

# 2023

# Environmental, Social and Goverance (ESG) Report Highlights

Anji Microelectronics Technology (Shanghai) Co., Ltd





# 2023 ESG Highlights

#### **Corporate Governance**

- Conducted 6 sessions of legal compliance trainings and 4 sessions of intellectual property-related trainings
- Conducted 268.5 hours of anti-corruption trainings
- Completed annual revision of ANJI-M-IC-01-A/3 Internal Control Manual
- Completed revision of Independent Director Working System
- Became member expert of Shanghai Integrated Circuit Industry Association Intellectual Property Expert Committee
- Awarded the AEO Certification by the Shanghai Customs, China

#### **Innovative Products**

- As of Dec 31<sup>st</sup>, 2023, the company has been granted 271 authorized patents, and held 337 valid patent applications
- Implemented validation and mass production of 3 highly concentrated chemical mechanical polishing slurries, as well as achieve 4 aqueous-based functional wet chemicals commercialization
- Won the "Industry Chain Breakthrough Award" of China Semiconductor Investment Alliance
- Won the title of "The First Group of Shanghai Innovative Enterprise Headquarters"

#### **People-oriented**

- As of Dec 31<sup>st</sup>, 2023, 4,396,290 RMB<sup>2</sup> was invested in equipment maintenance and production safety
- Completed the relocation to new site, and the overall office space has reached 8,244.68 sqm<sup>2</sup>.
   The working environment for employees has significantly improved
- Completed over 30 safety inspections throughout the reporting year, including more than 10 emergency drills
- 2. Including the overall investment of EHS department and other departments in equipment maintenance and production safety

- Employees received on average 73 hours of training annually. Achieved 100% training coverage among all employees
- Annual employee turnover rate reduced to 10.85%, 3.85% lower compared to 2022
- Average score for employee satisfaction in the company's departmental survey exceeded 90%

#### **Environment Protection**

- As of Dec 31<sup>st</sup>, 2023, 5,580,105 RMB¹ was invested in environment equipment and facilities, as well as green operation
- Zero safety accidents in 2023
- Constructed and completed grid-connection of self-built photovoltaic facilities in Jinqiao Base, generating 135,107 KWh of electricity and reduced CO<sub>2</sub> emissions by 7.7 tons.
- 1. Including the overall investment of EHS department and other departments in environment equipment and facilities, as well as green operation

## **Social Undertakings**

- Conducted supplier evaluations for 81 suppliers, achieving 100% qualification rate.
   Approximately 82.7% of the suppliers scored above 80 points.
- The completion rate of supplier ESG and guideline manual training program reached 100%
- Actively organized and/or participated in public welfare projects, such as rural revitalization, supporting public education, tree planting, ESG family day, etc.



Corporate Goverance Innovative Products

Environment Protection

Peopleoriented Social Undertakings Appendix & Conclusion



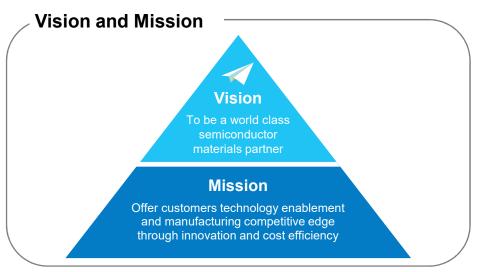
# **About Us**



Anji Microelectronics Technology (Shanghai) Co., Ltd. (stock code: 688019.SH) is a high-tech semiconductor materials company with an emphasis on independent innovation and intellectual property. We are dedicated to R&D and industrialization of high-growth and high-function materials with high technological barriers, with a strategy of "Rooted in China, serving the world". We enhance our one-stop solution for Chemical mechanical polishing slurry (CMP) fluids and solidifies a comprehensive product portfolio. We expand the platform for functional electronic wet chemicals to cover the high-end and high-technology sector. We strengthen the strategic supply of high-end electro-chemical plating solutions and additives, and build the foundation for rapid market expansion. By achieving greater autonomy and control over key raw materials, we drive technological advancements and fill domestic gaps, propelling the rapid development of the semiconductor materials industry chain.

By the end of this reporting period, we now covered the three key processes of polishing, cleaning and deposition in the integrated circuit manufacturing. As we further expand the range and applications of our products, multiple technology nodes in chip manufacturing processes have been covered, and our product coverage in advanced packaging have increased, resulted in a growing customer base.

# Respect Care People-oriented Innovation Result-driven Pursuit of Excellence



Awards & Recognition

Awarded
The First Group of
Shanghai Innovative
Enterprise Headquarter by
Shanghai Development and
Reform Commission

Awarded Science & Technology Innovation Achievement of Jinqiao Development Zone Awarded
Top 10 Growing
Enterprises & Top 10
Intellectual Property
Enterprises by Integrated
Circuit Materials Industry
Technology Innovative
Alliance

Awarded
2023 China Integrated
Circuit Innovation Alliance
6th IC Innovation –
Technical Innovation
Award

Awarded
2023 Shanghai Top 100
Hardcore Technology
Enterprises in Shanghai
Industry Technology
Innovation Convention

Awarded
2023 Industry Chain
Breakthrough Award by
China Semiconductor
Investment Alliance

About Us

**Corporate Goverance** 

Innovative Products

Environment Protection

Peopleoriented Social Undertakings Appendix & Conclusions



# **Sustainable Development**

Human development faces various daunting challenges, including climate change, biodiversity loss, air pollution, energy crisis and resource scarcity. While ensuring the robust development of our own business, we consistently aligns our core development strategy with the United Nations Sustainable Development Goals (SDGs). We actively focus on customers who share these goals, collaborating to achieve the objectives and needs expected by stakeholders. We consistently strive to be at the forefront of exploring and capturing ESG-related risks and opportunities, facing challenges with an innovative and proactive mindset. We contribute the experience and insights gained from our journey to the sustainable development of the industry.



# **ESG Governance Structure**



- Review company's ESG vision, systems, goals and annual ESG reports
- Monitor the implementation progress of ESG goals
- Assist the ESG
   Committee to establish
   the company's ESG
   vision, systems, and
   goals
- Track the performance against company's ESG goals
- Collect information about the performance against the company's ESG goals and indicators, and prepare the annual ESG report
- Implement the resolutions of the ESG Committee, design work plans according to the company's ESG goals, track and report on the department's performance against the company's ESG goals and indicators

# Sustainable Development

ESG Vision:
Pursue a greener, better, and brighter future

Company Vision:
To be a world class semiconductor
materials partner



About Us

Corporate Goverance

Innovative Products

Environment Protection

Peopleoriented Social Undertakings Appendix & Conclusions



# **Innovative Products**



**Chemical Mechanical Polishing** (CMP) **Slurry** 



Functional Electronic Wet Chemicals



**Electro-chemical Plating Solution and Additives** 



**Core Material Supply** 

"3 + 1" technology platform & application

Core material Supply

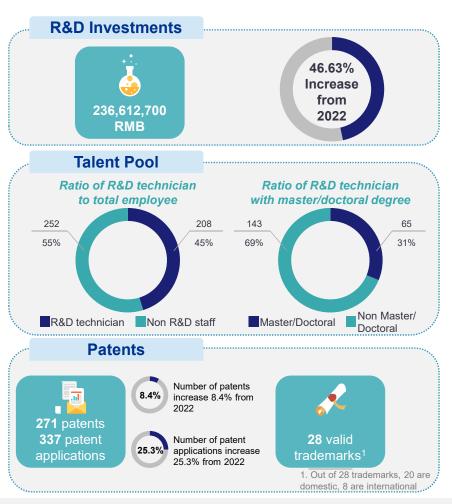
Validation and mass production of 3 highly concentrated CMP Slurries



Achieve 4 aqueous-based functional wet chemicals commercialization



2023 innovative product achievement



With a steadfast focus on present, a visionary outlook for the future, and commitment to our ESG vision of "Pursue a greener, better, and brighter future", we will persist in pioneering product innovation and infuse green and sustainable principles throughput our R&D process, and to become a leading practice of green operation among in the industry

About Us

Corporate Goverance Innovative Products

**Environment Protection** 

Peopleoriented Social Undertakings Appendix & Conclusions



# **Environment Protection**

# **Waste Management**

#### **Waste Management:**

 Established a sound waste management system which focuses on waste reduction, reuse and recycling (3R) principles. We address waste generation from the source, aiming to minimize it and improve the efficiency of waste treatment

#### **Air Emission Management:**

 Employed various methods of air emission control, including a combination of gas collection, treatment and refined management to reduce emissions

#### **Wastewater Management:**

 Focused on reducing and recycling wastewater by implementing strict wastewater management measures and optimizing treatment processes

### **Natural Resources**

#### **Energy Management:**

- Equipped Building 6 of Jinqiao base with energy management system, reducing CO<sub>2</sub> emission by 30.8 tons
- R&D center has improved the operation of the cleanroom's fan filter unit, reducing CO<sub>2</sub> emissions by 42.8 tons
- Ningbo base saved 426,000 RMB in electricity costs through various energy-saving and emission reduction practices

#### **Water Resources Management:**

 Jinqiao and Ningbo base have saved a total of 25,600 tons of water, resulting in cost saving of 127,800 RMB

# **Green Operation**

Improve greenhouse gas

emissions control and

strive for a gradual reduction in carbon

emission

Indicators	Sub-Indicators	Unit	2023	
Scope 1	From coal combustion during operation	tCO <sub>2</sub> e <sup>1</sup>	0	
	From natural gas combustion during operation	tCO₂e	0	
	From owned vehicles fuel usage	tCO <sub>2</sub> e	3.227	
Scope 2	Carbon emissions from purchased electricity	tCO <sub>2</sub> e	10,305.595	
CO <sub>2</sub> emission intensity	Product CO <sub>2</sub> emission intensity	tCO <sub>2</sub> e/ tons product	0.439	

Promote the installation of internal water-saving and recycling equipment, optimize water usage, and improve the efficiency of water resource recycling and utilization

Further enhance the utilization of clean energy and renewable energy sources, and optimize the existing energy mix

Reduce wastes and promote new concepts of green production, such as advocating the use of recyclable materials and implementing green purchase

<sup>1.</sup> tCO<sub>2</sub>e stands for ton of CO<sub>2</sub> equivalent



#### **Safe Production**

Adhere to our strategy of "Respect, Compassionate and Value people", we are committed to creating a

safe, healthy and more humane working environment for all our employees

As of Dec 31st, 2023, a total of 4,396,290 RMB was invested in maintaining equipment and production safety by EHS and other departments





Over the course of the year, more than 30 safety inspections were carried, along with more than 10 emergency drills



The relocation of R&D center to Shanghai Jinqiao base, was a crucial step for us in pursuing sustainable development through innovation. The overall office area have increased to  $8,244.68~\text{sqm}^2$ , and the dining area increased to  $336~\text{sqm}^2$ 

## **Human Resource Development**





- Labor contract signing rate: 100%
- Social insurance contribution for employees under labor contracts: 100%



- New Employees in Mainland China (as of 2023): 58
- Total Employees in Mainland China:452
- Total Employees in Mainland and Taiwan Region : 460



- Total Female Employees: 116
- Total Female Employees Ratio: 25.217%

## **Grow with the Company**



Annual employee turnover rate has been reduced to 10.85%

3.85% lowered than that of 2022

- Total training hour reached 33,494 hours
- Covering all 460 employees, achieving 100% coverage rate
- Average annual training hours per employee reached 73 hours



Average annual training hours per employee by gender

82 hrs

70 hrs

Female Employee Male Employee



# **Social Undertakings**

# **Sustainable Supply Chain**

Centered around the core concept of "win-win" cooperation, we collaborate with our supply chain partners to build a sustainable ecosystem. We consistently demonstrate the responsibilities that we as a technology companies should uphold. We actively engage in alliance and collaboration with peer companies and university activities, fully embodying our social mission



- We conducted supplier evaluation for 81 suppliers through 5 dimensions, including quality management, order delivery management, technical cooperation and service, ESH management and cost management
- The result showed a 100% qualification rate, with 67 suppliers (82.7% of total suppliers) scoring above 80 points
- As per annual plan, we conducted ESG and supplier guidance manual trainings for qualified suppliers of raw materials. As of Dec 31<sup>st</sup>, 2023, we have successfully completed all the planned training for the year, achieving a 100% completion rate
- Moving forward, we will continue to promote the relevant training among our suppliers



# **Social Responsibility**

We actively organize and/or participate in various social welfare activities, dedicating ourselves to creating positive and constructive values for society. We not only advocate for innovation and education, but also extend our helping hand to socially vulnerable groups, promoting values of sustainable development and fairness, and fulfilling social responsibility

 We actively organized and/or participated in public welfare projects, such as rural revitalization, supporting public education, tree planting, ESG family day, etc.





#### Our achievements in 2023:

- 140,000 RMB of social donation
- 319 pieces of adult clothing, 35 pieces of child clothing
- 127 pieces of beddings, 22 pieces of toys and books

# **University-Enterprise Cooperation**

 We continued to maintain active collaboration with universities including Fudan University, East China University of Science and Technology, Shanghai Second Polytechnic University and Harbin Engineering University Yantai Research Institute





Environment

About Us

Corporate Goverance Innovative **Products** 

Tons/ tons

product

Tons

Tons

0.008

0.017

856.955

Environment Protection

Peopleoriented

Social Undertakings



# **Appendix & Conclusions**

Non-hazardous wastes intensity

Electronic waste

Hazardous wastes

Performance Indicators		Unit	Data	Performance Indicators		Unit	Data
Economic	R&D Investment	10K RMB	23,661.27	Environment	Hazardous wastes intensity	Tons/tons product	0.036
Social	Total workforce <sup>1</sup>	Person	460		Volatile Organic Compounds (VOCs)	Tons	0.963
	Female employee ratio	%	25.217		Nitrogen Oxide (NOx)	Tons	0.269
	Labor contract signing rate	%	100		, ,		
	Employee training coverage	%	100		Particles	Tons	0.012
	Total duration of employee training	Hours/year	33,494		Chemical Oxygen Demand (COD)	Tons	3.614
	Average training duration per employee	Hours/year	73		Total Nitrogen (TN)	Tons	1.904
	Number of deaths in the past three	Person	0		Ammonia Nitrogen (NH3-N)	Tons	0.342
	years related to work  Number of lost workdays due to				Total Phosphorus (TP)	Tons	0.015
	occupational injuries <sup>2</sup>	Days	14		Consumption of purchased electricity (excluding green electricity)	KWh	18,070,4
	Number of safety training	Times	17		Consumption of green electricity	KWh	135,107
	Total safety training participants	Person-Times	1,279		Consumption of gasoline	Liters	1,437.82
	Total workplace accidents	Times	0		Consumption of Water <sup>4</sup>	Liters	319,574
	Annual investment in workplace safety	10K RMB	439.629		·		· ·
	Social donations	RMB	140,000 <sup>3</sup>		Consumption of Recycled Water <sup>5</sup>	Liters	183,464
	Number of valid patent applications	Pieces	337		Direct emissions (Scope 1 emission)	tCO <sub>2</sub> e	3.227
	Number of patents	Pieces	271		Indirect emissions (Scope 2 emission)	tCO <sub>2</sub> e	10,305.5
	Number of valid trademarks held	Pieces	28		CO2 emission intensity <sup>6</sup>	tCO <sub>2</sub> e/ tons product	0.439
	Domestic wastes	Tons	4.500		Annual investment in environment protection	10K RMB	558.011
	Total amount of non-hazardous wastes	Tons	197.514	A total of 460 people, of which 452 are from Mainland China and 8 are from Taiwan Region.     According to the definition of the Ministry of Human Resources and Social Security			

According to the definition of the Ministry of Human Resources and Social Security

Including the 40,000 RMB donated to SMIC Liver Transplant Program, and the donation of 100,000 RMB made to Dongxuzhuang School in Junxian, Hebi, Henan Province

Including municipal water, groundwater, river water, and so on

Including recycled water and condensate water from steam

During this reporting period, both the R&D development center and production workshops underwent capacity expansion. The disclosed CO<sub>2</sub> emission intensity is calculated based on the overall energy consumption data, including both the R&D center and production workshops