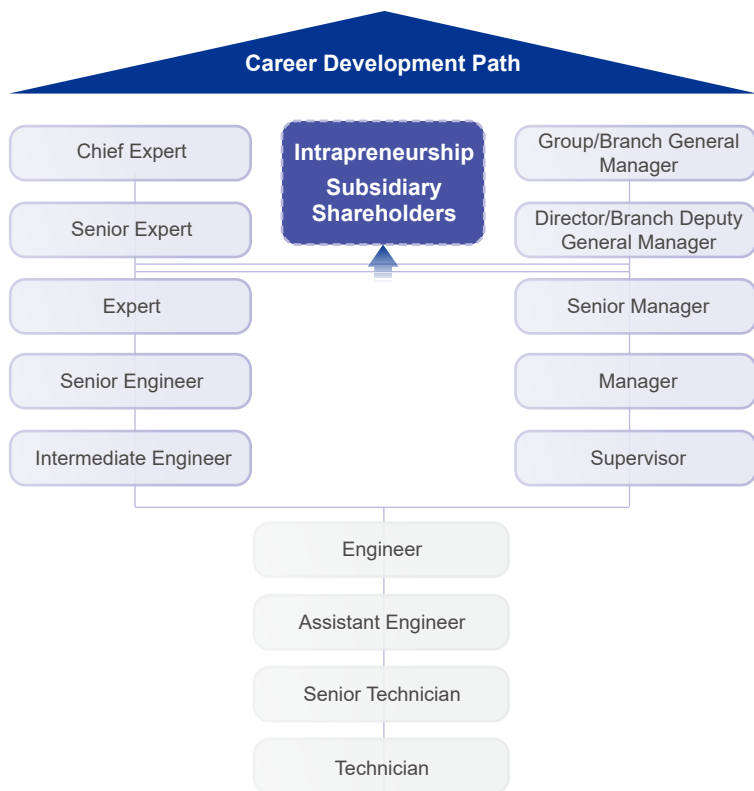


Diagram of Career Development Path for Envicool Employees

Enhancing Employee Performance Incentives

Envicool set the *Performance Management Measures* to strengthen the value evaluation system oriented by responsibility results. By improving employees' performance, we sustainably boost the overall corporate performance, facilitating the standardization and institutionalization of daily management and communication.

We manage the fairness of the performance appraisal as an important matter and encourage the employees who do not agree with the appraisal evaluation to initiate communication with his/her supervisor or the Human Resources Center. We will handle the matter and feed back the results to him/her.

We grant stock options to qualified recipients. As of 2023, 424 individuals have received stock option incentives from Envicool.

As of 2023

424 individuals

have received stock option
incentives from Envicool



Advancing Work-life Balance

We are committed to creating a happy and harmonious working environment for employees, providing generous welfare benefits, and organizing colorful cultural and sports activities to ensure the work-life balance of employees and improve their sense of well-being. We formulated *Employee Welfare Management Procedures* to regulate the normal management of related benefits distribution and activities organization.



Responsible Procurement

Improving Supplier Responsibility Assessment

Responsibility management between us and our suppliers is pivotal in achieving business objectives and fostering stable collaborative partnerships. Envicool has established the *Supplier Management Process*, which requires suppliers to follow all applicable laws, regulations, and norms and put higher value on internationally-recognized human rights, business ethics, and social and environmental responsibilities.



Introduction and Accreditation of Suppliers

Based on the nature of suppliers, Envicool classified our suppliers into suppliers of production materials and non-production materials. During the supplier accreditation phase, we required suppliers to conduct a self-evaluation according to the *Supplier Accreditation Report*. Once the self-evaluation is passed, Envicool would organize relevant personnel to conduct an on-site audit. To be recognized as official suppliers, suppliers must meet business, quality systems, and environmental and occupational health standards.

| | | |
|--|---|--|
| System management certification | Child labor and underage labor | Discrimination, punishment, and forced labor |
| Freedom of association and communication | Working hours, remuneration, and benefits | Business ethics |
| Health and safety | Environmental protection | Environmental protection management |
| Conflict-free mineral | Energy conservation, emission reduction, and carbon emissions | Business continuity |

Main Topics of Supplier CSR Accreditation

Supplier Performance Assessment

Envicool conducts assessment and quantitative evaluation regarding suppliers' daily performance from five aspects, namely, T&S (Technology & Service), Q (Quality), D (Delivery), and C (Cost). Supplier performance is recorded in "Envicool Supply Chain Management (SCM) System", where suppliers can view their scores in real time for delivery, quality, and overall performance. We conduct annual offline assessments of suppliers' technical and service performance.

After reviewing the supplier performance assessment report, we forward the data to suppliers through the SCM system or via e-mail and send the issues outlined in the corrective action form to the suppliers. In case of any disputes regarding the performance assessment data, the suppliers can appeal and communicate with Envicool. Upon receiving the issues outlined in the corrective action form, each supplier must provide a correction plan as required and submit it to the Procurement Accreditation Department. The Procurement Accreditation Department then organizes various departments to track and supervise the implementation of the suppliers' correction actions.

Developing a Transparent Value Chain

Envicool is committed to creating a fair partnership. We have formulated the *Envicool Honesty and Integrity-based Cooperation Agreement*, which stipulates that there shall be no improper financial transactions such as kickbacks, commissions, or labor fees between the company and the suppliers. Suppliers shall not provide disguised bribes to our business personnel in any form or name.

Case: Corruption Report Channel

Audit Department's complaints e-mail: audit@envicool.com

Strengthening Conflict Mineral Management

Envicool attaches great importance to issues regarding conflict minerals. We guarantee to purchase materials only from suppliers who are environmentally and socially responsible and communicate our stance to the suppliers to promote the implementation of conflict mineral policies and ensure that the metals used in raw materials do not come from conflict areas. We will not tolerate any activities that may exacerbate conflicts, environmental degradation, or human rights violation, nor will we seek profit from or provide assistance to such activities in any way.

In terms of supplier introduction, we establish a *Supplier Declaration of Conflict-free Metal Procurement* and conflict mineral management guidelines. Suppliers must submit a Conflict Minerals Reporting Template (CMRT) questionnaire, pass the audit, and sign the declaration before entering Envicool's supplier database.

For suppliers already working with us, we actively conduct regular audits and training to continuously improve supply chain transparency and traceability.

2023

No

violations found



Public Welfare & Charity

Supporting Education Development

Envicool has always regarded supporting education development as a strategic focus of its corporate public welfare programs. By establishing scholarships and fostering an atmosphere of respect for teachers and education, we have carried out various programs to cultivate talents for the development of enterprises and the industry.

In 2023, we collaborated with Xi'an Jiaotong University, Huazhong University of Science and Technology, and Hunan University to promote industrial talent cultivation and industry-education-research cooperation through special scholarships and other forms. By doing so, we have translated our commitment to supporting education development into practical actions.



Contributing to Rural Revitalization

Promoting comprehensive rural revitalization has become a key focus of rural economic development in the new era. Envicool has participated in the cause through various ways to help achieve this goal as soon as possible.

On February 15, 2023

Envicool made a charitable donation to the Zhongshan Branch Red Cross Society of China to support rural revitalization and promote common prosperity.

On August 21, 2023

Envicool participated in the “Guangdong Poverty Relief Day” event initiated by the Shenzhen Longhua District Charity and made a charitable donation to support rural revitalization and promote common prosperity.



Governance

To Be a Trustworthy Issuer

Our Progress

- The number of independent directors accounts for more than **30%** of the total with the number of female directors exceeding **40%**. The diversity of the Board of Directors has been further enhanced;
- In 2023, there was **no violation** in internal audits;
- As of the end of 2023, we have owned **1,026** patents in force, including **59** invention patents;
- We have been certified to **ISO 27001**, the world's best-known standard for information security management systems (ISMS).

Supporting UN Sustainable Development Goals (SDGs)



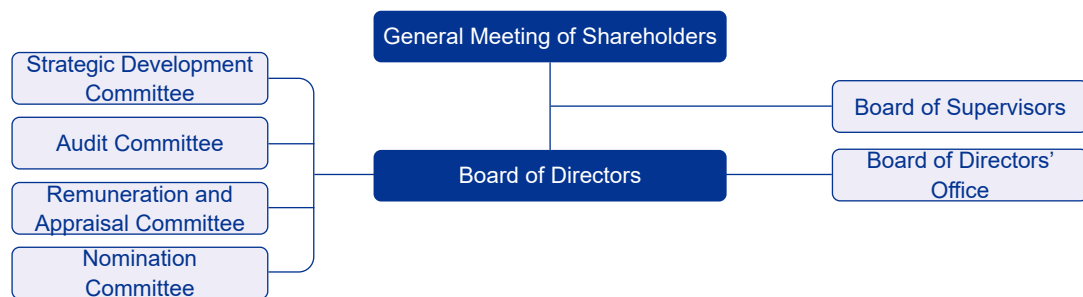
Corporate Governance

In line with laws and regulations currently in effect, including the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Rules Governing the Listing of Shares on Shenzhen Stock Exchange*, and the *Self-Regulatory Guidelines No. 1 for Companies Listed on Shenzhen Stock Exchange—Standardized Operation of Companies Listed on the Main Board*, we have established a corporate governance structure consisting of the General Meeting of Shareholders, Board of Directors, and management and developed a clear and balanced corporate governance mechanism with clear rights and responsibilities to ensure the fairness and rationality of corporate governance decisions.

Improving the Corporate Governance System

Envicool has set up a governance structure of “General Meeting of Shareholders, Board of Directors, Board of Supervisors, and Management.” The General Meeting of Shareholders, as the highest authority, decides on major matters related to our operation and management. The Board of Directors is elected by the General Meeting of Shareholders. As the decision-making body for the operation and management, it upholds the interests of the company and all shareholders, and is responsible for making decisions on our development goals and major operation activities.

We have formulated the *Articles of Association of Shenzhen Envicool Technology Co., Ltd.* to regulate the behavior of the Board of Directors and its members, ensure the democratization and scientification of our decision-making, and cater to the needs of establishing a modern enterprise system. The Board of Directors is composed of nine directors, of which three are independent directors. The Board of Directors sets up the Strategic Development Committee, Audit Committee, Remuneration and Appraisal Committee, and Nomination Committee.



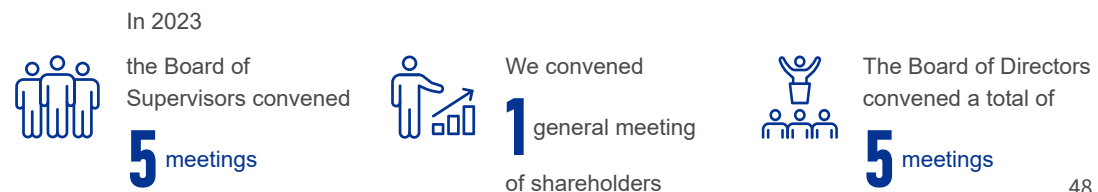
Governance Structure of Envicool

The Board of Directors strictly adheres to the provisions of laws, administrative regulations, and rules and regulations. Centering on the company's development strategy and business objectives, and with a responsible attitude towards the company and all shareholders, the Board of Directors loyally and diligently fulfills its duties, solidly carries out daily work, makes prudent decisions, and oversees the effective implementation of deliberated matters. It guides the management in carrying out various tasks, and actively plays its core role in corporate governance, thereby continuously improving corporate governance, and ensuring the smooth operation and sustainable development of the company. The Board of Directors continuously improves our rules and regulations and urges its members and management to strictly adhere to them. It continues to optimize our governance structure, and enhance standardized operation, thereby providing a fundamental guarantee for our development. It also establishes a more standardized and transparent operating system for a listed company, ensuring the healthy, robust, and sustainable development of the company.

In strict accordance with the requirements of applicable laws and regulations, including the *Company Law of the People's Republic of China*, the *Self-Regulatory Guidelines No. 1 for Companies Listed on Shenzhen Stock Exchange—Standard Operation of Companies Listed on the Main Board*, the *Articles of Association*, the *Rules of Procedure of the Board of Directors*, and the *Independent Director System*, the independent directors independently and diligently fulfill their duties, actively participate in relevant meetings, and carefully deliberate on proposals put forward by the Board of Directors. In terms of company-related major matters and issues that require independent directors' input, they fully express their opinions and provide advance recognition or independent opinions as required, and they have never raised any objections to the matters deliberated by the Board of Directors.

The company sets up a Board of Supervisors. The Board of Supervisors convened five meetings in 2023 and fully fulfilled its duties.

In 2023, we convened one general meeting of shareholders and a total of five meetings of the Board of Directors. The convening and procedures, qualifications of attendees, voting procedures, voting results, and resolutions of the meetings all comply with relevant laws and regulations, as well as the *Articles of Association* and the *Rules of Procedure of the Board of Directors*.



Members of Board of Directors and Their Roles in Professional Committees

| Member | Background | | | Roles in Professional Committees | | | |
|-------------|------------|---|---|----------------------------------|---------------------------------|--------------------------------------|----------------------|
| | Gender | Position | Expertise | Audit Committee | Strategic Development Committee | Remuneration and Appraisal Committee | Nomination Committee |
| Qi Yong | Male | Chairman and General Manager | Expert in precision temperature control with rich experience in enterprise management | - | ☆ | - | √ |
| Wei Lichuan | Male | Director | Expert in precision temperature control | - | √ | - | - |
| Ou Xianhua | Male | Director, Deputy General Manager, and Secretary of Board of Directors | With rich experience in precision temperature control and investment | √ | √ | - | - |
| Ye Guiliang | Male | Director and Chief Financial Officer | Expert in finance | - | - | √ | - |
| Xing Jie | Female | Director | With rich experience in industry, investment, merger, and acquisition | - | - | - | - |
| Zhu Xiao'ou | Female | Director | With rich experience in investment, merger, and acquisition | - | - | - | - |
| Qu Ruizheng | Female | Independent Director | Expert in information and communication | √ | √ | - | √ |
| Wen Fang | Female | Independent Director | Financial expert, accounting professor, and certified public accountant | ☆ | - | ☆ | - |
| Tian Zhiwei | Male | Independent Director | Expert in investment, merger, and acquisition | - | √ | √ | ☆ |

Note: ☆ represents the committee convener, √ represents the committee member, and - represents no position holding.



Giving Full Play to the Value of Professional Organizations

The Board of Directors sets up four professional committees: Audit Committee, Remuneration and Appraisal Committee, Nomination Committee, and Strategic Development Committee. The working system of each professional committee is separately formulated by the Board of Directors.

In 2023, the Board of Directors and its professional committees worked in an orderly manner according to the provisions of the company's *Articles of Association* and the implementation rules of professional committees. All directors diligently fulfilled their duties and actively offered suggestions and strategies for the company's operation and development to facilitate rational decision-making by the Board of Directors:

Audit Committee

This committee reviews the company's regular reports and internal control reports, as well as audit reports and work summaries submitted by external renewed accounting agencies and internal audit institutions. Its resolute defense of audit independence in the aforementioned work is crucial for safeguarding transparency and credibility of the company and is a foundation for ensuring the scientific and rational decision-making of the Board of Directors based on comprehensive and accurate information. Its prudent and professional review and guidance effectively contribute to our robust operation and long-term development.

Remuneration and Appraisal Committee

This committee focuses on reviewing the remuneration program for directors, supervisors, and senior officers of 2023, while also covering important matters such as equity incentive plan. It conducts thorough discussions and detailed analysis of the remuneration program and incentive plan. Based on our operation and the market environment and combined with the competition in the industry and future development needs, it offers objective and fair suggestions for various proposals, which not only conform to market rules but also ensure internal equity. This establishes a robust foundation for attracting and retaining talents, and accelerates the realization of the company's strategic objectives.



Nomination Committee

This committee continuously monitors and is committed to the selection, recommendation, and appointment of directors and senior officers of the company. For instance, it conducts thorough background investigations and qualification assessments of potential candidates, and collects and integrates both internal and external talent resources, which provides adequate preparation for potential personnel adjustments or new appointments in the future.

Strategic Development Committee

This committee formulates and researches long-term development plans and significant strategic decisions-involved matters related to the company.

Facilitating Transparent Communication and Exchanges

Committed to managing investor relations, Envicool actively establishes a multi-channel and multi-level communication platform between the company and investors to strengthen the communication and exchanges with investors, improve their understanding and recognition of the company, and promote long-term, robust, and positive interactions with investors, thereby establishing a positive image in the capital market.

Always attaching great importance to the management of investor relations, we have established communication channels and mechanisms primarily consisting of online interactive platforms, investor hotlines, and e-mail to answer investors' questions in daily work. We designate the Secretary of the Board of Directors as the direct person in charge of investor relations management affairs to coordinate our relations with investors, receive research visits from institutional investors, answer their inquiries, provide disclosed information, and organize and carry out daily management of investor relations. In addition, we designate the *Securities Times*, *China Securities Journal*, *Shanghai Securities News*, *Securities Daily*, and *cninfo* (www.cninfo.com.cn) as the newspapers and website for our information disclosure to ensure that all shareholders can promptly learn about our significant matters and have equal access to information, thereby safeguarding the right to know of the shareholders, especially minority shareholders.

In 2023, the Board of Directors strictly adhered to relevant regulations on information disclosure, and completed the disclosure of regular reports on time according to the guidelines for information disclosure formats issued by the China Securities Regulatory Commission and the Shenzhen Stock Exchange, as well as other relevant regulations. Based on the company's actual situation, the Board of Directors faithfully fulfilled its obligation of information disclosure by publishing temporary announcements such as resolutions of the General Meeting of Shareholders, Board of Directors, and Board of Supervisors and significant events in a true, accurate, complete, fair, and timely manner. This ensured that investors could keep up to date with the company's major events, thereby protecting the interests of investors to the greatest extent.



Responsible Operation

We are committed to following relevant laws, regulatory requirements, industry norms, and organizational standards and advocating for the establishment of a more transparent, efficient and objective, and fairer management environment. We have formulated a compliance management policy to strengthen the standardization and institutionalization of governance and internal controls, ensuring that every employee must always be honest and upright when handling issues without compromise, no matter where they are.

Ensuring Compliance Operation and Management

Compliance Management

According to relevant national and international laws, we have formulated *Envicool Code of Business Ethics*, *Policy for Signing Honesty and Integrity Agreements*, *Management Policy for Sensitive Posts*, and *Measures for Control and Management of Non-conflict Minerals* to improve the management in terms of operation compliance and social responsibility compliance. In addition, we make efforts to promote compliance management of litigation, contracts, engineering construction project tendering and bidding, export trade, technology, intellectual property and other aspects. By doing so, we continuously enhance the internal compliance governance structure, precisely define the responsibilities of each department in this regard, and explore and optimize the compliance management system.

We actively monitored and studied the latest external laws, regulations, policies, and trends, and took the following responsive measures accordingly:



Establishing a policy trend monitoring system

We endeavored to promptly grasp any changes in national policies through a policy trend monitoring system. This involved subscribing to government notifications, closely following policy interpretation articles, and reading industry reports. We leveraged various network platforms, such as policy and regulation databases and websites of industry associations, to subscribe to relevant policy information. And we also actively monitored updates on websites, official accounts, and other platforms of authorities, law firms, associations, and experts.

Strengthening information exchanges and sharing



We also stayed abreast of policy trends and developments through increasing information exchanges and sharing activities, such as organizing industry seminars and association meetings. In addition, we established cooperative relationships with other enterprises and government agencies, as well as experts and scholars. We actively participated in forums, exchanges, seminars, and other events organized by governments and other external groups to gain access to more information and professional advice.



Strengthening policy research

In addition to staying abreast of policy changes, we conducted in-depth research on new policies to understand their influences, objectives and goals, so as to analyze the influences more accurately. Moreover, we hired professionals, provided training for employees and communicated with external partners (such as consulting lawyers) for information exchanges.

Strengthening internal professional training



We purchased access to PKULAW DATABASE and organized our employees to engage in irregular study sessions. We organized specialized compliance activities and internal learning and exchange meetings, such as quarterly and monthly exchange meetings, based on the latest laws, regulations, policies and trends, and internal thematic activities to enhance employees' awareness of compliance.

Internal Control Audits

We have established an Audit Department responsible for developing the annual internal audit plan, which is implemented after approval by the Audit Committee of the Board of Directors. The Audit Department reports to both the Chairman and the Audit Committee and is subject to their supervision. The Audit Department has established a "Three Lines of Defense" mechanism: The first line is to manage risks associated with the products and services provided to customers; the second line is to provide professional support and supervision and raise reasonable doubts regarding risk-related matters; and the third line is to provide independent and objective confirmation and suggestions for all matters related to objectives. The Audit Department audits all business operations every year, including canteens, vehicle management, and logistics transportation. Audit items are categorized into four types: annual routine audits, audits of long-term key projects, emergency audits, and business support audits, with the audit scope covering all branches nationwide.

We have formulated an *Internal Audit Process*, which stipulates that the Audit Department should issue an audit notification three days before conducting a formal audit to notify the audited organization or department. After an audit, the Audit Department solicits feedback from the audited organization or department regarding the audit findings and suggestions to ensure the objectivity and fairness of the audit. For important audit items, the Audit Department may arrange for follow-up audits to check on the correction or rectification progress of the audited organization based on audit opinions or suggestions. Auditors may conduct additional audits directly upon receiving an audit notification in cases where our assets are facing significant risks, there is evidence or suspicion of major fraud, or there are major reports, or when specifically instructed by the leadership.

In 2023, we conducted compliance audits and did not find any violations.

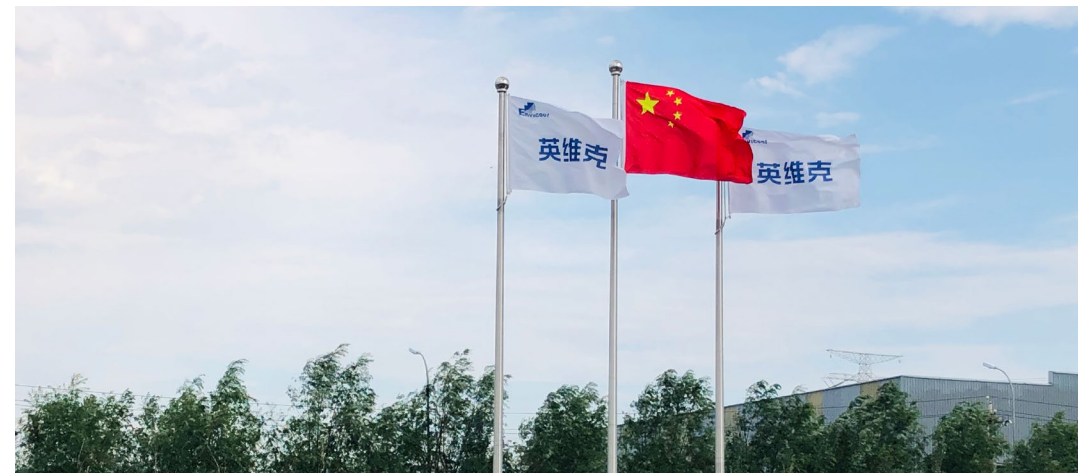


Policy

Overview

Scope

| | | |
|--|--|--|
| Management Policy for Follow-up Rectification of Audited Matters | This policy facilitates the efficient implementation of audit suggestions and standardizes the rectification process, establishing closed-loop management for the entire process from problem identification to rectification. | Applicable to relevant personnel from departments of headquarters and subsidiaries of Envicool. |
| Internal Audit Policy | This policy defines the responsibilities of internal audit institutions and auditors, improving the quality of internal audits. Envicool has established an Audit Department, which is responsible for Envicool's internal audits. | Applicable to internal institutions, holding subsidiaries, and major invested companies of Envicool. |
| Internal Audit Process | Internal audits are designed to promote Envicool's operation, management, and economic efficiency, identify problems in Envicool's management system, and oversee the effective implementation of various procedures and regulations. | Applicable to internal institutions, holding subsidiaries, and major invested companies of Envicool. |
| Internal Audit Manual | This manual standardizes the internal independent audits among auditors, enabling them to perform their duties according to unified standards. It helps to enhance the quality of audits, improve professional skills, and raise overall work performance. | Applicable to internal institutions, holding subsidiaries, and major invested companies of Envicool. |
| Code of Professional Ethics for Auditors | This code improves the skills and abilities of auditors and defines the responsibilities of internal audit institutions and auditors. | Applicable to internal audit institutions and auditors of Envicool. |



Tax Compliance and Risk Management

Attaching great importance to tax governance and transparency, we have optimized tax management processes through report and statement development, tax forecasting, and the identification of tax risks. We integrated a list of tax risks and regularly checked against this list to rule out risks for prompt feedback and correction. We started special tasks and launched projects to strengthen risk management. In addition, we organized thematic meetings on export tax rebate policies to standardize business practices.

We conducted regular training for tax-related personnel, which covered how tax planning can support the implementation of enterprise strategies, practical tax management for small enterprises upgrading into enterprises above designated size, tax compliance and risk management in the latest regulatory environment, foreign exchange and tax enabling training for cross-border enterprises in Shenzhen, and new trends in cross-border business operations and global tax compliance.

Based on the tax declaration in 2022, Envicool obtained the tax credit rating of Grade A from the tax service. In March 2023, we were awarded an AAA enterprise credit rating (valid for three years) as assessed by China National Credit Information Service Co., Ltd.

Enhancing Business Ethics Constraints

Standardizing Business Ethics Management

We have established the *Envicool Code of Business Ethics* to combat unethical behaviors and promote honest and ethical behaviors, including the ethical handling of substantial and apparent conflicts in employment and business activities. This code covers topics such as anti-bribery, anti-discrimination, conflict of interest, gifts and entertainment, protection and use of the company's assets, as well as intellectual property and confidentiality. The Human Resources Center develops and implements relevant policies and regularly investigates and evaluates their effectiveness. All departments strictly adhere to this code, and every employee has the responsibility to understand and comply with it. Meanwhile, we regularly communicate with employees on professional ethics to ensure that they are dedicated to their duties, honest and trustworthy, fair in handling affairs, and committed to contributing to the society. In case of any unethical behavior by employees, we should promptly stop it and provide relevant education and training.

In addition, we have formulated the *Accountability Management Measures* to define the "red lines" of operation and management, which include but are not limited to abusing authority for personal gain, engaging in illegally connected transactions, failing to fulfill duties diligently, seriously violating financial disciplines, providing illegal guarantees or leases, disclosing confidential business information and intellectual property, causing major accidents or adverse events, and obstructing audits or investigations. These measures promote Envicool's employees to better fulfill their duties, be strict with themselves, practice Envicool's corporate values, and establish good professional behavior habits and qualities.

Promoting Transparent and Standard Operations

We comply with the provisions of the *Anti-Unfair Competition Law of the People's Republic of China*, *Company Law of the People's Republic of China*, *Basic Standard for Enterprise Internal Control*, *Supporting Guidelines for Enterprise Internal Control*, *Interim Provisions on Banning Commercial Bribery*, and *Foreign Corrupt Practices Act* and *Bribery Act* for multinational corporations, and other relevant laws, regulations, and regulatory documents, as well as the provisions of the *Articles of Association*. We have developed a *Management Policy for Anti-fraud and Anti-bribery* to resolutely prevent and combat fraud and bribery to safeguard our good image and reputation, improve long-term early warning mechanisms to govern fraud and bribery, and protect the legitimate rights and interests of the company and the shareholders.

We have formulated the *List of Anti-corruption Risks of Envicool* and issued the *Management Policy for Sensitive Posts*. All "broad procurement-related" operations are considered as high-risk posts prone to fraud. We continuously conduct follow-up audits on businesses within the Supply Chain Center, including supplier introduction, procurement tendering, decoration projects, infrastructure projects, research and development project approval, equipment acceptance, and post-evaluation. According to the applicable documents and authorities of the company, the Audit Department can directly report corruption incidents to independent directors of the Audit Committee.



| Policy | Overview | Scope |
|--|---|--|
| Management Policy for Anti-fraud and Anti-bribery | This policy is aimed at safeguarding our good image and reputation, improving long-term early warning mechanisms to govern fraud and bribery, and protecting the legitimate rights and interests of Envicool and its shareholders. | Applicable to internal institutions, holding subsidiaries, and major invested companies of Envicool. |
| List of Anti-corruption Risks of Envicool | We regularly integrate the list of anti-corruption risks to identify and prevent potential risks. | Applicable to special posts in Envicool. |
| Registration and Management Policy for Gift Reception of Employees | This policy is aimed at maintaining the integrity and self-discipline of employees in external communication and internal operation and management activities. The Human Resources Center is in charge of the gift registration and management. | Applicable to gifts, monetary gifts (currency), securities, and other forms of gifts. |
| Policy for Signing Honesty and Integrity Agreements | This policy is aimed at strengthening the awareness of integrity and self-discipline among employees and promoting professional ethics construction among employees. The Human Resources Center is responsible for the signing of the <i>Envicool Honesty and Integrity Agreement</i> . | Applicable to all monthly-rated and hourly-rated employees of Envicool and its subsidiaries. |
| Management Policy for Sensitive Posts | This policy is aimed at developing a high-quality employee team and creating a clean and honest business atmosphere of “do not have the opportunity, audacity and desire to be corrupt.” | Applicable to Envicool and all subsidiaries and branches. |

Whistleblowing and Whistleblower Protection

To better maintain the corporate governance framework and ensure the healthy operation, we have improved our policies related to whistleblowing and whistleblowers and have established open and transparent channels for communication and whistleblowing. And we have thoroughly illustrated and implemented protection mechanisms for whistleblowers.

In terms of policies, we have formulated a *Reward Policy for Whistleblowing and Accountability Management Measures*, which specifically define the privacy and protection measures for whistleblowers. We ensure that these policies are widely informed and implemented, effectively integrating and embodying the principles of anti-corruption, timely whistleblowing, and timely communication into the operation management.

| Policy | Overview | Scope |
|--|--|---|
| Reward Policy for Whistleblowing | We show no mercy to any rule violations, disciplinary violations, or illegal actions of our employees. Whistleblowers can report to the Audit Center through letters, visits, phone calls, e-mails, and other means. | Applicable to all business operations, leaders, and employees of the headquarters and wholly-owned or holding subsidiaries of Envicool. |
| Whistleblowing E-mail Management Regulations | To provide more whistleblowing channels for employees and ensure sufficient whistleblowing channels, the Audit Center of Envicool has set up a dedicated whistleblowing e-mail. | All reports are properly handled by the Audit Center of Envicool, in conjunction with the Human Resources Center and the Legal Department, based on the nature and severity of the cases. |

In terms of whistleblowing channels

the whistleblowing e-mail, phone number, and visit address are open to the public. We encourage all employees to directly report to the Chairman through various channels and at any time, or directly visit the Audit Center for whistleblowing.



Regarding the whistleblower protection mechanism

we have explicitly prohibited any form of retaliation against whistleblowers by any company or individual. We prohibit any company or individual from suppressing, obstructing, harassing, retaliating against, or framing whistleblowers. Otherwise, we will hold the violators accountable accordingly. Once the behavior constitutes a crime, we will promptly transfer the violators to the judicial authorities in accordance with law. We consider any act of retaliation against the whistleblower as a violation of the “red line”, which will be handled with serious and severe punishments.

As for the whistleblowing response process

we adhere to an open, fair, and transparent approach. Upon receiving a whistleblowing clue, we follow a closed-loop process for handling.

Whistleblowing Channels of Envicool

-  Whistleblowing e-mail: audit@envicool.com
-  Correspondence and visit address: Audit Center, 5F, Building 9, Hongxin Industrial Park, Guanlan Subdistrict, Longhua District, Shenzhen

Whistleblowing Response Process of Envicool

- 1 Analyze the case upon receiving a whistleblowing clue to check whether it is “auditable”; real-name reporting must be audited; contact the whistleblower immediately in case of anonymous whistleblowing, and check whether it can be transferred to a real-name audit.
- 2 Analyze the whistleblowing clue and evidence to determine whether to transfer the case to relevant authorities. If not, the Audit Department will directly dispatch personnel for auditing.
- 3 Establish an audit team to analyze the case, arrange for on-site audits, and investigate the background.
- 4 Interview and verify with the whistleblower after investigation to identify the nature of the case and kindly reply to the original whistleblower if it is found to be a “false accusation.”
- 5 Communicate with the person being reported against, confirm with his/her superior manager and fix a handling scheme after verifying that the whistleblowing case is a fact, and notify him/her.
- 6 Communicate with the Human Resources Department and assist in handling a series of tasks such as dismissal of the person being reported against.
- 7 Report the results of the whistleblowing case to the leaders of the company and follow the latest instructions.
- 8 Communicate with the Legal Department and assist in determining whether to enter into litigation.
- 9 Provide feedback on the investigation results to the original whistleblower and provide appropriate encouragement and rewards.
- 10 Decide whether to inform all employees about the case for warning and education.

Standardizing Intellectual Property Management

Our intellectual property management aims at enhancing the core competitiveness to facilitate market competition and ensure safe and sustainable development. Regarding intellectual property management as a crucial means to drive innovative development, Envicool has established a comprehensive intellectual property management system covering patents, trademarks, copyrights, and trade secrets. As of the end of 2023, we have owned 1,026 patents in force and developed a patent portfolio in over 10 countries worldwide.

Objectives for Intellectual Property Management

- To provide at least **10** intellectual property-themed training sessions for all employees;
- To pass the annual surveillance audit against the *Enterprise Intellectual Property Management*.

We have formulated the *Intellectual Property Management Manual* to clearly define the requirements for our intellectual property management system, management responsibilities, resource management, basic management, implementation and operation, as well as review and improvement.

Attaching great importance to guiding employees to cultivate innovative consciousness, we have established the *Intellectual Property Reward and Punishment Regulations* and set up an intellectual property bonus pool to incentivize outstanding employees and teams to continuously carry out independent innovations, thereby creating an atmosphere of high-involvement innovation.

We have established a relatively complete intellectual property training and capacity building system:

For new employees

Intellectual property training

For professionals

Regular or irregular professional training on intellectual property and sharing of intellectual property information



Third-party Intellectual Property Recognition

In 2023, Envicool obtained the Intellectual Property Management System Certificate issued by Zhonggui (Beijing) Certification Co., Ltd.

the Intellectual Property Management System Certificate

In 2022, Envicool won the title of "National Intellectual Property Advantageous Enterprise" granted by the China National Intellectual Property Administration.

the title of "National Intellectual Property Advantageous Enterprise"

In 2022, Envicool obtained the Certificate of Key Trademarks Protection List in Guangdong Province issued by the Key Trademark Protection Committee of Guangdong Trademark Association.

the Certificate of Key Trademarks Protection List in Guangdong Province

In 2020, Envicool won the title of "Guangdong Province Intellectual Property Demonstration Enterprise" granted by the Guangdong IP Protection Association.

the title of "Guangdong Province Intellectual Property Demonstration Enterprise"

In 2019, Envicool won the title of "Shenzhen Intellectual Property Advantageous Enterprise" granted by the Shenzhen Intellectual Property Administration.

the title of "Shenzhen Intellectual Property Advantageous Enterprise"

Consolidating Information Security Management

Consolidating the Information Security Management System

We have developed a code of conduct that the employees shall “actively comply with information security regulations, report violations and breaches, and disclose information security risks.” We have formulated policy documents, including the *Information Security Management Policy*, *Employee Information Security Management Policy*, *Security Management Measures for Network Access*, *Reward and Punishment Management Regulations of Information Security*, and *Contingency Plan for Disaster Recovery of IT System* to clarify the code of conduct concerning information security, enhance the information security awareness of all employees, and ensure the compliant use of our information system resources. Furthermore, we regularly conduct risk self-assessment and issue an *Information Security Risk Assessment Report*. At present, we have been certified to ISO/IEC 27001:2013, the standard for information security management systems (ISMS).



Taking Multiple Measures to Strengthen Management

In terms of protection measures

we employ a dedicated team with specialized roles to manage and monitor security in real time, ensuring prompt response to any detected abnormalities. Meanwhile, we take the following measures to strengthen the construction of the security defense system and ensure business continuity:

We build a the firewall to isolate external networks, monitor real-time egress traffic, and intercept and alert abnormal traffic detected. Operation and maintenance personnel keep track of the network security status, promptly handle any abnormalities detected, and record logs to ensure that our network remains protected from malicious attacks and intrusions. The users' internet behaviors are controlled.

Encryption software is applied. We encrypt end-users' files in computers. File distribution or decryption shall go through the approval procedures.



Drills



Network egress
protection



Server
protection



Terminal
protection

We conduct regular emergency drills related to network, virus, data backup and restoration, and irregular drills for scenarios such as network disconnections, disaster recovery, and malicious attacks to enhance the emergency response capabilities of the IT system in the event of disasters;

We employ technologies and products such as SKYLAR, server reinforcement, anti-ransomware, and backup; We regularly update virus databases and apply patches to remove system vulnerabilities; And only programs deemed safe by server administrators are allowed to run while unauthorized programs are not;

In terms of information security goals

we effectively protect our organizational information and information systems from unauthorized access, modification, destruction, or sabotage by achieving relevant goals.

In terms of information security training

we provide training for employees in information security culture, awareness, and case analysis. We irregularly post e-mail security announcements through platforms such as DingTalk to enhance the awareness of information security and privacy protection among all employees.

In terms of customer data protection

we attach great importance to it to better serve customers. We sign a data sharing and confidentiality agreement with customers, stating that confidential information, including technical information, business information, and other commercial information, must not be disclosed, to ensure the right to know, the permission to, and the right to privacy confidentiality in data exchange.

Data security and confidentiality

Ensure that information is not accessed or obtained by unauthorized individuals or entities.

Reviewability

Ensure that users and operators of the information can be tracked and identified.

Corporate data integrity

Ensure that information is not modified or sabotaged by unauthorized individuals or entities during transmission and storage.

Accreditation

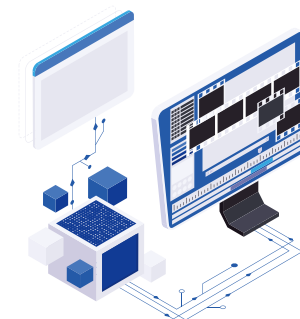
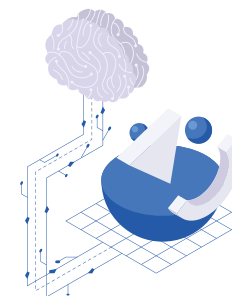
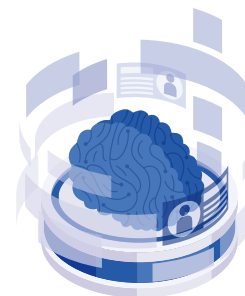
Confirm that the users or operators of the information are identical to their claimed identities.

Information and data availability

Ensure that information and systems can be accessed and used by authorized individuals or entities when needed.

Optimization of user experience

Utilize digital technology to provide personalized and convenient services for customers and improve their satisfaction.



Envicool Information and Data Security Requirements

ESG Key Performance Indicator

Business Performance

| Indicator | Unit | 2021 | 2022 | 2023 |
|---|---------------|----------|----------|----------|
| Annual operating revenue | CNY 1 million | 2,228.22 | 2,923.18 | 3,528.86 |
| Domestic operating revenue | CNY 1 million | 1,948.71 | 2,453.84 | 2,894.69 |
| Foreign operating revenue | CNY 1 million | 279.51 | 469.34 | 634.17 |
| Net profit attributable to shareholders of listed companies | CNY 1 million | 205.05 | 280.28 | 344.01 |
| Total assets | CNY 1 million | 3,456.41 | 4,042.33 | 5,091.06 |

Governance Performance

Board of Directors

| Indicator | Unit | 2023 |
|---|--------|------|
| Number of directors | Person | 9 |
| Number of male directors | Person | 5 |
| Number of female directors | Person | 4 |
| Number of directors with accounting expertise | Person | 3 |
| Number of independent directors | Person | 3 |

Anti-business and Anti-bribery

| Indicator | Unit | 2021 | 2022 | 2023 |
|---|------|------|------|------|
| Total number of reports generated by the anti-corruption whistle-blowing process | / | 3 | 2 | 4 |
| Total number of anti-bribery due diligence investigations of business partners (including intermediaries) conducted | Time | 40 | 32 | 50 |
| Total number of anti-corruption and commercial bribery training for directors/executives | Time | 1 | 1 | 1 |
| Total number of anti-corruption and commercial bribery trainings for ordinary employees | Time | 4 | 4 | 6 |
| Percentage of employees trained in business ethics and anti-corruption during the year | % | 30 | 30 | 30 |
| Cycle of internal audit covering all subsidiaries and all their departments at one time | Year | 1 | 1 | 1 |

Internal Audit

| Indicator | Unit | 2023 |
|---|------|------|
| Cycle of internal audit covering all subsidiaries and all their departments at one time | Year | 1.00 |

Environmental Performance

Greenhouse Gas

| Indicator | Unit | 2023 |
|---|---|----------|
| Total greenhouse gas emissions | tCO ₂ e | 9,960.17 |
| Scope 1 emissions | tCO ₂ e | 1,072.96 |
| Scope 2 emissions | tCO ₂ e | 8,887.21 |
| Total greenhouse gas emission intensity | tCO ₂ e/per CNY 1 million of operating revenue | 2.82 |
| Scope 1: Direct emission intensity | tCO ₂ e/per CNY 1 million of operating revenue | 0.30 |
| Scope 2: Indirect emission intensity | tCO ₂ e/per CNY 1 million of operating revenue | 2.52 |

Energy Consumption

| Indicator | Unit | 2021 | 2022 | 2023 |
|--|----------------------|--------------|---------------|---------------|
| Total purchased grid electricity consumption | kWh | 7,003,507.41 | 11,067,220.09 | 15,583,393.92 |
| Gasoline | Liter | 116,939.27 | 98,835.56 | 142,857.18 |
| Diesel | Liter | 61,390.65 | 60,802.53 | 103,022.52 |
| Natural gas | 10000 m ³ | 2.71 | 3.62 | 12.58 |
| Liquefied petroleum gas | Kilogram | 13,250 | 14,650 | 16,200 |

Note:

1. Purchased grid electricity consumption, petrol consumption cover Shenzhen region, Guangdong Envicool Technology Co., Ltd., Suzhou Envicool Environmental Control Technology Co., Ltd., Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd., Hebei Envicool Technology Co., Ltd., Henan Envicool Technology Co., Ltd., and Beijing Envicool New Energy Technology Research Institute Co., Ltd.
2. Diesel consumption covers Shenzhen region, Guangdong Envicool Technology Co., Ltd., Suzhou Envicool Environmental Control Technology Co., Ltd., Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd., and Hebei Envicool Technology Co., Ltd.
3. Natural gas is only used at the Zhongshan plant.

Water Resources

| Indicator | Unit | 2023 |
|-------------------------------|--|------------|
| Total water withdrawal | Tonne | 120,078.25 |
| Intensity of water withdrawal | Tonne/per CNY 1 million of operating revenue | 34.03 |

Note:

1. Water withdrawals cover Shenzhen region, Guangdong Envicool Technology Co., Ltd., Suzhou Envicool Environmental Control Technology Co., Ltd., Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd., and Hebei Envicool Technology Co., Ltd.

Packaging

| Indicator | Unit | 2023 |
|----------------------------|--|----------|
| Total packaging weight | Tonne | 2,231.94 |
| Packaging material density | Tonne/per CNY 1 million of operating revenue | 0.63 |

4. Coverage of greenhouse gas emissions: Shenzhen Envicool Technology Co., Ltd., Suzhou Envicool Environmental Control Technology Co., Ltd., Beijing Envicool New Energy Technology Research Institute Co., Ltd., Shenzhen Cooltek Electric Vehicle Cooling Technology Co., Ltd., Shanghai Cooltek Transport Refrigeration Equipment Co., Ltd., Shenzhen Envicool Information Technology Co., Ltd., Shenzhen Envicool Software Technology Co., Ltd., Shenzhen Envicool Precision Technology Co., Ltd., Shenzhen Envicool Health Environment Technology Co., Ltd., Hebei Envicool Technology Co., Ltd., Guangdong Envicool Technology Co., Ltd., Shenzhen Envicool Smart Connection Technology Co., Ltd., and Shenzhen Envicool Aviation Temperature Control Co., Ltd.

Social Performance

Employee

| Indicator | Unit | 2021 | 2022 | 2023 |
|-------------------------------------|--------|-------|-------|-------|
| Total number of employees worldwide | Person | 2,589 | 3,287 | 3,853 |
| By gender | | | | |
| Male employees | Person | 1,959 | 2,386 | 2,823 |
| Female employees | Person | 630 | 901 | 1,030 |
| By age | | | | |
| <30 years old | Person | 810 | 1,181 | 1,458 |
| 30-50 years old | Person | 1,692 | 2,015 | 2,295 |
| >50 years old | Person | 87 | 91 | 100 |
| By educational level | | | | |
| Doctorate degree | Person | 8 | 10 | 11 |
| Master's degree | Person | 62 | 68 | 123 |
| Bachelor's degree | Person | 697 | 874 | 1,206 |
| Other degree | Person | 1,822 | 2,335 | 2,513 |

Health and Safety

| Indicator | Unit | 2023 |
|--|--------|-------|
| Safety drill activities | Time | 2 |
| Number of security training sessions | Time | 33 |
| Number of participants in employee safety training | Person | 3,236 |
| Employee safety training coverage | % | 100 |
| Number of participants in contractor safety training | Person | 62 |
| Contractor safety training coverage | % | 100 |

Training and Development

| Indicator | Unit | 2021 | 2022 | 2023 |
|------------------------------------|------------|--------|--------|--------|
| Total training attendance per year | Attendance | 36,294 | 46,800 | 49,665 |
| By gender | | | | |
| Attendance of male employees | Attendance | 27,318 | 35,226 | 37,383 |
| Attendance of female employees | Attendance | 8,975 | 11,573 | 12,282 |

Supplier

| Indicator | Unit | 2021 | 2022 | 2023 |
|------------------------------|------|------|------|------|
| Number of material suppliers | / | 777 | 750 | 766 |

Customer Satisfaction

| Indicator | Unit | 2021 | 2022 | 2023 |
|-----------------------|-------|-------|-------|-------|
| Customer satisfaction | Score | 93.62 | 94.04 | 93.06 |

Product R&D

| Indicator | Unit | 2021 | 2022 | 2023 |
|---|------------|-----------|-----------|-----------|
| Cumulative number of domestic patents granted | / | 616 | 863 | 1,026 |
| Total annual R&D investment | CNY 10,000 | 15,012.49 | 19,562.44 | 26,300.72 |





Charity and Donations












| Indicator | Unit | 2021 | 2022 | 2023 |
|--|------------|------|------|------|
| Donations to other public welfare projects | CNY 10,000 | 15 | 15 | 63 |



GRI Standards Index

| | |
|---------------------|--|
| Guideline | Shenzhen Envicool Technology Co., Ltd. reported the information cited in this GRI Content Index during the period January 1, 2023 through December 31, 2023 by reference to the GRI Standards. |
| Standard references | GRI 1: Basis 2021 |

| Heading 1 | Heading 2 | Corresponding GRI indicator | Corresponding SDGs |
|---|---|-----------------------------|--|
| About this report | | GRI 1 | |
| Envicool in 2023 | About Us | GRI 2 | |
| | Statistics for 2023 | GRI 201 | |
| ESG Strategy and Management | ESG Model | GRI 2 | |
| | ESG Management Structure | GRI 2 | |
| | Stakeholders Communication and Engagement | GRI 3 | |
| Spotlight: More Than Cooling for New Development | High-quality Innovations | GRI 203 |   |
| | Digital Wave | GRI 302, GRI 303 | |
| | New Energy Revolution | GRI 302 |   |
| | A Better New Life | GRI 203 | |

| Heading 1 | Heading 2 | Corresponding GRI indicator | Corresponding SDGs |
|---|---------------------------------|---|--|
| Environmental: To Be a Practitioner of Green Development | Environmental Management System | GRI 305 |   |
| | Green Operation System | GRI 303, GRI 306 | |
| Social: To Be a Conveyor of Public Welfare Value | Customer Satisfaction | GRI 416 | |
| | First-rate Team | GRI 401, GRI 403, GRI 404, GRI 405, GRI 406, GRI 408, GRI 409 |    |
| | Responsible Procurement | GRI 204, GRI 308, GRI 414 |    |
| | Public Welfare & Charity | GRI 413 | |
| Governance: To Be a Trustworthy Issuer | Corporate Governance | GRI 2 |    |
| | Responsible Operation | GRI 205, GRI 207, GRI 418 | |

