



2023
Environmental, Social, and
Governance Report

HANGZHOU FIRST APPLIED MATERIAL CO., LTD

Table of cotents

1.0 About this Report

Report Instructions	4
Letter from the Chairman	5
About FIRST	6
2023 Key Performance and Awards	8

2.0 Sustainable Development System

Response to UN Sustainable Development Goals	11
Stakeholder Communication	13
Materiality Assessment for ESG Issues	14
R&D innovation system	15

3.0 Environmental Protection

Environmental Management System Certification & Energy Management	18
Green Operations	20
Emission & Waste Management	22
Chemical Safety	26
Water Conservation	29
Response to Climate Change	30

4.0 Creating Value

Product Development	34
Intellectual Property Protection	39
Supply Chain Management	40

5.0 Employee and Social Care

Equality and Diversity	42
Employee Training and Development	43
Occupational Health & Safety Management	45
Compensation and Benefits	46
Union Management	48
Social Responsibility	49

6.0 Corporate Governance

ESG Management	51
Corporate Governance Structure	53
Standard Operation	54
Risk Management and Internal Control	55
Business Ethics	56

7.0 Appendix

GRI Content Index	58
Feedback Form	64

01

About this Report

- 4 Report Instructions
- 5 Letter from the Chairman
- 6 About FIRST
- 8 2023 Key Performance and Awards

Report Instructions

This report is the Environmental, Social, and Governance (ESG) Report published by Hangzhou First Applied Materials Co., Ltd.(FIRST). The purpose of this report is to showcase FIRST's practices and achievements in sustainable development and to disclose the work done by FIRST in the areas of environment, social, and governance in 2023 and previous years.

Report Scope

The organizational scope of this report covers Hangzhou First Applied Materials Co., Ltd. and its subsidiaries. This report is published annually, in alignment with the fiscal year, covering the period from January 1, 2023, to December 31, 2023. To enhance the readability of the report, some content or data may trace back to previous years or look forward to subsequent years. Unless otherwise stated, this report uses the RMB as the currency unit.

Information Source

Unless specifically stated, the data in this report comes from the company's periodic or interim disclosures. If there are discrepancies, please refer to the disclosed periodic or interim announcements. Other data comes from the company's internal management systems and statistics, including some historical data. The company assures that there are no false records, misleading statements, or material omissions in the content of this report.

Disclaimer

This report contains forward-looking statements, including business plans and development strategies. These statements reflect the company's predictions of future events based on the current situation and may be influenced by unknown and uncertain factors that materially differ from the actual results. No forward-looking or expected statement in this report constitutes a material commitment by the Company to investors.

Report Preparation Standards

This report was prepared in accordance with the "Guidelines for Environmental Information Disclosure of Listed Companies" required by the Shanghai Stock Exchange; it references the Global Reporting Initiative (GRI Standards 2021) and the "Environmental, Social and Governance Reporting Guide" published by the Hong Kong Stock Exchange. It is also compiled in reference to the Sustainable Accounting Standards Board (SASB) and the recommendations framework of the Task Force on Climate-related Financial Disclosures (TCFD).

Appellation Description

For ease of expression and reading, the terms "First," "the company," "we," and "our" in this report all refer to Hangzhou First Applied Materials Co., Ltd. and its subsidiaries.

Report Access

This report is available for download in electronic format from the Shanghai Stock Exchange (www.sse.com.cn) and Hangzhou First Applied Material Co., Ltd.'s website (www.firstpvm.com). This report is available in both Chinese and English. In case of discrepancies or ambiguities between the Chinese and English interpretations, the content in the Chinese version shall prevail. For further inquiries, questions, or suggestions regarding this report, please contact:

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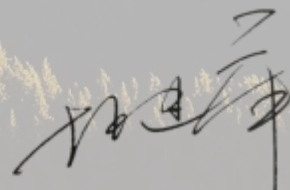
Letter from the Chairman

In the past year, the global challenges of climate change have become increasingly severe and urgent. At the same time, technological advancements are focusing more on digitalization, intelligence, and decarbonization. There is a growing interest among stakeholders in sustainable development and ESG-related performance, which raises higher demands for transparency in our operations and ESG disclosures. Against this backdrop, we have been actively and decisively embracing these changes in our own way, always viewing ESG and sustainability issues from the perspective of growth and opportunity and vigorously driving our corporate responsibility and sustainability work.

We have enhanced decision-making efficiency and transparency by building and upgrading our corporate governance structure. In 2023, we strengthened our internal controls and business ethics. We always practice the people-centric philosophy and have strategically invested in DEI (Diversity, Equity, and Inclusion) initiatives. In 2023, our employee dormitory came into operation, providing integrated services of accommodation, dining, and leisure for over a thousand employees. We have invested significant resources to ensure comprehensive protection for our employees, including professional development, health and safety, and various incentives.

We proudly ranked among the top 50 innovative companies in Forbes China in 2023, continued to increase our R&D investment, and enhanced our drive for innovation, achieving new breakthroughs in our fields of photovoltaic materials, electronic materials, and functional films. We are actively pushing for the development of digital, intelligent, and green concepts and technologies, improving the efficiency of corporate production and operations, enhancing creativity and competitiveness, and providing reliable products and services.

Looking ahead, we will remain committed to the business tenet of "innovative technology for the future" and our core mission of being a technology leader in the industry. Leveraging our advantages in the PV industry, we will promote the integrated use of solar energy in various forms to actively support the national "dual carbon" goals and foster the development of green and sustainable endeavors. We will further explore fields with broad growth prospects, such as electronic material and water treatment material, focusing on the independent R&D and industrialization of high-polymer new materials, and strive to promote technological innovation and application in the global clean energy industry.



About FIRST



Hangzhou First Applied Material Co.,Ltd.

Development Strategy: Focus on the main PV business, and vigorously develop other new material industries.

Development Vision: To become a world-class materials supplier.

PV Material Division	Electronic Material Division	Functional Film Division	PV Generation Business
Suzhou FIRST Chuzhou FIRST Jiaxing FIRST Guangdong FIRST Thailand FIRST Vietnam FIRST	Hangzhou First Electronic Material Co.,Ltd. and its subsidiaries	Hangzhou First Functional Material Co.,Ltd	Zhejiang new energy development Co.,Ltd. and its subsidiaries

Responsible for developing photovoltaic business such as PV Film and PV Backsheet.

Applications include encapsulating, enhancing efficiency, and protecting PV modules.

Conducting electronic material business, including Dry Film Photoresist, FCCL, and Photosensitive Solder Resist.

Applications include graphic etching of PCB, and insulation protection of soft board substrates and fine circuit.

Responsible for the business of functional film materials such as Aluminum Laminated Film and RO Membrane Support Fabric.

Applications include the flexible packaging of lithium batteries and the support of water purification membranes.

Responsible for developing small ground power stations, industrial and commercial, and household distributed power station business.

About FIRST



Hangzhou Headquarters



Suzhou Factory



Chuzhou Factory



Jiaxing Factory



Software Company



Anji Factory



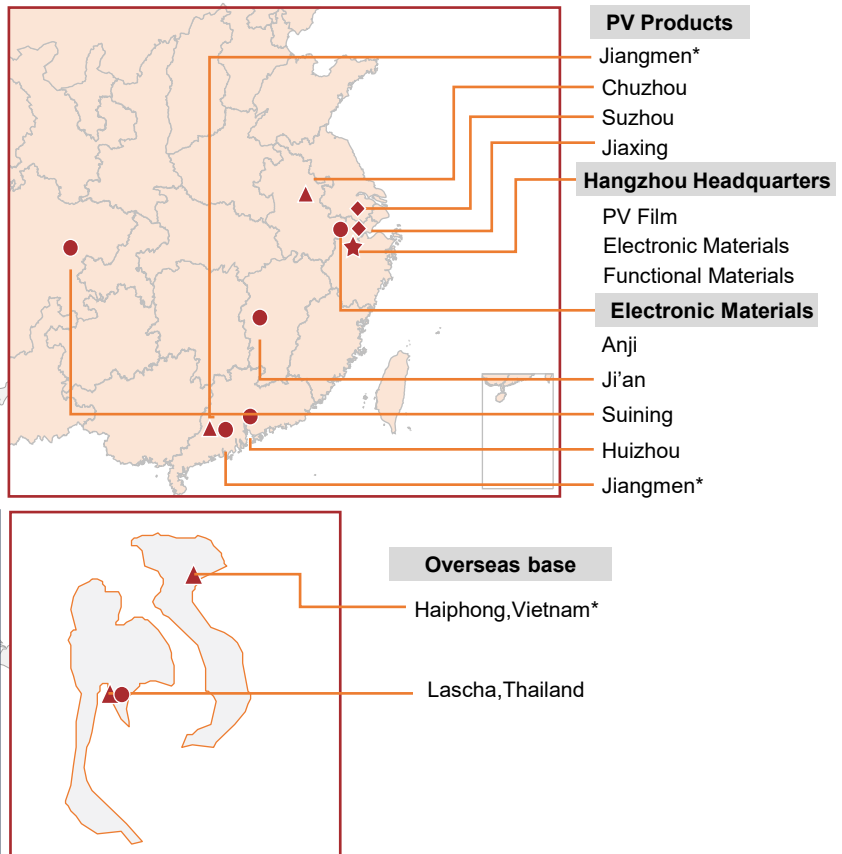
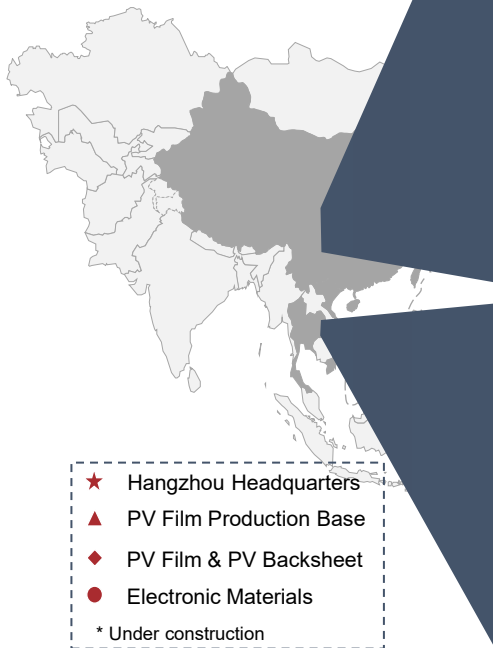
Thailand Factory



Vietnam Factory

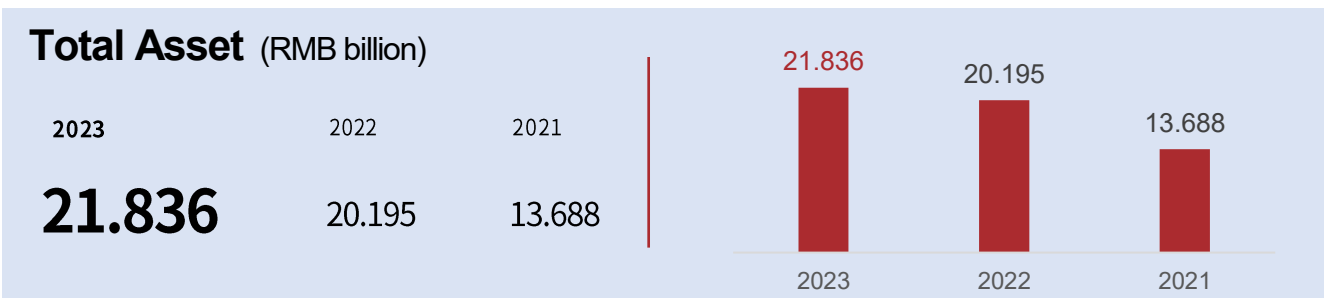
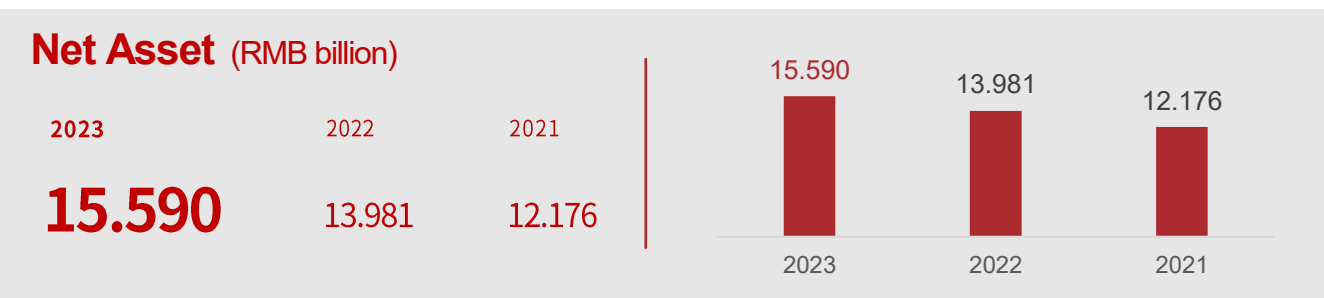
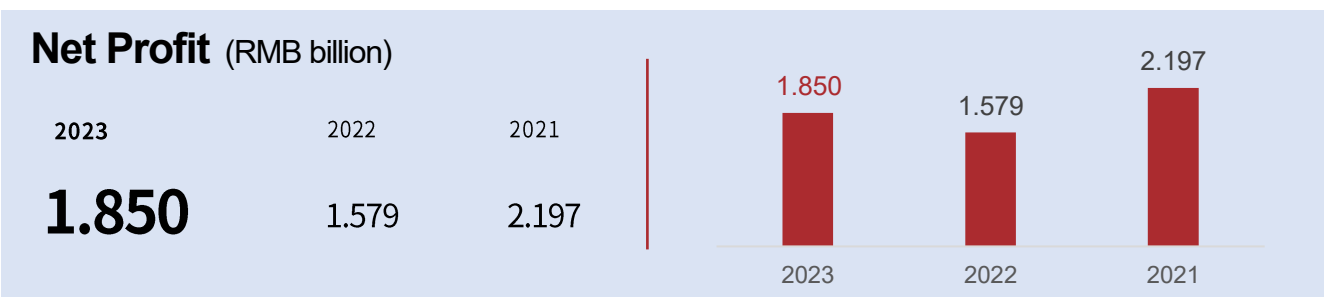
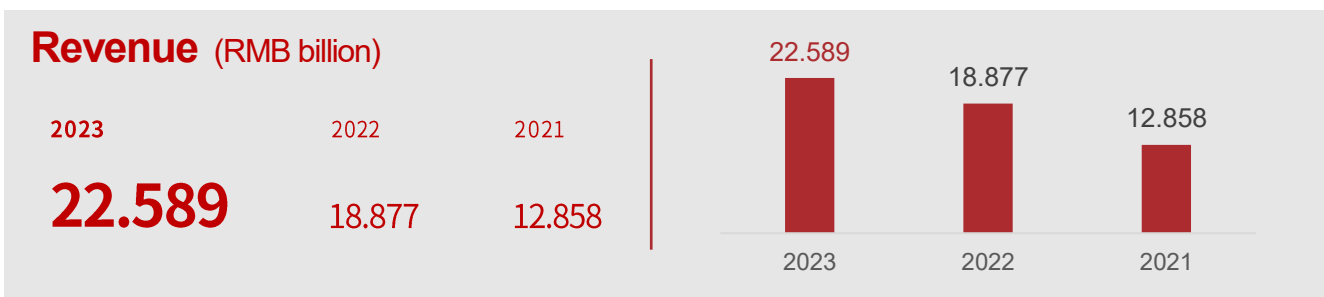


Jiangmen Factory



2023 Key Performance and Awards

We mainly engaged in the R&D, production, and sales of PV Film, PV Backsheet, and Photosensitive Dry Film. We are the largest supplier of PV films globally, with a market share of about 50%. We offer the richest product line that can meet the encapsulating requirements of various types of crystalline silicon cells and thin-film modules. The cumulative shipments of our PV films can encapsulate over 850GW of PV modules.



2023 Key Performance and Awards

- National Green Factory
- Forbes China Top 50 Innovative Companies 2023
- China Photovoltaic 20 Years Innovation Pioneer Award
- Zhejiang Province Technology Leading Enterprise
- Zhejiang Province's First Batch of Eagle Enterprises
- Dry Film Photoresist Products Recognized as Zhejiang Province's First Batch of New Materials
- Hangzhou "Future Factory"
- Hangzhou Headquarters Enterprise



浙江省第一批 雄鹰企业名单		
序号	属地	企业名称 (技术领航型)
1	杭州	杭州海康威视数字技术股份有限公司
2		浙江大学技术股份有限公司
3		阿里云技术有限公司
4		新华三技术有限公司
5		蚂蚁科技集团股份有限公司
6		浙江菜鸟供应链管理有限公司
7		杭州汽轮动力集团股份有限公司
8		杭州福斯特应用材料股份有限公司



02

Sustainable Development System

- 11 Response to UN Sustainable Development Goals
- 13 Stakeholder Communication
- 14 Materiality Assessment for ESG Issues
- 15 R&D Innovation System

Response to UN Sustainable Development Goals

Our commitment to supporting and aligning with the United Nations Sustainable Development Goals (SDGs) is unwavering, ensuring our operations advance in concert with the global sustainability agenda. Our strategy is methodically structured around four core themes: Environmental Protection, Creating Value, Employee and Social Care, and Corporate Governance. We diligently identify intersections with the SDGs, embracing a range of objectives that includes Gender Equality, Industry, Innovation, and Infrastructure, Responsible Consumption and Production, responsible consumption and production practices, and Climate Action, among others, comprising a total of 16 targeted goals.

Environmental Protection



Environmental Management System Certification & Energy Management

Green Operations

Emission & Waste Management

Chemical Safety

Water Conservation

Response to Climate Change



Creating Value



Product Development

Intellectual Property Protection

Supply Chain Management



Response to UN Sustainable Development Goals

This report crystallizes our sustainable development ethos, reflecting our resolute commitment to the global sustainability trajectory. FIRST believes that through concerted, collaborative efforts with all stakeholders, a formidable collective force can be cultivated on a global level. This concerted effort is instrumental in addressing a spectrum of challenges within the ecological, social, and economic realms, fulfilling the Sustainable Development Goals as envisioned by the United Nations, and contributing to a sustainable future for our planet.

Employee and Social Care



Equality and Diversity

Employee Training and Development

Occupational Health & Safety Management

Compensation and Benefits

Union Management

Social Responsibility



Corporate Governance



ESG Governance

Corporate Governance Structure

Standard Operation

Risk Management and Internal Control

Business Ethics



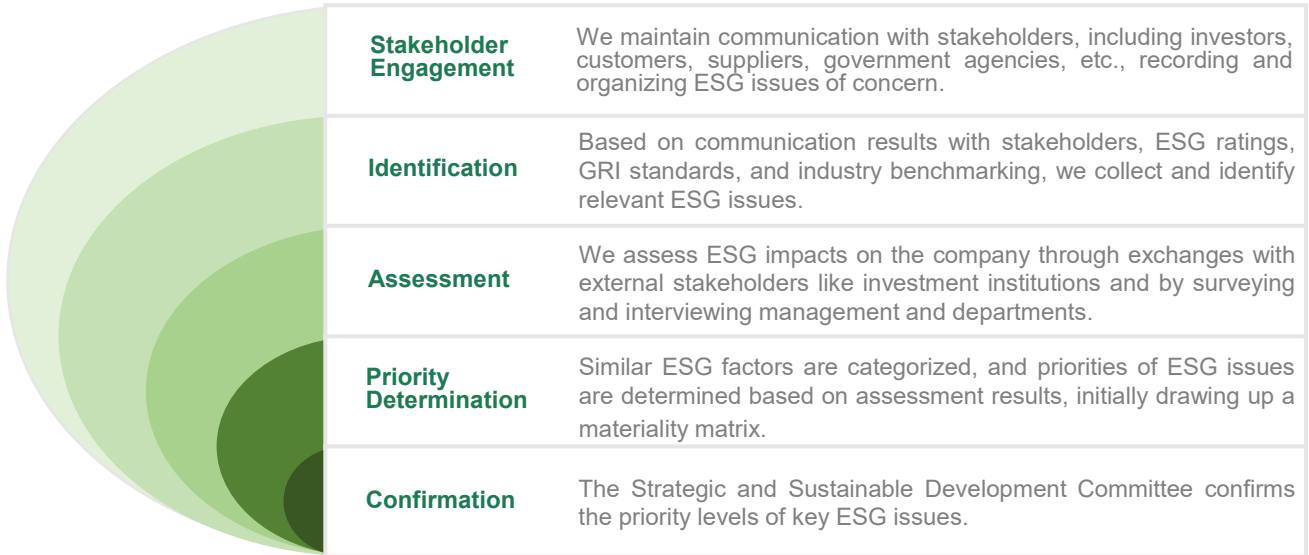
Stakeholder Communication

In advancing sustainable development, we prioritize engaging with stakeholders. We continuously refine the types and methods of their involvement, promptly collect and organize feedback from all parties, and take responsive measures to fulfill stakeholder cooperation and collectively enhance communication mechanisms. We actively listen to stakeholders, understanding their concerns and recognizing their reasonable expectations. Our goal is to grow alongside our stakeholders through diverse communications.

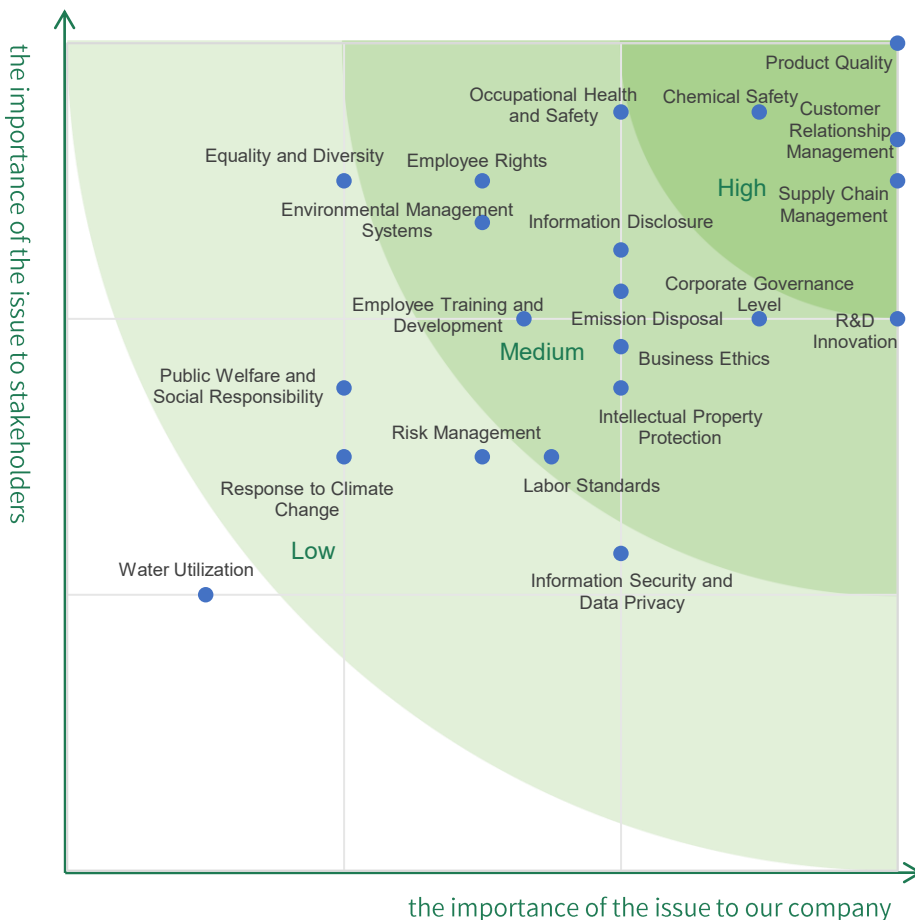
Types of stakeholders	Main demands	Main response measures	Main communication methods
Shareholder	<ul style="list-style-type: none"> • Consistent and stable return on investment • Understand the company's operations • Sustainable development 	<ul style="list-style-type: none"> • Strengthen the core competitiveness of the business • Fulfill information disclosure obligations in a timely manner • Improve internal control management 	<ul style="list-style-type: none"> • Periodic reports and interim announcements • Investors exchange events such as performance presentations
Employee	<ul style="list-style-type: none"> • Decent working conditions • Broad career development • Excellent compensation and benefits • Perfect health and safety guarantee 	<ul style="list-style-type: none"> • Improve employee recruitment, training, promotion and other systems • Continue to optimize the compensation and welfare system • Enrich staff activities • Strengthen occupational health and safety management 	<ul style="list-style-type: none"> • Staff congress • Learning and training activities • Employee care activities • Corporate website and WeChat public account
Customer	<ul style="list-style-type: none"> • Stable and safe product • Competitively priced products • Solve quality problems quickly • Provide excellent customer service 	<ul style="list-style-type: none"> • Implement a customer-first business approach. • Strengthen the core competitiveness • Continue to carry out R&D innovation • Enhance our overall operational efficiency. 	<ul style="list-style-type: none"> • Customer service • Technical exchange • Industry exhibition • New product launch
Supplier	<ul style="list-style-type: none"> • Fair competition • Fulfill the contract on time 	<ul style="list-style-type: none"> • Implement bidding procedures • Establish a list of qualified suppliers and conduct annual audits • Sign the integrity and self-discipline letter • Pay attention to suppliers' demands • Win-win cooperation 	<ul style="list-style-type: none"> • Supplier conference • Supplier annual audit • Integrity report platform
Government	<ul style="list-style-type: none"> • Drive the development of local and surrounding industries • Operate legally and in compliance 	<ul style="list-style-type: none"> • Provide jobs and pay taxes • Cooperate with government inspection work • Improve internal compliance monitoring • Ensure compliance with environmental, safety, and integrity laws and regulations 	<ul style="list-style-type: none"> • Compliance operation • Pay taxes in accordance with law • Government data reports • Government related meetings • Accept government scrutiny
Community and environment	<ul style="list-style-type: none"> • Environmental protection • Energy conservation and emission reduction • Good neighborliness • Public charity 	<ul style="list-style-type: none"> • Operate legally and in compliance • Manage “three wastes” • Promote lean production • Fulfill social responsibilities 	<ul style="list-style-type: none"> • Publish ESG report • Accept social supervision

Materiality Assessment for ESG Issues

Material Issue Assessment Process



Materiality Matrix



We have assessed each issue and determined its priority based on the results of comprehensive internal interviews and the feedback from stakeholders, with the final confirmation by the Committee on Strategy and Sustainable Development. Taking into account the substantive extent of these issues, we have constructed an ESG Materiality Matrix. This matrix unfolds across two dimensions: "the importance of the issue to our company" and "the importance of the issue to stakeholders," laid out as the horizontal and vertical axes, respectively. The main ESG issues are presented within the matrix in 3 levels of importance: high, medium, and low.

R&D innovation system

The development of innovative technologies has always been the primary driving force behind our sustainable development. Whether in the photovoltaic materials business or other new materials ventures, each technological breakthrough we've achieved in over two decades of industrial exploration stems from persistent R&D and innovation. This has established us as a technology innovation enterprise with a profound R&D DNA.

As of December 31, 2023, our R&D technical staff numbered 701, with approximately 17% holding master's degrees or higher. The proportion of R&D technical staff to the total number of employees is about 15%. We always prioritize R&D investment. In the fiscal years of 2021, 2022, and 2023, the cumulative R&D investment amounted to RMB 454 million, RMB 645 million, and RMB 792 million, respectively, with a compound annual growth rate of 32.14%, continuously maintaining a leading position in the industry.



R&D Innovation System

Material Research and Development

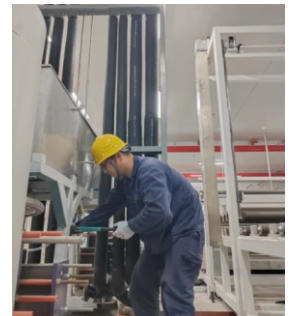


R&D

We are a platform-type material enterprise. Since the successful development of EVA film in 2003, we have been deeply rooted in the PV material field for over 20 years, carrying out thorough research on the formula, process, and equipment of PV films and backsheets. In recent years, building on a key common technology platform, we have continuously researched and developed new material products such as electronic materials and functional materials, possessing strong internal growth momentum. In the future, we will steadfastly implement the development strategy of "Focus on the main PV business, and vigorously develop other new material industries," driven by technological innovation to achieve the domestication of more key new materials.

Equipment Development

We have always independently developed and constructed film production equipment, mastered core design and manufacturing technologies, with a strong team of over 200 people, and a systematic professional talent training system to meet the equipment construction needs of production bases globally. Upholding the business tenet of "innovative technology for the future," we continuously provide technological breakthroughs for various products in terms of R&D, quality, and efficiency, serving the differentiated requirements of customers and markets. Focusing on the innovative development of equipment automation and digitization, we have deepened applications in production, storage, energy, and other aspects, adapting to the trends of industry development. With sustained investment and cultivation in equipment technology, coupled with the dual advantages of equipment and product technology, we remain our core competitiveness.



Equipment manufacturing at Vietnam site

Software Development



Hangzhou First Application Software Co., Ltd.

We have established a professional digital team, and since 2019, we have developed ERP, MES, WMS, EAM systems covering the main products of each subsidiary in the group, obtaining five software copyrights. We have also acquired professional software such as OA, SRM, TMS, and our software developers have linked various systems together. Through a combination of software procurement and self-development, these systems play a significant role in the company's production and operations. Our software personnel apply IoT, digital twin technology, edge gateway computing technology, etc., to actively enhance management efficiency and increase production capacity.

03

Environmental Protection

SDGs addressed in this chapter



- 18 Environmental Management System Certification & Energy Management
- 20 Green Operations
- 22 Emission & Waste Management
- 26 Chemical Safety
- 29 Water Conservation
- 30 Response to Climate Change

Environmental Management System Certification & Energy Management

No.	System	System Name	Hangzhou FIRST	Suzhou FIRST	Chuzhou FIRST	Anji FIRST	Jiaying FIRST (New)	Thailand FIRST	Operational Subsidiary Coverage Ratio
1	ISO9001	Quality Management System	Certified	Certified	Certified	Certified	Certified	Certified	100%
2	ISO14001	Environmental Management System	Certified	Certified	Certified	Certified	In certification	Certified	83.33%
3	ISO45001	Occupational Health & Safety Management System	Certified	Certified	Certified	Certified	In certification	In certification	66.67%

Energy Management System

In alignment with corporate objectives to bolster energy conservation and reduction, we have instituted an Energy Management Leadership Team and enacted the "Energy Conservation and Consumption Reduction System." A structured leadership hierarchy, consisting of a leader, deputy, and team members, ensures the achievement of our energy efficiency goals. The team leader devises energy-saving policies, oversees energy and environmental planning, and report compilation. The deputy enacts technological energy-saving modifications and oversees annual energy plans, promoting innovative technologies and organizing training. Team members, from workshop and office management, are tasked with implementing these plans and supervising energy use, focusing on enhancing efficiency.

Energy Efficiency Publicity

We pursue relentless energy conservation publicity, deepening employees' awareness through focused training, adapting energy-saving practices to our offices and production scenarios. Our strategies encompass optimizing air conditioning and building insulation to reduce energy usage, using precise data to highlight the negative impacts of sub-optimal temperature control and air leaks on energy efficiency, encouraging the adoption of effective energy-saving measures; and promoting the use of cooling water instead of chilled water, as well as the proper selection of electrical equipment, to reduce operating costs and enhance energy efficiency. These practices reflect our firm commitment to improving energy management and supporting sustainable development goals, embodying the culture of energy conservation that emphasizes both professionalism and action.

Environmental Management System Certification & Energy Management

Energy-Saving Renovations Cases

Our commitment to energy efficiency is evidenced by diverse, innovative conservation measures that have led to significant enhancements in energy efficiency and cost reduction. Optimizations in production line process, cooling systems, as well as cooling tower operation strategies, have yielded notable energy savings.

Chilled Water Supply Renovation

In the existing system, the refrigeration process was inefficient, employing a method that consumed a substantial amount of energy. To improve this, we have enhanced the refrigeration method to be more efficient and successfully increased the system's energy utilization efficiency by adjusting the temperature differential in the cooling cycle and reducing the use of certain equipment.

Cooling Tower Renovation

In the original design, the capacity of the cooling system was configured higher than the actual demand, leading to a certain degree of energy wastage. To address this issue, we adjusted the operational strategy of the system, enabling the cooling equipment to operate only when necessary, thereby reducing unnecessary energy consumption. This adjustment has helped us control temperatures more effectively and achieve energy savings throughout the system.



Green Operations

Green Energy Investment

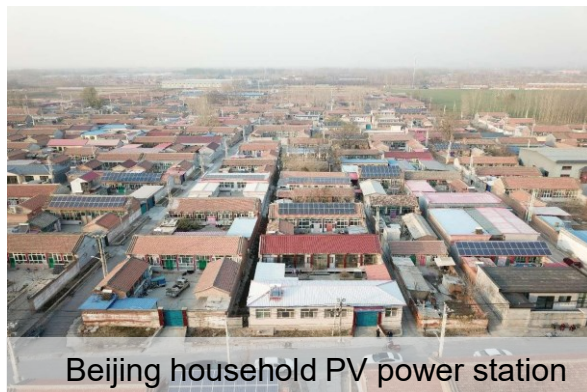


Jiangshan Agrivoltaic Power Station

As the world advances towards "Carbon Peak" and "Carbon Neutrality," solar power generation is set to significantly increase its share in the new energy-dominated power systems of the future. We are firmly implementing the development strategy of "Focus on the main PV business, and vigorously develop other new material industries." Leveraging our advantages in technology research and development as well as cost control, we will accelerate the capacity expansion of PV films and backsheets, stabilize the market pattern of the PV film industry, and continue to consolidate and enhance our market share while growing alongside the global PV industry. Additionally, we actively practice the "SOLAR FOR SOLAR—Negative Carbon Earth" concept, which, apart from constructing distributed power generation systems on our factory roofs, also involves setting up a business division dedicated to developing various types of solar power stations. In the next 3 to 5 years, we anticipate an annual capital expenditure of 500 million to 1 billion RMB for the construction of PV materials and solar power station businesses.



Chuzhou factory PV power station



Beijing household PV power station

SOLAR FOR SOLAR

Green Operations

We place high importance on the conservation of natural resources and strictly adhere to the "Environmental Protection Law of the People's Republic of China," the "Environmental Impact Assessment Law of the People's Republic of China," the "Water Law of the People's Republic of China," the "Energy Conservation Law of the People's Republic of China," and other national and local laws and regulations. We place resource conservation at a key position in our development strategy and operational methods, continuously improving our management systems in energy consumption, optimizing energy-saving measures, and committed to continuous monitoring and improvement of our energy and resource efficiency. We aim to build a resource-conserving, environmentally friendly enterprise and strive for a harmonious and sustainable development of people, resources, and the environment.

In 2023, the operating income from our clean technology products (PV materials) accounted for 96.54%.

Year	2023	2022	2021
Environmental protection investment(ten thousand RMB)	6,861.08	3,618.74	2,193.73

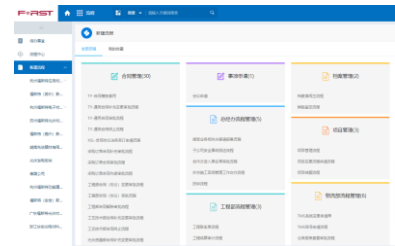
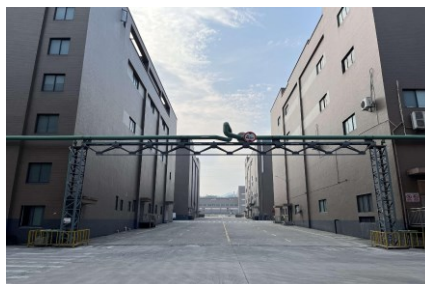


Resource Conservation Case

We consistently implement the concept of "water conservation," following the guidance of local natural resource conservation agencies, and develop water usage plans based on actual consumption, actively promoting water-saving measures and continually reducing water resource consumption. In 2023, our main water supply came from municipal water, with a freshwater withdrawal of approximately 928,200 tons and a wastewater discharge of about 266,000 tons.

Innovative Utilization Case

We actively explore the recyclable use of by-products generated in the production process, turning waste into treasure. In 2023, steam generated from the production of electronic materials was channeled through pipes to functional material equipment, coordinating resources between two different business divisions, saving on steam treatment costs for electronic materials on one hand, and solving the steam source required for the production of functional materials on the other. This innovative use of energy, due to its significant effect, was selected as an excellent case for the company's cost-saving measures that year. In 2023, the company achieved a steam reuse of 2,939 tons.



Green Office Case

We actively practice the concept of energy conservation and reduction, creating a green and environmentally friendly office model, and striving to be a faithful practitioner in building a "resource-saving" society. We fully utilize the OA system to promote electronic office work and approval, effectively reducing paper usage. We strictly enforce waste sorting into recyclable, putrescible, other, and hazardous wastes, identifying and processing recyclable office waste. We have invested in high-grade shredders and other equipment, facilitating the recycling process while ensuring the confidentiality of office document information.

Emission & Waste Management

We adhere to laws and regulations such as the "Environmental Protection Law of the People's Republic of China," the "Air Pollution Prevention and Control Law of the People's Republic of China," the "Water Pollution Prevention and Control Law of the People's Republic of China," and the "Solid Waste Pollution Environmental Prevention Law of the People's Republic of China." We have established internal systems such as the "Environmental Protection Management Responsibility System," "Environmental/Safety Operation Control Procedures," and "Hazardous Chemicals Management System." We have set up emissions such as waste gas and wastewater monitoring plans and goals, strengthened the management of waste emissions, and improved the level of pollution prevention and control.

We have been honored with titles such as the National Green Factory of 2022, Zhejiang Green Enterprise issued by Zhejiang provincial government, and Zhejiang Green Factory issued by the Zhejiang Provincial Department of Economy and Information Technology.

中华人民共和国工业和信息化部
工业和信息化部 新闻动态 政务公开 政务服务 公众参与 工业数据 专题专栏

2022年度绿色制造名单公示

发布日期: 2023-02-09 12:04 来源: 工业和信息化部

为落实《“十四五”工业绿色发展规划》，全面落实绿色制造，助力工业领域碳达峰、碳中和目标，根据《工业和信息化部办公厅关于做好2022年度绿色制造名单推荐工作的通知》（工信厅节函〔2022〕259号），经组织工业和信息化部主要部门及专家评审，按照《工业和信息化部2022年度绿色制造名单公示公告》，如有异议，请在公示期间内与我处联系，并提交相关证明材料。

公示时间: 2022年2月9日至2022年2月19日
联系单位: 工业和信息化部节能与综合利用司
联系电话: 010-68015340/68015354
电子邮箱: hb@miit.gov.cn

附件: 1. 绿色工厂公示名单.pdf
2. 绿色设计产品公示名单.pdf
3. 绿色工业园区公示名单.pdf
4. 绿色供应链管理体系公示名单.pdf

附件1

绿色工厂公示名单

序号	地区	工厂名称	第三方评价机构名称
1	北京	雷恩特新材料科技发展有限公司	北京建筑材料科学研究院有限公司
2	北京	北京福北京药股份有限公司	北京爱金邦科技服务有限公司
3	北京	北京中石石油石化包装有限公司	北京绿色之城科技有限公司
4	北京	北京康仁堂药业有限公司	北京爱金邦科技服务有限公司
251	浙江	杭州康恩贝制药有限公司	杭州中乾科技有限公司
252	浙江	浙江华新药业股份有限公司	浙江贝斯特节能环保科技有限公司
253	浙江	杭州福斯特应用材料股份有限公司	浙江工信能源信息中心有限公司
254	浙江	浙江华丰制药有限公司	台州市英敏特管理咨询有限公司
255	浙江	浙江康恩贝中药有限公司	浙江工信能源信息中心有限公司

Emission & Waste Management Training

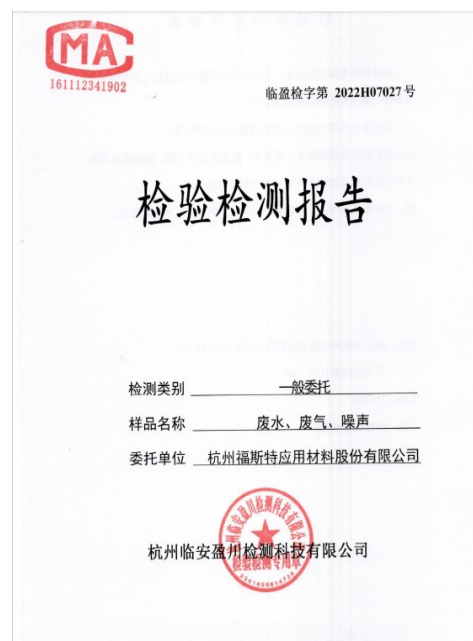
We pay attention to the compliance of waste disposal, especially the standardized management of hazardous waste, and we regularly organize hazardous waste management training to let employees have a correct understanding of hazardous waste, to achieve compliance with the collection, transfer, storage, and so on, to ensure the effective disposal of waste compliance.



Emission & Waste Management

Emission & Waste Targets

Emission & Waste Monitoring Plan and Target					
Emission & Waste Monitoring Plan		Emission & Waste Management Target	Frequency	Time	Achievement of Targets
2022 Annual - Outsourced Testing	Waste Gas	Emissions comply with the "Emission Standard of Pollutants for Synthetic Resin Industry" (GB31572-2015);	Annually	Mid July 2022	Targets met and standards complied
	Wastewater	Wastewater discharge complies with the standards in the Network Admission Opinion Letter / "Pollutant Emission Standards for Urban Wastewater Treatment Plants" (GB18918-2002) Class A standards before discharge;			
	Noise	Boundary noise emissions comply with the 2nd class standards in the "Emission Standard for Environmental Noise of Industrial Enterprises at Boundary" (GB12348-2008), and the eastern boundary reaches the 4th class standard limits.			
2023 Annual - Outsourced Testing	Waste Gas	Emissions comply with the "Emission Standard of Pollutants for Synthetic Resin Industry" (GB31572-2015);	Annually	Mid July 2023	Targets met and standards complied
	Wastewater	Wastewater discharge complies with the standards in the Network Admission Opinion Letter / "Pollutant Emission Standards for Urban Wastewater Treatment Plants" (GB18918-2002) Class A standards before discharge;			
	Noise	Boundary noise emissions comply with the 2nd class standards in the "Emission Standard for Environmental Noise of Industrial Enterprises at Boundary" (GB12348-2008), and the eastern boundary reaches the 4th class standard limits.			



Emission & Waste Management

We implement appropriate waste management and emission monitoring across all locations of operations.

In accordance with the 'Hazardous Waste (Solid Waste) Management Regulations', the type of waste is jointly determined by the user departments and the EHS department. For waste identified as hazardous, we ensure proper collection, transfer, storage, and management, and entrust it to qualified hazardous waste disposal entities.

Main Types of Waste and Disposal Measures

Main Types of Waste and Disposal Measures		
Type of Waste	Categories of Waste	Disposal Method
Hazardous Waste	Waste engine oil, thermal oil	All entrusted to a qualified third party for disposal.
	Waste packaging drums	
	Waste labor protection supplies	
	Laboratory waste	
	Sludge from biochemical pools, etc.	
Recyclable Waste	Waste wood	Collected, disposed of by a qualified waste recycling company, or internally recycled, to promote a circular economy.
	Waste cardboard	
	Waste paper tubes	
	Waste plastic	
	Waste metals, etc.	
	Waste strapping, etc.	
Non-recyclable Waste	Insulation cotton	Entrusted sanitation departments for transportation and disposal, with treatment and disposal measures meeting environmental protection requirements.
	Air tubes	
	Labels, etc.	
	Domestic waste	
	Kitchen waste	

Emission & Waste Management

Source Management & Resource Circulation

We focus on clean production practices, continuously improving each step of the production process to reduce resource consumption and waste generation. We also implement recycling initiatives, seeking to maximize internal reuse and collaborating with customers to promote the recycling and reuse of packaging materials, thereby reducing environmental impact.

Recycled packaging materials category / Recycling quantity by year	2022 Recycling quantity (thousands)	2023 Recycling quantity (thousands)
Wooden pallet	670	1,340
Plastic pallet	150	410
Paper tube	960	1,540
Plastic tube	1,090	2,090
Wooden liner	/	6,700



Chuzhou Iron Frame Packaging Recycling Utilization Case

In response to national initiatives to effectively control and reduce the environmental and human health hazards of hazardous waste, we began using iron frame packaging for recycling purposes in August 2023, thereby reducing the output of waste cardboard boxes, wooden pallets, and other materials.

From August 2023 to the end of the year, we purchased 465 iron frame packages, which were recycled a total of 3,398 times. On average, each frame was recycled more than seven times per month. Each use saved the production of 2 cardboard boxes, 4 wooden boards, and 1 wooden pallet. In 2023, this initiative saved a total of 6,796 cardboard boxes, 13,592 wooden liners, and 3,398 wooden pallets.



↓ Cardboard boxes packaging ↓



Iron frame packages

Chemical Safety

Chemical safety management is vital to corporate safety production management. We've developed systems in response to chemical management needs, including SOP-EHS-030 for managing chemicals susceptible to drug abuse and explosives, SOP-EHS-018 for dangerous chemicals, SOP-EHS-035 for hazardous waste, SOP-EHS-042 for ingredient hazardous chemical warehousing, SOP-EHS-040 for storage safety, and SOP-EHS-048 for safety information card management. We follow 'MSDS Safety Technical Requirements' related to these protocols. To standardize handling dangerous chemicals, we maintain QR-EHS-007 'Dangerous Chemicals Inventory,' overseeing their transportation, storage, labeling, use, waste management, and disposal to minimize environmental impact and personnel harm. We issue No.1 document annually to set forth safety management requirements, formulating annual safety targets for each aspect of chemical safety, and we achieved 100% of the set goals. In areas involving chemical usage and storage, such as production and R&D, we enforce stringent regulatory measures, and maintain clear signage to mitigate risks. We employ experts to identify, purchase, use, and store chemicals, and organize relevant training periodically. This ensures clarity on the procurement, storage, collection, and use of chemicals, and promote protective and emergency practices.

Chemical Management

Responsibility	Executing Department	Regulatory Department
Departmental Responsibilities	R&D Department: Identify and make optimal choices based on the characteristics of various chemicals, responsible for updating, replacing, or phasing out chemicals, and for testing and hazard assessment of new chemical substances.	<p>EHS Department Regulatory Responsibility The functional department for the management of hazardous chemicals. It is responsible for compiling a list of hazardous chemicals and safety information cards, managing and supervising the execution of hazardous chemical usage processes and personnel qualifications, and managing the recycling and disposal of related waste materials.</p>
	Procurement Department: Ensure compliance with laws and regulations governing the procurement, transportation, and storage of hazardous chemicals. Source from suppliers possessing the "Hazardous Chemicals Production and Operation License," verify the transportation unit's qualification, and establish safety agreements with both supplier and transporter.	
	User Department: Complete the "Hazardous Chemicals Demand List" for approval and record by the EHS department. Supervise hazardous chemical use, ensuring adherence to MSDS and proper personal protective equipment. Maintain detailed records with the "Hazardous Chemicals In and Out Ledger," strictly following safety procedures, product instructions, and prevention measures. Properly collect and store chemical waste, collaborating with the EHS department to determine waste type and develop compliant disposal plans, entrusting qualified suppliers for disposal.	
	Quality and Storage Department: Conduct thorough safety and quality inspections during hazardous chemical storage, adhere to national laws and regulations for storage locations, prominently display warning signs, and maintain daily safety management of storage sites and surrounding areas.	
Documentary Standard	Procurement Department: Responsible for executing the chemical purchase and technical agreements, as well as establishing safety technical standards for raw materials. All suppliers must provide chemicals with MSDS documents and COA compliant with company regulations and national standards.	<p>Emergency Handling Establish emergency response plans for hazardous chemicals, standardizing the handling methods for accidents of different types and scales (including adsorption of spills, cutting off leaks, organizing evacuations, etc.). When necessary, initiate emergency plans and report to the relevant departments.</p>
	EHS Department: Tasked with formulating and inspecting rules and regulations pertaining to hazardous chemicals management, including the regular update of system documents.	
	User Department: Conducts operations in adherence to established standards outlined in documentation provided by the EHS Department and procurement agreements.	
Chemical Labeling	User Departments: Must establish corresponding signs for the use of chemical labels.	
	EHS Department: Establishes the corresponding signs.	
	Supplier: According to the national standard 'Regulations for the Compilation of Chemical Safety Labels' (GB 15258-1999), safety labels must use a combination of text, graphic symbols, and codes to indicate the hazards and safety precautions of chemicals; safety labels should be affixed, hung, or printed by the manufacturer in a conspicuous position on the packaging or container before the goods leave the factory; if the packaging is changed, the changing unit must re-affix, hang, or print the labels.	

Chemical Safety

Chemical Identification and Elimination

Chemical Identification

Based on the characteristics of chemicals, we have categorized them into three types: chemicals prone to being used for drug and explosive production, hazardous chemicals, and other chemicals. We manage strict identification and differentiation according to the "MSDS Safety Technical Requirements" for each type of chemical.

Chemical Elimination

- 1) Internally, the company is optimizing the use of highly hazardous and toxic chemicals, with the R&D department responsible for gradually researching phase-out or implementing replacement plans.
- 2) In compliance with national laws, we strictly prohibits the use of problematic chemicals, updating the catalog as per regulations. Following the June 2023 announcement by the Ministry of Ecology and Environment and 11 other departments regarding restrictions on five types of persistent organic pollutants, including Polychlorinated Naphthalenes, we've assessed our chemical usage. Any identified chemicals have been investigated, and phased out in accordance with regulations.

《修正案》限控的持久性有机污染物清单

序号	持久性有机污染物名称	化学文摘社编号	参考海关商品编号
1	六氯丁二烯	87-68-3	2903299020
2	五氯苯酚及其盐类和酯类	87-86-5	2908110000
		131-52-2	2908199023
		27735-64-4	2908199024
		3772-94-9	2915900014
3	多氯萘, 包括二氯萘、三氯萘、四氯萘、五氯萘、六氯萘、七氯萘、八氯萘	1825-21-4	2909309017
		-	2903999050等
4	十溴二苯醚	1163-19-5	2909309018
5	短链氯化石蜡*	例如:	
		85535-84-8	
		68920-70-7	
		71011-12-6	3824890000
		85536-22-7	
		85681-73-8	
		108171-26-2	

注: 短链氯化石蜡是指链长C₁₀至C₁₃的直链氯化碳氢化合物, 且氯含量按重量计超过48%, 其在混合物中的浓度按照重量计大于或等于1%。

Chemical Registration and Supervision

Chemicals Prone to Misuse for Drug and Explosive Production

In adherence to relevant laws such as the "People's Republic of China Narcotics Control Law," and "Regulations on the Control of Chemicals Used for Illicit Drug Production," we've established SOP-EHS-030 "Safety Management System for Chemicals Prone to Misuse for Drug and Explosive Production, and Highly Toxic Dangerous Chemicals." There is strict management in the production, operation, transportation, and storage of chemicals prone to being used for drug production, with one specially designated keeper with national qualifications for the safety management of chemicals used for illicit drug production and two part-time keepers responsible for related affairs. Chemicals are stored separately with a dual-lock system, and inventory records are meticulously maintained. Monthly inventory checks are conducted, and any issues are promptly reported to local authorities. Emissions, wastewater, and waste residue are treated to meet national regulations, with no mixing allowed for disposal.

Hazardous Chemicals

We adhere to the "Regulations on the Safety Management of Hazardous Chemicals" and have established SOP-EHS-018 "Hazardous Chemicals Management System." Precise control is maintained over procurement, transportation, storage, use, and disposal, guided by SOP-EHS-040 and SOP-EHS-048.

Other Non-Hazardous Chemicals

Non-hazardous chemicals are managed according to company standards, with the R&D department identifying material characteristics, the EHS department outlining management requirements, and the user department overseeing daily safety management.

Chemical Safety

New Substance Hazard Assessment

Our assessment of new substance hazards focuses on human health impacts and environmental risk. We begin by identifying characteristics such as physicochemical properties, toxicology, and hazards. Then, we determine potential harms by analyzing data to identify short-term or long-term effects, including direct health impacts or potential environmental harm. Finally, we devise control measures based on these assessments, including storage, workplace standards, personal protective equipment, and environmental safeguards.

We've established a robust system for assessing and introducing chemical substances. Our main raw materials undergo an "Raw Material Introduction Process," and special additives through an "Additive Introduction Process," with hazard assessment being a critical step involving collaboration across EHS, R&D, quality, process, production, and procurement departments.

Collaboration with Leading Substitute Material Producers

Our company engages in-depth with leading global raw material suppliers, aligning introduction and assessment with the ISO 9001:2015 Quality Management System. We implement the QSP-PM-841 "Supplier Management Control Procedure" to regulate supplier selection, assessment, performance evaluation, and improvement processes, ensuring continuous compliance with our requirements.

Chemical raw material suppliers are vetted through a multi-step process for inclusion in the "Qualified Supplier Directory": supplier qualification review → sample assessment → pilot assessment → semi-industrial assessment → change review → supplier audit (factory inspection) → qualified supplier; the QSP-PM-840 "Purchasing Control Procedure" determines purchase volumes based on supplier assessment categories and levels. Our primary raw materials, such as Ethylene-Vinyl Acetate Copolymer (EVA) and Polyolefin Elastomer (POE), have been sourced for years through procurement cooperation with global leaders like Dow Chemical, LG Chem, and ExxonMobil, with whom we also engage in in-depth scientific research for new product development and application.



Water Conservation



Source Management

We analyze the current exploitation of water resources, the rationality of water usage, potential impacts, and protective measures in our operational regions, taking reasonable water extraction measures post-assessment. Continuous monitoring of water use risks and emergency planning are conducted to ensure water resources can support our long-term growth. In 2023, our fresh water extraction amounted to approximately 928,200 tons.



Water Conservation and Discharge Reduction

We segregate wastewater into industrial and domestic categories, each treated accordingly. Industrial wastewater, mainly from production line cooling, equipment cleaning, and floor maintenance, is fully recycled when possible, with non-recyclable wastewater treated to meet standards before discharge. Domestic wastewater is disposed of through municipal sewage networks. In 2023, we discharged approximately 266,000 tons of wastewater.

Water Conservation Case: Recirculating Water Quality Control to Reduce Wastewater

Previously, our cooling tower open-loop recirculating system had high water consumption, with scaling from calcium and magnesium ions, as well as bacteria and algae growth affecting cooling exchange and corroding pipes. We addressed this by using softened water for make-up and controlling conductivity, which reduced scaling and wastewater discharge, saving water.



Product Innovation

Leveraging our capabilities in high-polymer material research and manufacturing, we developed a range of membrane support fabrics for water purification with various weights, thicknesses, and permeabilities. These materials, used for reverse osmosis, nanofiltration, ultrafiltration, and microfiltration membranes, are widely applied in seawater desalination, industrial pure water production, municipal and industrial wastewater treatment, and household water purification, fundamentally enhancing the utilization and protection of water resources.

Response to Climate Change

The main energy consumed in our production process is electricity, and in 2023 we consumed about 512 million kWh. By the end of 2023, we have 37.59MW photovoltaic power stations, which is equivalent to a reduction of 45,000 tons of carbon dioxide emissions through it if we calculate the coal consumption per kilowatt hour. In 2023, the sales volume of our PV film reached 2.249 billion square meters, which is able to produce 237GW PV modules. Based on the coal consumption of kilowatt hour electricity, about 236 million tons of carbon dioxide emissions can be reduced through the produced PV modules.



We acknowledge the profound impact of climate change on human society and the natural environment. The challenges it brings, like rising sea levels and extreme weather events, pose unprecedented challenges to global economic structures and business operations. Hence, we view climate change as a core strategic consideration, aiming to mitigate its adverse effects and actively seek opportunities to contribute to society's transition to low-carbon, green development. As an active participant in the renewable energy sector, our PV films backsheets, essential for module encapsulation and protection, not only optimize PV conversion efficiency but also significantly extend the modules' lifespan. Though our production activities consume energy, they translate into clean energy output through PV generation, offering environmental returns exponentially.

We are committed to the sustainable development concept of "SOLAR FOR SOLAR—Negative Carbon Earth," implementing energy conservation and emission reduction in operations and optimizing our energy mix. Our technological innovation and green product development support and propel the industry and society toward more sustainable development. For instance, we've built distributed power generation systems on our factory roofs to lessen traditional energy dependency, while also diversifying our business by developing various types of photovoltaic stations. We believe such efforts not only promote the widespread adoption of clean energy and contribute to global energy transformation and climate change mitigation but also create new growth opportunities and value for our long-term development.



Response to Climate Change

Governance

We have established the company's ESG governance structure to ensure comprehensive monitoring and management of climate-related risks and opportunities. The board of directors is directly responsible for overseeing climate-related risks and opportunities, and we have set up a specialized ESG working group responsible for executing specific ESG strategies and actions. This group collaborates across departments to assess the potential impact of climate change on business operations and provides regular reports and suggestions to the board of directors. Furthermore, we regularly review and update our assessment of climate-related risks and opportunities in accordance with the framework recommended by TCFD, ensuring our management measures stay aligned with industry and international best practices.

Risk Management

We adopt a systematic approach to identify, assess, and manage climate-related risks and opportunities. This includes a comprehensive assessment of physical risks and transition risks, as well as a deep understanding of the potential impact of these risks on business operations, financial conditions, and prospects. We strive to reduce the potential impact of these risks on the business through sustainable resource management, chemical safety, and waste emissions management. At the same time, we actively explore and utilize business opportunities brought about by climate change to promote the company's long-term sustainable development.

Indicators & Targets

We have identified a set of environmental and climate-related indicators to monitor and evaluate the impact of our business activities on the environment and support our climate-related risk management work. These indicators include energy usage (such as water resources, electricity, etc.) and waste emission conditions.

Strategy

We have identified and assessed two main categories of climate-related risks: transition risks related to the low-carbon economy transition and physical risks related to the impacts of climate change, including acute risks (such as extreme weather events) and chronic risks (such as long-term changes in climate patterns). Addressing climate change is not only about risk management but also about seizing development opportunities. We are committed to developing greener, low-carbon products and services through technological innovation and production efficiency improvements to meet the challenges posed by climate change.



Response to Climate Change

Identification and Assessment of Climate-related Risks

Climate-related Risks(TCFD Framework)		
Physical risks	Acute risks	Extreme Weather Events: Events such as typhoons and floods can lead to supply chain disruptions, production halts, equipment damage, and damage to raw material and finished product storage areas, affecting the stability of the supply chain and production efficiency.
		Extreme Heat Events: Frequent high temperatures can lead to equipment overheating and worsening storage conditions for products, increasing cooling costs, and affecting employee health and production efficiency.
	Chronic risks	Climate Pattern Changes: Persistent warming may increase the energy demand of cooling systems, leading to higher operational costs.
Transition risks	Policy and legal risks	Uncertainty in Energy Policy: The uncertainty of energy policies, such as changes to support policies and incentives for renewable energy and related trade policies, can affect a company's long-term investment decisions and market positioning.
		Carbon Emission Restrictions: Governments may set stricter carbon emission limits, requiring companies to reduce carbon emissions or purchase carbon credits, which increases the financial burden on businesses.
	Technology and market risks	Technological Innovation and Cost Competition: Technological advances within the PV industry could render existing products obsolete rapidly. Companies need to continuously develop new technologies to maintain competitiveness. At the same time, effective cost control is key to maintaining product competitiveness.
Changes in International Market Access Thresholds: As global responses to climate change strengthen, countries may set stricter import standards, requiring imported products to have a lower carbon footprint. This requires companies to optimize production processes and supply chain management.		

04

Creating Value

SDGs addressed in this chapter



- 34 Product Development
- 38 Intellectual Property Protection
- 40 Supply Chain Management

Product Development

"Customer First" is one of our core principles, and winning the trust and long-term cooperation of our customers is a vital cornerstone for our company's development. We consistently adhere to a customer-oriented approach, committed to providing excellent products and services.

Customer satisfaction has improved year

	2021	2022	2023
Customer satisfaction	98.83%	98.84%	98.89%



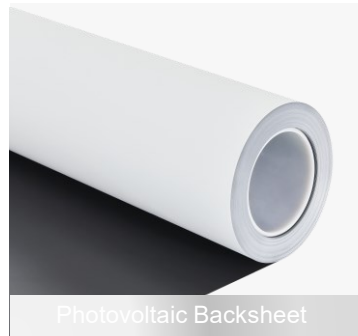
Product Development

Photovoltaic Materials

Our Products



Used for encapsulating and protecting the front and back of crystalline silicon solar cell modules, as well as the power generation layers of thin-film solar modules. Depending on the raw materials and manufacturing processes, it includes types such as EVA film, white EVA film, EPE film, and POE film.



A weather-resistant protective material used on the backside of solar modules.

Downstream Application



Terminal Applications



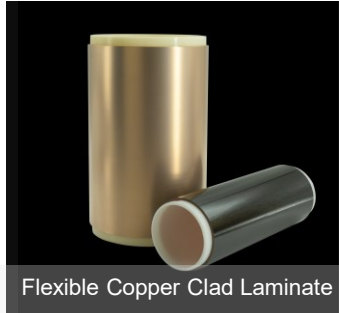
Product Development

Electronic Materials

Our Products



A film material used for image transfer on rigid and flexible printed circuit boards, high-density interconnect boards, and packaging substrates.

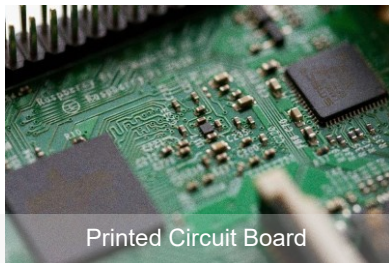


The base material used for flexible printed circuit boards.

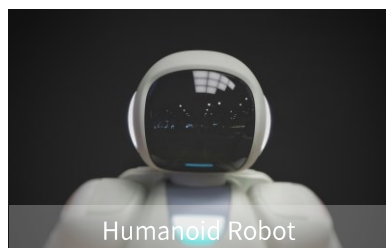


An insulating protective material used for fine circuitry in printed circuit boards, MiniLED, Micro-LED, and camera module sectors.

Downstream Application



Terminal Applications



Product Development

Functional Film Material

Our Products



Aluminum Laminated Film

A multilayer composite material containing aluminum foil, used for the soft packaging of lithium batteries.



Membrane Support Fabric

A base material used to support water purification membranes.

Downstream Application



Soft Pack Battery



Water Purification Membrane

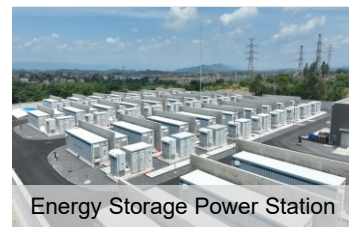
Terminal Applications



Consumer Electronics



New Energy Vehicle



Energy Storage Power Station



Desalination



Urban Sewage Treatment



Household Water Purifier

Intellectual Property Protection

Intellectual Property Management Department

We place a high emphasis on the role of intellectual property (IP) in our company's development, maintaining a dedicated Intellectual Property Department responsible for the daily management of the company's IP. We have established comprehensive patent management regulations and standardized procedures for patent applications, as well as the collection, organization, archiving, preservation, and application of patent information. Currently, we have a specialized IP management team of five members, three of whom are qualified patent agents. One of these members holds both a patent agent license, an intermediate patent management engineer certificate, and an IP consultant certificate. To enhance the professional skills of our staff, we provide multiple external training opportunities for our IP management personnel annually. As of December 31, 2023, FIRST has filed 645 invention patents and obtained 249 effective invention patents; filed 155 utility model patents and obtained 115 effective utility model patents.



Intellectual Property Training

To enhance our IP level and core competitiveness, we have established a long-term strategic cooperation with professional IP service agencies. This collaboration covers all aspects of IP affairs, including the discovery and strategic planning of IP for innovative results, patentability analysis and protection scope analysis for risk patents, patentability consultation for challenging risk patents, IP layout and risk pre-warning, and modularized patent knowledge training. These efforts fully leverage IP and its strategic layout to provide robust protection for our R&D, production, sales, procurement, and in dealing with infringement warnings and litigation, reducing R&D costs and operational risks, thereby improving our core competitiveness.

To improve the informatization and automation level of our patent management, we use professional enterprise patent management systems and patent databases. We establish patent technology navigation and patent early warning monitoring based on our self-developed products and technologies, effectively supporting patent retrieval, novelty search, competitor selection and tracking, and analysis of our patents.

To raise patent awareness among our employees and enhance the management level of our patent workers, we regularly organize IP training sessions. These include strategic IP planning for senior management, patent mining and technical disclosure training for R&D personnel (at least twice a year), and patent search and analysis training for IP management personnel (at least once a quarter).

Intellectual Property Protection

Intellectual Property Management Department

According to the "Zhejiang Province Intellectual Property Model Enterprise Assessment and Management Measures," after local review, expert evaluation, and public announcement, our company was recognized as a Zhejiang Province Intellectual Property Model Enterprise by the Zhejiang Provincial Market Supervision Administration on September 8, 2022. This designation confirms our company's effective use of the intellectual property system to enhance the value of intellectual property and core competitiveness, providing a typical example of creation quality, application benefits, protection effectiveness, and management efficiency.

Following the guidelines of the "Notice on Implementing the 2022 National Intellectual Property Empowerment Demonstration Work for Enterprises" issued by the National Intellectual Property Administration, through procedures including enterprise assessment, recommendation reporting, and review confirmation, our company was designated as a National Intellectual Property Advantage Enterprise at the end of September 2022. This recognition marks a significant breakthrough for our company at the national intellectual property platform level. It indicates that FIRST possesses a strategic management concept of intellectual property, outstanding comprehensive competitive advantage in intellectual property, enhanced overall innovation system effectiveness, and significant industry influence and benchmarking.

浙江省市场监督管理局文件

浙市监知运〔2022〕24号

浙江省市场监督管理局关于认定 2022年浙江省知识产权示范企业的通知

各市、县（市、区）市场监督管理局（知识产权局），有关企业：
为深入贯彻《知识产权强国建设纲要（2021-2035年）》，全面推进知识产权强国工程，促进企业提升知识产权综合能力和核心竞争力，按照国家知识产权局向企业开展知识产权强国建设示范工作要求，根据《浙江省知识产权示范企业评定管理办法》，经地方审核推荐、专家评审、社会公示等程序，现认定杭州巨星科技股份有限公司等551家企业为2022年浙江省知识产权示范企业，有效期三年，自2022年9月起算。

省知识产权示范企业是知识产权强国建设示范工作的重要载体。

咸阳市、各地要进一步加大培育力度，完善配套政策措施，加强对示范企业的指导和服务，及时总结、推广企业知识产权工作典型案例和先进经验，充分发挥示范企业的引领带动作用，为我省打造知识产权强国建设先行省提供有力支撑。

附件：2022年浙江省知识产权示范企业名单



（此件公开发布）

序号	企业名称	所在地市/区县
121	杭州德信医药科技股份有限公司	杭州/萧山区
122	杭州德信医药科技股份有限公司	杭州/萧山区
123	杭州德信医药科技股份有限公司	杭州/萧山区
124	杭州德信医药科技股份有限公司	杭州/萧山区
125	杭州德信医药科技股份有限公司	杭州/萧山区
126	浙江德信医药科技股份有限公司	杭州/萧山区
127	浙江德信医药科技股份有限公司	杭州/萧山区
128	杭州德信医药科技股份有限公司	杭州/萧山区
129	杭州德信医药科技股份有限公司	杭州/萧山区
130	杭州德信医药科技股份有限公司	杭州/萧山区
131	杭州德信医药科技股份有限公司	杭州/萧山区



Intellectual Property Management System

We actively engage in aligning our enterprise intellectual property with national standards. Based on the existing "Patent Management Implementation Methods" and "Technical Progress Achievement Review and Reward Methods" among other intellectual property management systems, we focus on the acquisition, maintenance, and application of intellectual property. This includes R&D and implementation phases involving detailed intellectual property management issues. We have devised the "Intellectual Property Management System", including "Patent Management Process", "Patent Application Control Process", and "Intellectual Property Maintenance Assessment Process", to ensure that all intellectual property activities are controlled. These intellectual property management tasks are integrated into the company's operational management assessment system to improve the efficiency of intellectual property management. After years of system optimization and accumulated work, the company passed the national standard GB/T29490-2013 certification in 2019, with certificate number 18119IP5388ROM, and successfully passed the triennial re-evaluation of the GB/T29490-2013 standard in 2022.

Supply Chain Management

We have established the Procurement Control Procedure and Supplier Management Control Procedure to standardize our supplier management process. Additionally, our company holds the AEO advanced certification of customs, which guides our screening and assessment of potential business partners based on compliance and trade security. We regularly review and evaluate our qualified suppliers to ensure their qualifications and maintain historical product quality files. Furthermore, we have implemented a supplier integrity system to ensure fair supply chain management, including issuing "Integrity and Self-discipline Notification Letters" for significant procurement activities and bidding.

Our commitment to building trustworthy and mutually beneficial relationships with our suppliers drives our efforts to establish a sustainable supply chain ecosystem that promotes collaborative innovation and long-term industry growth. We typically sign long-term contracts with suppliers to ensure the timely supply and delivery. Our comprehensive digital supplier management system oversees the entire monitoring cycle from supplier selection, certification, and evaluation to exit management. We carefully select our suppliers based on technical competence, operational experience, compliance record, credit history, and market reputation. Qualified suppliers undergo a rigorous certification process, including raw material quality assessment, site evaluation, sample testing, and contract signing. We regularly evaluate supplier performance in delivery timeliness and quality, pricing and management, operations, and communication. Any unqualified suppliers exit through our exit management procedure.

To make purchasing decisions, our purchasing committee regularly assesses market conditions, raw material prices, consumer surveys, competitor arrangements, and other factors and reports directly to the chairman and general manager. We maintain strict standards for our Bill of Materials ("BOM"), reliability monitoring, and material introduction process to ensure raw material quality. We sign raw material quality assurance agreements with suppliers and regularly sample and test raw materials for consistency. Our technology research and development capability and continuous improvement of the production process ensure the quality and reliability of our products, which are widely recognized in the industry.

05

Employee and Social Care

SDGs addressed in this chapter

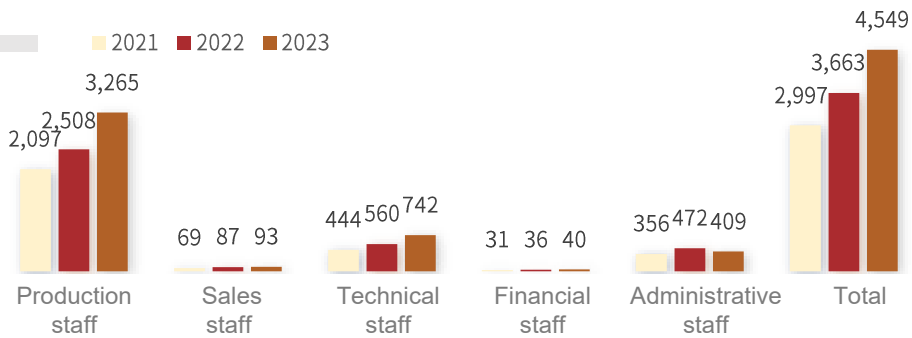


- 42 Equality and Diversity
- 43 Employee Training and Development
- 45 Occupational Health & Safety Management
- 46 Compensation and Benefits
- 48 Union Management
- 49 Social Responsibility

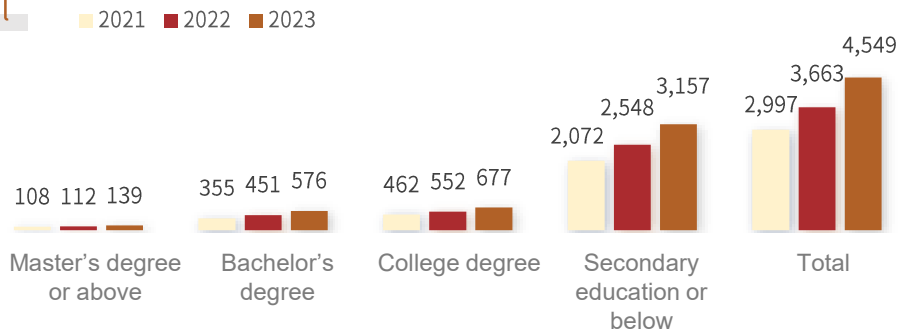
Equality and Diversity

In 2023, we continued to refine our "Employee Recruitment Management Methods," establishing and enhancing a market-oriented mechanism for selecting and employing staff. We strictly prohibit the employment of child labor and forced labor in any form, and we are committed to treating employees of different genders, ages, ethnicities, and cultural backgrounds equally, providing equal job opportunities to all applicants. Throughout the year, there were no incidents of child labor or forced labor. As of December 31, 2023, we have 4,549 contract employees, including one from Hong Kong, Macau, or Taiwan, and 152 from Thailand. Among our contract employees, 3,437 were male, accounting for 75.56%, and 1,112 were female, making up 24.44% of the workforce. In 2023, the number of personnel outsourced for labor services was 153.

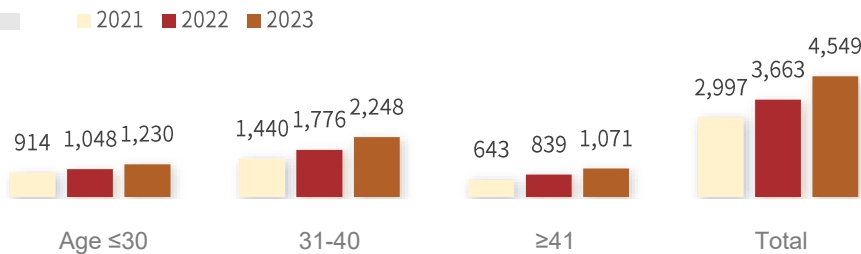
Staff by function



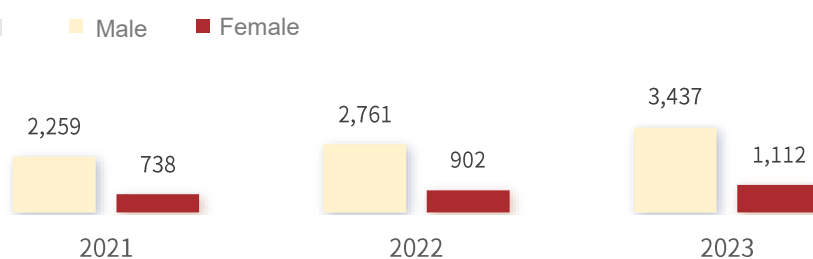
Staff by education level



Staff by age



Staff by gender



Employee Training and Development

"Modesty, eagerness to learn, and teamwork" are among our core values, and "creating a learning organization" is a crucial way to build our corporate culture and demonstrate these core principles. We utilize "FIRST University" as a platform to establish a training system that covers all employees, manages all levels, and organizes training hierarchically, creating opportunities for employee skill enhancement and career development.

2021-2023 Training Data Statistics				
Year	Total training sessions organized	Total training participants	Total hours of training	Average hours of training per person
2021	477	7,025	22,515.7	3.21
2022	617	10,032	37,886.1	3.78
2023	798	15,529	39,901.6	2.57
Total	1,892	32,586	100,303.4	3.08

Professional Skills

We value professional skills and meet career development needs. We actively respond to government calls to standardize the policy for recognizing skill levels, applying to become a "Professional Skills Level Recognition Pilot" unit. To date, we have successfully conducted three sessions where 130 quality inspectors achieved their level certifications. Employees enjoy corresponding pay grades based on their skill levels as per our company's remuneration system. We have established a comprehensive management (M), professional (P, B, O), and operational (F) sequence covering all employees, thereby providing broader development opportunities for career advancement across various levels and positions.

High-Level Talent

As of the end of 2023, our organization includes one Class B talent, nine Class C talents, nine Class D talents, 43 Class E talents, 47 Class F talents, and 44 Class G talents. Currently, the company employs two senior professional title holders, 36 with associate senior professional titles, 36 with intermediate professional titles, and 56 with junior professional titles.

Employee Training and Development

"Qingteng" Program

To enhance the overall capabilities of our middle management team, we launched the "Qingteng" program. We employed external experts to deliver lectures, providing comprehensive and multi-angle knowledge training and practice transformation for our management staff. The project focuses on "goal-setting," "scheme-building," "implementation-grasping," and "results-sharing" and offers practical workshops to provide hands-on training. This approach encourages active participation in learning and addresses actual work-related key points. This leads to improved enterprise performance and the accomplishment of annual business objectives.



"Qingmiao" Program

Employees can systematically learn management knowledge, such as safety, quality, lean production, and team management. We have also organized various activities, such as reading-sharing meetings, standard study tours, and outdoor activities. In addition, we also set up growth courses to enable employees to better engage in work and study and make their ability improved throughout their lives. Employees acquire a broad range of management knowledge and apply it effectively to improvement projects through the combination of theory and practice.



"Xinya" Program

"Xinya" program offers basic courses such as corporate culture, quality, product knowledge, safety. And occupational courses like occupational communication, career development are also offered. These learning courses are combined with online cloud university courses and practical activities in order to make the fresh graduate to quickly adapt to the company, their position. This program also offers a platform for the participants to communicate their knowledge.



Team Leader Program

To improve the management concept, knowledge, skills, and professional quality of each workshop foreperson and promote and drive the overall quality of the production workshop staff, we organized the personnel training project for the first-line foreman. The project trained and taught the craftsmanship spirit, leadership, optimistic attitude, practical communication skills, and other aspects of the front-line team leaders. Meanwhile, all front-line team leaders were required to carry out transfer training for front-line employees, and a total of 341 times of transfer training were implemented to learn and grow together.



Occupational Health and Safety Management

Employee physical examination

We deeply care the health of employees and provide various medical health examinations and health consultation services every year to help employees to know their real time physical conditions, effectively implement health intervention measures, prevent occupational diseases, and enhance the sense of belonging and identity of employees to the company.



Psychological counseling

We establish the "Mood Station", allocate the corresponding venues and facilities, and introduce the online consultation service of mental health experts. We offer the psychological support to the employees with abnormal mental conditions, through counseling and treatment, to make them timely released from the bad mood, get out of the psychological predicament, face the life more positively.



New employee training

We design a series of training courses to help new employees get familiar with our company, learn the corporate culture, safety, 5S, quality, and other basic knowledge, understand and master job knowledge and skills, accelerate the process of new employees' integration, promote them to enter the work state and complete the role transformation smoothly. New employee training coverage is 100%.



First-line mentor

We develop the first-line mentor training plan, make the experienced employees to fully play the role to help, transfer knowledge and support the new employees. In this way, the new employees could adapt to their work quickly, understand the operating procedures, and establish a preliminary awareness of production safety. Up to now, the company has completed two first-line mentor training programs, with a total of 115 first-line mentors.



Compensation and Benefits

We strictly abide by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Employment Promotion Law of the People's Republic of China, the Protection of Minors of the People's Republic of China and other relevant laws and regulations. We have formulated the Employee Handbook, Human Resources Control Procedures, and other internal systems and adhere to legal and compliant employment. According to the relevant laws and regulations of the Ministry of Labor and Social Security and the local subsidiaries, employees to handle pension insurance, industrial injury insurance, unemployment insurance, medical insurance, and maternity insurance, and implement the housing provident fund system. In 2023, our total compensation and benefits was 747.32 million RMB.

Employee Benefits	
Multidimensional rewards	Employee stock ownership plan, project responsibility system reward, patent reward, rationalization proposal reward, management innovation reward, technological progress reward, etc.
Leave benefits	Established the "Leave Management Methods" to provide employees with legal leave, including annual leave, maternity leave, sick leave, marriage leave, nursing leave, childcare leave and other welfare leave.
Other benefits	Free working meal, free shuttle bus, holiday gift, anniversary gift, birthday gift, expatriate allowance, annual physical examination, talent apartment, sympathy allowance, union points exchange, Love Factory dedication award (5, 10, 15, 20 years).

Compensation policy

We follow the principles of "fair and ordered management, adapting to market environment, reflecting talent value, realizing the incentive goal." We foster sustainable development and achieve a mutually beneficial relationship between employees and the company. We keep on evaluating the ability, contribution and work performance, set a salary promotion system, offer the promising promotional opportunities for each position. Additionally, we follow the "principle of ordered and sustainable development" by connecting employee compensation to the company's overall income growth, sharing responsibility and benefits, and realizing the individual improvement of the organization. We continually improve our performance appraisal system, salary and welfare system, training management system, and employee development and promotion channels to motivate and guide employees towards improvement, achieving a harmonious development with the company.

Except for the chairman and independent directors, we do not provide directors' remuneration. Directors who also hold senior management positions or other positions in the Company will be compensated according to the remuneration system of their respective positions. The supervisors are not entitled to any remuneration, but if they hold other positions in the Company. They will receive remuneration according to the remuneration system of those positions. The annual compensation of the Company's senior management personnel comprises two components: a basic monthly salary and an annual performance-based bonus. The performance-based bonus is paid in the following year, and its amount is determined based on the Company's performance and the individual's work contributions, as evaluated by the Compensation and Evaluation Committee. The remuneration of directors and senior managers is reviewed by the Remuneration and Evaluation Committee of the Board of Directors, which submits its recommendations to the Board of Directors for approval. The Board of Supervisors reviews the remuneration of supervisors, which is then submitted to the Board of Shareholders for approval.

Compensation and benefits	2021	2022	2023
Employee compensation (ten thousand RMB)	39,168.28	59,242.70	74,731.73
Including:			
-- Employee stock ownership plan incentive fund (ten thousand RMB)		6,957.07	
Photovoltaic business Partnership Plan special fund (ten thousand RMB)			5,492.96

Compensation and Benefits

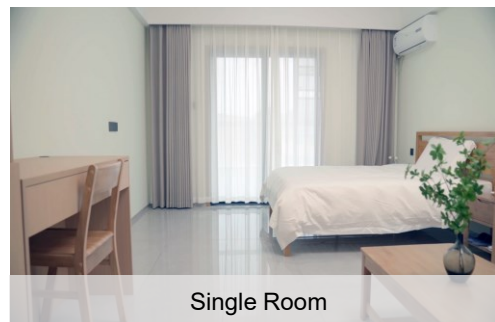
Employee Dormitory

We consistently practice a "people-centric" approach to humanitarian care, with ongoing attention to our commitment to and implementation of employee welfare. To better meet the accommodation needs of our employees, enhance their sense of belonging and satisfaction, and improve their quality of life, we engaged in thorough discussions and meticulous planning. Consequently, the company constructed the 43,400 square meter "Fu Ren Ju" employee dormitory, which officially began operations in 2023. The dormitory offers 660 high-quality, eco-friendly fully furnished suites, and single, and double rooms, providing a comfortable and homely environment for 1,200 employees.

Located in the ecologically friendly and scenic area of Jinma Village, the "Fu Ren Ju" employee dormitory provides employees with a beautiful and comfortable living environment. Additionally, we have equipped the dormitory complex with standard badminton and basketball courts, a gym, and facilities for dining and entertainment including an automated cafeteria, a bakery, a supermarket, and parking. Furthermore, we have introduced an automated and digital smart management system, aiming to create a comprehensive living and leisure community for our employees.



"Fu Ren Ju" Employee Dormitory



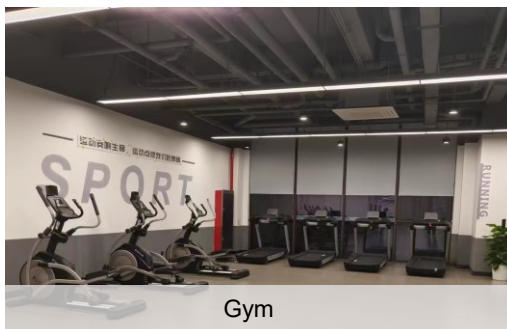
Single Room



Cafeteria



Supermarket



Gym



Basketball Courts

Union Management

We have established a range of trade union management systems, such as the Measures for the Welfare Management of Trade Union Members, the Measures for the Management of Trade Union Points, and the employees' representatives conference, to uphold democratic management and protect the legitimate rights and interests of employees. Our efforts have been recognized with the National May Day Labor Certificate issued by ACFTU(All China Federation of Trade Unions).

In 2023, we held 2 employee representatives conferences and spent RMB 4.97 million on the union.

Union management structure

We have one union president, 14 union committee members, two union officers, one union accountant, and one union cashier. Under the leadership of the union president, there is a fund review committee and a Women Workers Committee. To ensure efficient operations, the union is divided into 10 groups, each led by a trade union officer and with one trade union committee member designated to manage each group. Employees voluntarily join the union, which prioritizes the functions of representation, safeguarding, construction, and education to protect the legitimate rights and interests of employees.

Work content of union

The union is dedicated to the well-being of employees, fostering harmonious labor relations at work, and promoting employee participation in management innovation, labor competitions, and the recognition of advanced groups and active union members. The union pays special attention to the rights of female employees, establishing "Mommy Rooms" and purchasing special illness insurance for them. Additionally, throughout the year, the union organizes various cultural and sports activities, providing a platform for talent display to enrich employees' leisure time.

Photos of union activities



Awards

Name of union	Awards	Issuance unit
Union of Hangzhou First Applied Materials Co., LTD	The second batch of "Happiness Community Leading Goose Enterprises" in Zhejiang Province	Issued by Zhejiang Federation of Trade Unions
Trade Union of Suzhou First PV	May Day labor Award of Suzhou City	Issued by Suzhou City Trade Union
Trade Union of First(Anji) Advanced Materials Co., LTD	Enterprise New Era Five-Star Civilization Practice Site	Issued by Anji County Federation of Trade Unions

Social Responsibility

FIRST is driven by a sense of mission and responsibility. Beyond generating profits and meeting legal obligations to shareholders and employees, we also uphold responsibilities towards consumers, communities, and the environment. Our focus extends beyond profit to the value of people in production processes, emphasizing contributions to the environment, consumers, and society at large, and the fulfillment of corporate social responsibilities to contribute to societal well-being. We actively fulfilled our social responsibilities during the reporting period and donated RMB 2.04 million RMB toward social welfare.

Tax Contributions

Lawful tax payment is a duty for every enterprise and citizen. We take our tax planning seriously, continually enhancing our tax risk management, strengthening administrative efforts, and perfecting our risk control mechanisms. We organize our tax accounting and payment efficiently, safeguard tax compliance, mitigate operational risks, and ensure healthy business activities. In 2023, our company renewed our "Tax Compliance Cooperation Agreement" with the Hangzhou Taxation Bureau for the fourth time, constantly improving our tax risk control system to foster an environment of honest business practices and lawful tax payment.



Charity and Philanthropy

Charitable work involves aiding the weak and impoverished, a voluntary endeavor to enhance human welfare. We are committed to charitable causes, supporting vulnerable groups, and making donations to various public welfare organizations through platforms like the Red Cross, Charity Federation, and education funds, increasing welfare for the disadvantaged.



Rural Revitalization

The countryside blends natural, social, and economic aspects, supporting production, living, and cultural activities, and forms a symbiotic relationship with urban areas as a key space for human activities. We support the national rural revitalization strategy by using our photovoltaic (PV) industry strengths to set up sustainable poverty alleviation methods. These include donating distributed PV systems, buying agricultural products from Baiyu County, Sichuan for poverty relief, and focusing on cultural development in rural areas, such as funding an ethnic cultural stage in Miaogu Village, Donglang Town, Congjiang County, Guizhou Province.



Community Engagement

Enterprises benefit from and influence their communities, which are vital for business development. Establishing long-term, mutually beneficial partnerships is crucial for maintaining a positive corporate image and sustainable growth. We value our community ties, offering economic benefits and jobs through lawful operations and engaging in welfare projects, such as visiting the elderly during the Double Ninth Festival, donating to special funds for the elderly, supporting special needs children, donating school supplies to primary students, and contributing to the Hangzhou Police Care Foundation to help maintain local security.



06

Corporate Governance

SDGs addressed in this chapter



- 51 ESG Governance
- 53 Corporate Governance Structure
- 54 Standard Operation
- 55 Risk Management and Internal Control
- 56 Business Ethics

ESG Governance

ESG Governance Structure

We continuously deepen our understanding of the ESG management system, striving for its ongoing optimization and improvement. To date, we have successfully established a comprehensive ESG governance structure with clear levels, defined roles and responsibilities, and an efficient operational mechanism. This structure consists of three levels: "governance, management, and execution," aimed at ensuring the effective advancement and implementation of ESG initiatives.

Within this framework, the Board of Directors holds the highest governance responsibility, overseeing and managing ESG matters at the company's highest decision-making level. Their key duties include setting the strategic direction for ESG, supervising the implementation of ESG initiatives, and reviewing related reports, as detailed in the "Board Strategy and Sustainability Committee Operating Rules." The Strategy and Sustainability Committee under the Board is composed of three directors. These members are first elected by the general shareholders' meeting to become company directors, and then the Board elects them to form the committee, including two non-independent directors and one independent director. The committee is chaired by the chairman of the board, demonstrating the company's high regard for ESG efforts. The chairman, as the actual controller of the company, diligently performs his duties, focusing on risk control, and strictly enforcing internal control management systems such as the "Related Transaction Management System" to protect the legitimate rights and interests of relevant stakeholders.

The General Manager's Office, as the management level, is responsible for formulating and implementing specific ESG plans, preparing ESG reports, and regularly updating the Board on progress.

The execution level consists of the ESG Working Group, led by the Board Office. Group members include departments like the Supply Chain Center, Legal Affairs, Internal Audit, Finance, PV Materials Business Division, Electronic Materials Business Division, Functional Films Business Division(including their Quality and EHS departments), Intellectual Property, Information Technology, Engineering, R&D Institute, and Human Resources, covering all aspects related to the company's daily management.



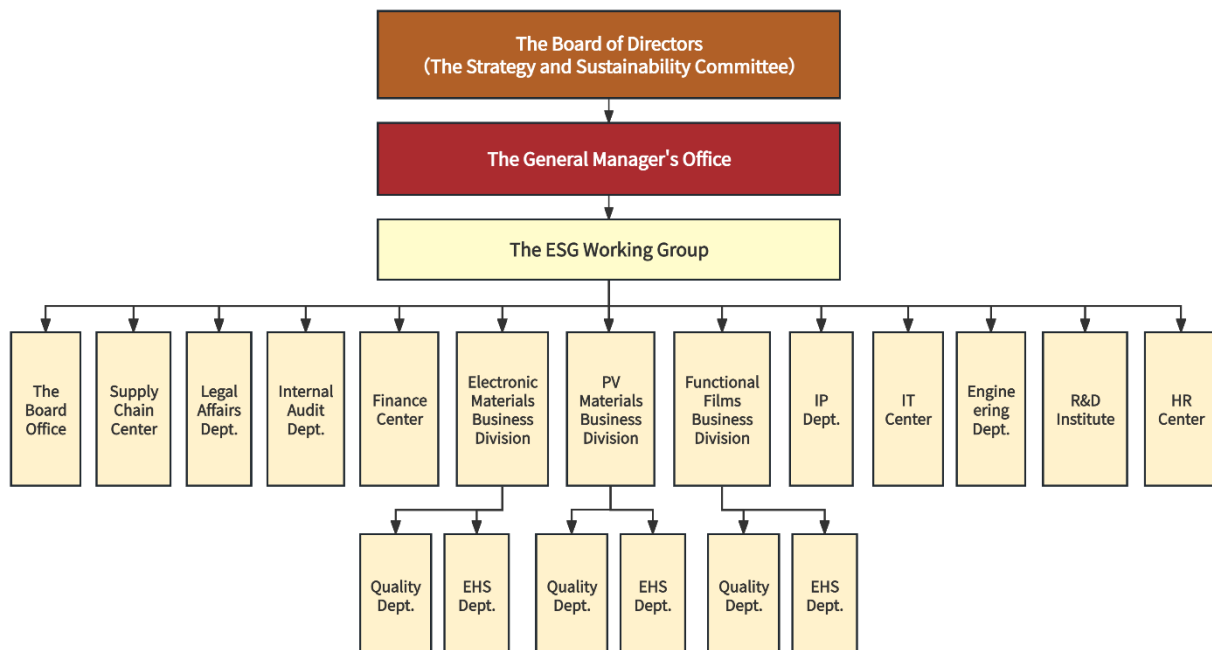
ESG Governance

ESG Working Group

To strengthen the implementation of ESG practices and enhance the quality of ESG disclosures, we have developed the "Detailed Guidelines for the ESG Working Group." The primary role of the ESG Working Group is to communicate, advance, and implement specific ESG measures and to manage and track the completion of ESG objectives. Through the collaborative efforts of this three-tier structure, we ensure the effective implementation of ESG initiatives within the group, further advancing our journey towards sustainable development.

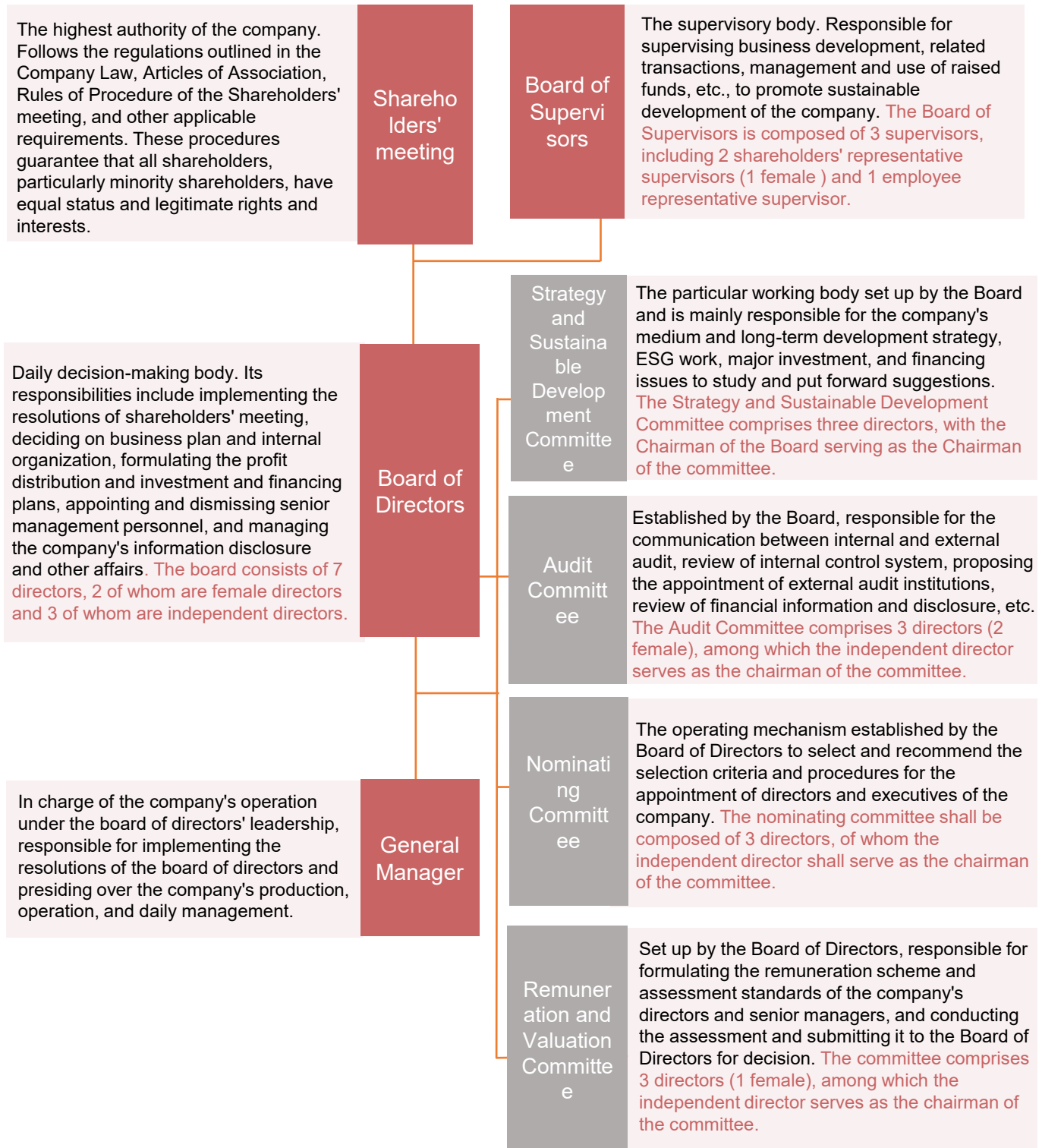
Looking forward, we are committed to continually improving and refining our practices in environmental, social, and governance (ESG) areas. We aim to strengthen interactions and exchanges with professional organizations both domestically and internationally, actively drawing on exemplary ESG practices within the industry. Moreover, the results of ESG implementation will serve as a critical metric for evaluating the performance of our management team, ensuring that ESG principles and practices permeate every level of the company's operations and management.

The Board Office, as the leadership core of the ESG Working Group, takes on the responsibility of planning, coordinating, and supervising ESG activities across departments, ensuring accurate compilation and timely disclosure of ESG information. The Supply Chain Center is responsible for maintaining honest relationships with partners, promoting transparency in the supply chain, and committing to selecting responsible suppliers. The Legal Affairs Department ensures comprehensive compliance with regulations and continuous improvement in ESG performance. The Internal Audit Department ensures that risks and controls related to ESG are effectively managed through auditing and collects data to guarantee its accuracy. The Finance Center supports ESG projects financially and monitors financial performance. Each business division and its Quality and EHS departments ensure that products and operations comply with environmental standards and actively engage in training and improvements in environmental and health safety. The Intellectual Property(IP) Department protects technological innovations, promoting sustainable technological development. The Information Technology(IT) Center supports ESG goals through technical solutions, including carbon reduction and efficiency improvements. The Human Resources(HR) Center ensures compliance with labor laws, protects employee rights, and promotes employee development.



Corporate Governance Structure

We continuously improve our corporate governance structure, revising and establishing major regulatory documents such as the "Company Articles," "Board of Directors Meeting Rules," "Independent Directors Work System," "Independent Directors Special Meeting Work System," "Related Transaction Management System," "Raised Funds Management System," and "External Guarantee Management System," to enhance decision-making efficiency and standardized operations.



Standard Operation Procedures

Investor relations

We have formulated the Information Disclosure Management System and the Investor Relationship Management System. Adhering to trustworthy, accurate, complete, timely, and effective information disclosure principles, we maintain effective communication with investors through information disclosure, performance presentations, institutional research, investor hotline, investor E interactive Q&A, etc. We help investors to understand the company information objectively, comprehensively, and deeply, and establish a long-term stable and good interactive relationship with investors.

Information disclosure

We attach importance to the work of information disclosure, fulfill the obligation of information timely disclosure in accordance with relevant laws and regulations, and safeguard all company shareholders' legitimate rights and interests.

In 2023, we completed preparing, submitting, and disclosing periodic reports. We completed the 120 interim announcements to disclose the company's relevant information to the majority of investors in a factual, accurate, complete, timely, and fair manner, so that investors can better understand the company's current situation.

We have been awarded Grade A for four consecutive years in the 2019-2022 Shanghai Stock Exchange Information Disclosure Evaluation.

Shareholder return

We pay great attention to shareholder returns and have clearly defined our dividend distribution policy in the "Company Articles" and "Shareholder Dividend Return Plan for the Next three years (2021-2023)." To maintain reasonable investment returns for public shareholders, our aim is sustainable development and the protection of shareholder rights. We ensure the continuity and stability of our profit distribution policy; during 2021-2023, cash dividends will constitute no less than 20% of the annual profit distribution.

Year	Increase by transferring per 10 shares (shares)	Dividend payout per 10 shares (RMB)	Cash dividend (tax included) (RMB)
2021	4.00	3.50	332,886,311.80
2022	4.00	1.50	199,731,787.05
2023	4.00	2.60	484,032,252.86
Cumulative cash dividends in the past three years			1,016,650,351.71

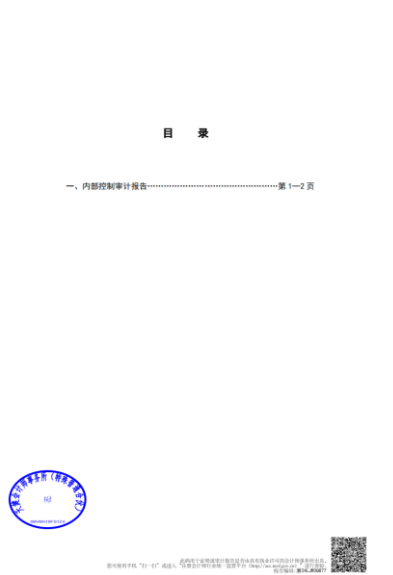
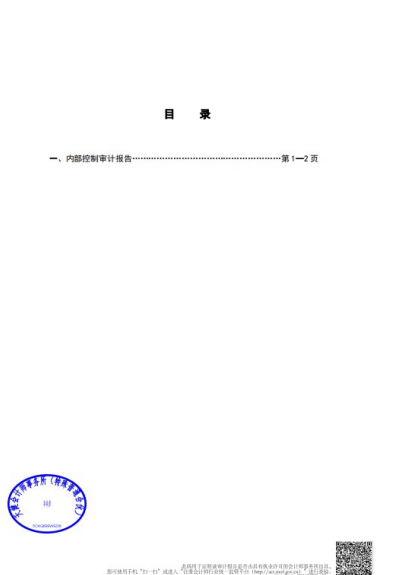
* The profit distribution plan for the fiscal year 2023 shall be implemented only after it has been reviewed and approved by the Annual General Meeting of Shareholders for the year 2023.

Risk Management and Internal Control

To effectively prevent and manage significant risks and enhance our overall risk management capabilities, we have updated and improved our "Internal Control Management System". This update aligns with the "Basic Norms for Enterprise Internal Control," "Guidelines for the Application of Enterprise Internal Control," and other relevant standards. We have developed a streamlined and robust internal control system that embeds risk management throughout all aspects of our operations and management. To oversee and assess our internal control management, which includes the internal environment, risk assessment, control activities, information and communication, and internal supervision, the board of directors, the board of supervisors, management, and the internal audit department have collectively established the company's risk internal control management organization. We strictly comply with all applicable laws and regulations. In 2023, neither our company nor any of its subsidiaries were involved in major violations or incurred fines for such violations.

In 2023, we engaged Pan-China Certified Public Accountants LLP to conduct an internal control audit of all functional departments at the headquarters and subsidiary levels. Throughout the year, no major defects were identified in the design and implementation of our internal control system, and **an unqualified opinion was issued in the Internal Control Audit Report**. We will also disclose our Internal Control Self-Evaluation Report on an annual basis.

In 2023, the board of directors and its various committees operated in compliance with legal regulations, diligently fulfilling their responsibilities. They actively worked on improving the company's governance structure and strengthening internal controls, ensuring the company's healthy operation and orderly development. During the reporting period, the board held 16 meetings, the supervisory board met 14 times, and the various committees convened 13 times. The board of directors also organized and held 4 shareholder meetings. All meeting resolutions were effectively implemented, maximizing the protection of the interests of the company, shareholders, and all relevant stakeholders.



For details of the Company's Internal Control Audit Report, please refer to the website of Shanghai Stock Exchange

Business Ethics

Adhering to Business Ethics

Engaging in misconduct such as embezzlement, bribery, or acts that compromise our company's interests or violate the principles of fair trade can severely disrupt the normal management order and hinder our sustained and healthy development. Therefore, our company rigorously follows laws and regulations including the "Criminal Law of the People's Republic of China," the "Civil Code of the People's Republic of China," the "Anti-Unfair Competition Law of the People's Republic of China," and the "Interim Provisions on Prohibiting Commercial Bribery." We are committed to opposing and explicitly prohibiting corrupt practices and fostering a culture of integrity and honesty within the company.

In 2022, to effectively mitigate operational and management risks and encourage broad employee involvement in governance, we established and published the "Internal Reporting Management System." This system facilitates timely supervision and reporting of operational flaws or non-compliant activities within the company, ensuring lawful and robust business operations.

Reporting Procedures and Anti-corruption Awareness

We ensure the transparency and accessibility of our corruption reporting policy and methods through various channels:

- (1) Bidding documents and procurement contracts must clearly display corruption reporting channels prominently or on a dedicated page.
- (2) On our website, in dormitory cafeterias, office areas, and factories, there are dedicated columns clearly displaying reporting ways.
- (3) During new employee orientation, the corruption reporting channels and anti-corruption policies are clearly indicated in training materials or employee handbooks.
- (4) Regular integrity awareness meetings for suppliers are held, requiring suppliers to sign an "Integrity Self-Regulation Notification Letter" to standardize their ethical behavior.

Key Principles

- (1) Broad employee participation.
- (2) Real-time monitoring and reporting.
- (3) Timely and effective response.
- (4) Strict accountability.
- (5) Confidentiality for whistleblowers.

Management Structure

The Management Leadership Team
 Leadership Team Leader: Chairman of the Board
 Leadership Team Office: Internal Audit Department

福斯特监督举报平台

公司举报平台上线啦!

举报平台检举方式

微信举报方式: 举报平台二维码

邮箱举报方式: 邮箱: firstjubao@firstpvm.com

举报平台报范围

公司所有部门、所有环节的运营缺陷、管理漏洞或违规行为都列为员工举报范围内。

(一) 经营管理中违反公司制度、监管政策、相关法律法规的行为;
 (二) 财务制度执行中的违法违规行为;
 (三) 员工招聘、干部聘任中违背公开、公平原则的暗箱操作行为;
 (四) 公司物品采购、公务消费、公务接待等方面存在违反公司规定的行为;
 (五) 其它会给公司带来经济、声誉损失的行为。

举报平台检举奖励

公司将检举重大违法违规行为或者成功堵截案件的员工, 实行奖励, 并将在案件处理完毕两周内直接奖励有功员工。

(一) 挪用资金或挽回损失在10万元以内(含10万元)的, 标准奖励为3%, 不高于3000元;
 (二) 挪用资金或挽回损失在10万元以上100万元以内(含100万元)的, 奖励标准为2%, 不高于21000元;
 (三) 挪用资金或挽回损失在100万元以上的, 标准奖励为1.5%, 不高于50000元;
 (四) 检举内容无法按照金额进行衡量的, 内部举报管理领导小组根据影响的大小确定具体奖励金额;
 (五) 对影响特别重大的, 奖励金额另行讨论。

杭州福斯特应用材料股份有限公司
 HANGZHOU FIRST APPLIED MATERIAL CO., LTD.

Business Ethics

Responsibilities of the Management Leadership Team

- (1) Establish, modify, and implement the "Internal Reporting System."
- (2) Receive and investigate reports of operational flaws or misconduct, and determine their nature.
- (3) Discuss remedial and corrective actions to report to the company.
- (4) Issue opinions on the responsibilities of those involved in operational flaws or misconduct, according to company policies.

Scope of Reporting

Operational flaws, management lapses, or violations across all departments and processes fall within the scope of employee reporting and whistle-blowing activities. This includes:

- (1) Violations of company policies, regulatory policies, or laws and regulations in business management.
- (2) Illegal activities in the implementation of financial systems.
- (3) Unfair practices in employee recruitment and cadre appointments.
- (4) Violations of company rules in purchasing goods, business expenditures, or official receptions.
- (5) Other actions that could cause economic or reputational damage to the company.



Confidentiality for Whistleblowers

We place high importance on protecting the legal rights of whistleblowers, implementing the strictest measures to safeguard their personal information, and prohibiting any disclosure. Information about whistleblowers and their materials are managed as confidential documents under our "Confidentiality System." During investigations, it is strictly forbidden to directly transfer any complaint letters, evidence, or records to the reported units or individuals, to prevent leaks and retaliatory actions. If retaliation occurs, the company will pursue administrative, financial, and legal responsibilities.



Key Supervisory Elements

Based on market cases and our actual situation, we have identified high-risk areas for corruption, such as material procurement, logistics, and construction. With a "prevention-first" philosophy, we have established a comprehensive "Bidding Management Method." The Supply Chain Center, the General Manager's Office, and the Internal Audit Department conduct open bidding for different business segments to prevent rent-seeking and corruption at the source. Every three years, the company conducts an audit of all operations. In 2023, the company conducted 93 bidding projects, 13 special audits, and dealt with 5 corruption cases, taking appropriate actions against the individuals involved as per company regulations.

APPENDIX 1 – GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 2: General Disclosures 2021	2-1 Organizational details	P4, P6-7	Report Instructions, About FIRST
	2-2 Entities included in the organization’s sustainability reporting	P4	Report Instructions
	2-3 Reporting period, frequency and contact point	P4	Report Instructions
	2-6 Activities, value chain and other business relationships	P6-9, P34-37, P40	About FIRST, Product Development, Supply Chain Management
	2-7 Employees	P42	Equality and Diversity
	2-8 Workers who are not employees	P42	Equality and Diversity
	2-9 Governance structure and composition	P51-53	ESG Governance, Corporate Governance Structure
	2-10 Nomination and selection of the highest governance body	P53	Corporate Governance Structure
	2-11 Chair of the highest governance body	P53	Corporate Governance Structure
	2-12 Role of the highest governance body in overseeing the management of impacts	P51-53	ESG Governance, Corporate Governance Structure
	2-13 Delegation of responsibility for managing impacts	P51-53	ESG Governance, Corporate Governance Structure
	2-14 Role of the highest governance body in sustainability reporting	P51-53	ESG Governance, Corporate Governance Structure
	2-15 Conflicts of interest	P13, P53	Stakeholder Communication, Corporate Governance Structure
	2-16 Communication of critical concerns	P13-14	Stakeholder Communication, Materiality Assessment for ESG Issues
	2-17 Collective knowledge of the highest governance body	P51-52	ESG Governance
	2-19 Remuneration policies	P46-47	Compensation and Benefits
	2-20 Process to determine remuneration	P46-47	Compensation and Benefits
	2-22 Statement on sustainable development strategy	P5	Letter from the Chairman
2-23 Policy commitments	P13	Stakeholder Communication	

GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 2: General Disclosures 2021	2-24 Embedding policy commitments	P31, P51-52	Response to Climate Change, ESG Governance
	2-25 Processes to remediate negative impacts	P13, P55	Stakeholder Communication, Risk Management and Internal Control
	2-26 Mechanisms for seeking advice and raising concerns	P13, P55	Stakeholder Communication, Risk Management and Internal Control
	2-27 Compliance with laws and regulations	P55	Risk Management and Internal Control
	2-29 Approach to stakeholder engagement	P13	Stakeholder Communication

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-1 Process to determine material topics	P13-14	Stakeholder Communication, Materiality Assessment for ESG Issues
	3-2 List of material topics	P14	Materiality Assessment for ESG Issues
	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	P8, P46-47	2023 Key Performance and Awards, Compensation and Benefits
	201-2 Financial implications and other risks and opportunities due to climate change	P31-32	Response to Climate Change

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	P49	Social Responsibility

GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	P56-57	Business Ethics
	205-2 Communication and training about anti-corruption policies and procedures	P56-57	Business Ethics
	205-3 Confirmed incidents of corruption and actions taken	P56-57	Business Ethics

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues Stakeholder Communication
GRI 207: Tax 2019	207-3 Stakeholder engagement and management of concerns related to tax	P13	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues Stakeholder Communication

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 302: Energy 2016	302-1 Energy consumption within the organization	P21, P29-30	Green Operations, Water Conservation, Response to Climate Change
	302-4 Reduction of energy consumption	P18-P30	Energy Management, Green Operations, Emission & Waste Management, Chemical Safety, Water Conservation, Response to Climate Change

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	P29	Water Conservation
	303-3 Water withdrawal	P29	Water Conservation
	303-4 Water discharge	P29	Water Conservation

GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	P22-25	Emission & Waste Management
	306-2 Management of significant waste-related impacts	P22-25	Emission & Waste Management
	306-3 Waste generated	P22-25	Emission & Waste Management
	306-4 Waste diverted from disposal	P22-25	Emission & Waste Management

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	P28	Chemical Safety
	308-2 Negative environmental impacts in the supply chain and actions taken	P40	Supply Chain Management

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P46-47	Compensation and Benefits
	401-3 Parental leave	P46-47	Compensation and Benefits

GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	P45	Occupational Health & Safety Management
	403-3 Occupational health services	P45	Occupational Health & Safety Management
	403-4 Worker participation, consultation, and communication on occupational health and safety	P45	Occupational Health & Safety Management
	403-5 Worker training on occupational health and safety	P45	Occupational Health & Safety Management

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	P43-44	Employee Training and Development
	404-2 Programs for upgrading employee skills and transition assistance programs	P43-44	Employee Training and Development

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	P42	Equality and Diversity

GRI Content Index

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	P49	Social Responsibility

GRI STANDARD	DISCLOSURE	LOCATION	RELATED CHAPTER
GRI 3: Material Topics 2021	3-3 Management of material topics	P11-12, P14	Response to UN Sustainable Development Goals, Materiality Assessment for ESG Issues
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No environmental penalties	/

APPENDIX 2 - Feedback Form

To our valued readers,

We express our gratitude for taking the time to read our 2023 Environmental, Social, and Governance (ESG) Report. As we strive to enhance the standard of our ESG endeavors and the caliber of our report preparation, we would greatly appreciate your input and valuable suggestions. You could provide us with your feedback through the mail, email, or by making calls, and so on. Rest assured that we will maintain the confidentiality of your personal information and the content you provide. Thank you!

Contact information

Address: No.8 Fusite Street, Lin'an, Hangzhou, China

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Email: first-zqb@firstpvm.com

What kind of stakeholder do you belong to:

- Shareholders Employees Suppliers Users Government Community
 Banks Academic institutions Others (please specify)

Your overall comments on this report are:

- Excellent Good Ordinary Poor

Do you find this report readable (the expression is easy to understand, the design is beautiful, and the information is easy to access)

- Excellent Good Ordinary Poor

Do you think the report is credible (the reported information is trustworthy and reliable)

- Excellent Good Ordinary Poor

You think the information integrity of this report is: (whether the information disclosure is complete)

- Excellent Good Ordinary Poor

Your assessment of the environmental liability section disclosed in this report is:

- Excellent Good Ordinary Poor

Your comments on the social responsibility section disclosed in this report are:

- Excellent Good Ordinary Poor

Your comments on the governance responsibilities section disclosed in this report are:

- Excellent Good Ordinary Poor

What other information would you like to get in addition to what has been disclosed in the report?