Jinan Acetate Chemical Co., Ltd List of Sustainability Reports

The words of the operator

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Operator's Words



Everyone is concerned about Jinan Acetate Chemical Co., Ltd. (hereinafter referred to as the company) of stakeholders, welcome to read the 2023 annual sustainability report issued by the company. The company is well aware that although the purpose of the enterprise is to make profits, to create maximum profits for shareholders is the purpose of the establishment of the enterprise, but in recent years, domestic and foreign enterprises in the pursuit of profits, but there are pollution of the surrounding environment or sweatshops, we hope that by issuing this report, stakeholders can be informed of the company's efforts in the company's management, environment, social and labor human rights, and hope to further arouse the industry's commitment to sustainable management, Attaching importance to the green environment and appropriately responding to the expectations of stakeholders, only by taking into account all aspects of the company's operation, environment and society, will the enterprise be stable, sustainable and developing.

Steady Company Operation

The Board of Directors of the Company has a total of 8 directors, including 4 independent directors, and the remuneration committee and the audit committee are composed of independent directors, who supervise the operation and management of the company through regular meetings, and combine the remuneration of senior management with the company's operating performance, so as to promote senior management to fulfill their obligations as good managers and create maximum benefits for the company. In addition, the Company authorizes each authority and responsible department to communicate with its corresponding stakeholder groups in a timely manner, understand the requirements and expectations of the Company, etc., and respond appropriately to the stakeholders after full discussion and decision-

making within the Company.

Looking back on 2023, the Company's consolidated revenue increased by 158.25% over the previous year, and the revenue of tow and vinegar tablets in the current period continued to hit a record high, mainly due to the trade war and changes in the geopolitical situation, which intensified the restructuring of the industrial chain, resulting in continued strong demand for tow and vinegar chips, and the completion of new capacity expansion. Strong demand, continuous expansion of production capacity, and upstream and downstream integration to optimize the cost structure, so that the market share has increased and has a more stable industrial position, in addition to maintaining existing customers, and continue to develop niche markets, continue to communicate with customers to adjust prices. Overall, the Company remains cautiously optimistic about future operational growth.

In order to comply with local government regulations and laws, we promise that all responsible units will strictly implement business in accordance with the law, and pay attention to the latest legal changes to change the management system and operation mode, reduce the risk of violating the law, and achieve the goal of sustainable operation, and there will be no major violations of Taiwan and mainland laws and regulations in 2023.

Environmental Sustainability Commitments and Practices

Resource Regeneration, Recycling

Product recycling and reprocessing is an important part of the circular economy. Reusing manufactured products through mechanical, chemical or pyrolysis is an effective strategy to reduce the consumption of the earth's resources. The company cooperated with the University of Rome in Italy to recover cellulose acetate pellets by chemical separation and thermal cracking, and successfully reduced cellulose acetate pellets into primary raw materials: plasticizers, acetic acid and cellulose. This new technology is patent pending, while evaluating the feasibility of reusing these recycled raw materials for reprocessing. We will continue to expand the development of this recycling technology to achieve the practical benefits of industrialization. Recognizing that abundant and clean water resources are indispensable for a sustainable environment, we have already begun to increase the wastewater treatment energy in our plants to fully meet the requirements for wastewater discharge. However, we believe that this is the most basic requirement, and the company is committed to improving the recycling process water, grading and reusing the recycled water, effectively improving the efficiency of water use, and reducing the waste of water resources. For the most recent three years of information on the above-mentioned reclaimed water use, please refer to P.48 of this report on water use for three consecutive years.

Green process, energy saving and carbon reduction

Raw material pretreatment and cellulose acetylation are the key steps in the cellulose acetate process that have the greatest impact on the environment. There is currently a lot of research on the development of green processes for cellulose acetate, and we are evaluating how to reduce the use of caustic solution in the pre-treatment stage and how to reduce the consumption of organic solvents and acetyl in the acetylation process. The company will gradually introduce green processes from the pilot stage to reduce resource

consumption and reduce the carbon footprint throughout the life cycle.

Pursue employee happiness

First of all, we attach great importance to the rights and interests of employees, realize that only by providing employees with better welfare benefits can we retain the talents who have been cultivated hard, and earnestly abide by the relevant provisions of labor laws, effectively protect the legitimate rights and interests of all employees, sign labor contracts with each employee, pay social insurance, so that employees can work with peace of mind until retirement and obtain pension protection; Through the implementation of a fair and reasonable remuneration system, we have created a sound talent training system and encouraged employees to maintain their competitiveness through external training, with a view to introducing, cultivating and gathering all kinds of talents to facilitate the sustainable development of the company. In addition, we pay attention to safety production, always pay attention to the occupational health and safety of employees, obtain a number of safety production related audit qualifications, comprehensively improve the workplace working environment, improve employee safety awareness, and successfully complete safety production goals. In the future, in the face of the gradual enhancement of employees' awareness of the main body, the Company will continue to pay attention to the rights and interests of employees and implement the policy of employee care, so as to meet the needs of employees, reduce the turnover rate of new employees, and establish a stable employee group, so as to facilitate the healthy and sustainable development of the Company.

Chairman

Wang, Ko-Chang

About this Report

This is the 2023 annual sustainability report published by Jinan Acetate Chemical Co., LTD. (hereinafter referred to as the Company), through which it explains to stakeholders the efforts and achievements made by the Company to strengthen corporate governance, customer service, environmental protection, factory safety and employee care under the goal of corporate sustainable operation in 2023 And look forward to shouldering more corporate social responsibility in the future.

Report Boundaries and Scopes

This report covers the period from January 1, 2023 to December 31, 2023, including the Taiwan Office

and three overseas subsidiaries-Jinan Acetate Chemical Co., Ltd., Acetek Material Co., Ltd. and Acetek

Momentum Co., Ltd., referred to as Jinan Acetate Chemical company, Acetek Material company and Acetek

Momentum company. Except for the disclosure of financial information based on consolidated financial

data, if there is any cross-year presentation or change in the scope of disclosure, it will be explained

separately in the report.

Basis for Writing and Verification

The principles governing the preparation of this report are based "Global Reporting Initiative, GRI)"

GRI Sustainable reporting guidelines: 2021 and "Operational Measures for the Preparation and Declaration

of Perpetual Reports of Listed Companies", the chemical industry should explain the disclosure projects

and disclose relevant information. This report is also entrusted with limited assurance by Legendary &

Steadfast Accountancy (LSA) pursuant to Assurance Standards Bulletin No. 1 "Conviction Cases Not

Historical Financial Information Examination or Review".

Release Frequency

The company promises to continue to issue a sustainability report every year, this report is the eighth

report, will be publicly published on the company's website, the full report Download URL:

www.acetek.com.cn.

Last release: September 2023

Release date: August 2024

Expected next release: August 2025

Contact Information

If you have any questions or suggestions about the contents of this report, please feel free to contact

us.

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Chapter 1 Sustainable development

1. Sustainable development strategy

Sustainable operation of the enterprise

Enterprises for the purpose of profit, the pursuit of the greatest interests of shareholders for the main purpose of the survival of the enterprise, but from time to time in the production process of enterprises have polluted the surrounding environment or sweatshops, therefore, in recent years, all parties in China require enterprises to fulfill their social responsibilities. The voice is rising, as a member of the society should give back to the society, so we in order to promote the sustainable operation of enterprises and practice social responsibility, we are committed to promoting the economy, To strike a balance between environmental protection and social participation, the Company has formulated the "Corporate Social Responsibility Code" as a basis for the implementation of corporate social responsibility and to declare the company's determination to implement corporate social responsibilityFor the various stakeholder groups corresponding to them, through multiple communication channels, we understand the concerns and expectations of the Company on issues such as the company's operation, green sustainability, labor and human rights, product liability, etc., and then put forward the issues of concern to the stakeholders at the meeting of the corporate sustainability promotion group at the beginning of each year, and after full discussion, put forward the response strategies and specific action plans for the chairman to approve.

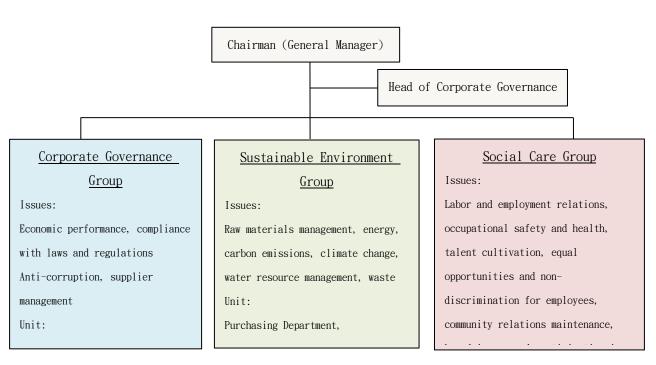
In 2022, the Company established a Corporate Sustainability Implementation Group, which was approved by the Board of Directors and appointed the General Manager as the chairman, with each authority and responsible unit responsible for the implementation of corporate governance, economic, environmental and social sustainability issues, and reported to the Board of Directors on the implementation results of corporate sustainability development every year, so as to strengthen the participation of the Board of Directors in the implementation of the Company's sustainable development results, and in order to strengthen the Company's sustainable development, the Company has established a corporate governance officer in 2023 to be responsible for continuously promoting sustainable development. In 2023, the number of training hours for corporate governance executives reached 41 hours.

2023 Corporate Governance Executive Training

Organizers	Course name	Number of study hours
IThome	Digital Sustainability Summit Sustainable IT&ESG	8
stock exchange	Publicity meeting on the sustainable development action plan of listed companies	3
Environmental Protection	Green chemistry creates sustainability	3

Administration, Executive Yuan		
Securities and Futures Development Foundation of the Republic of China	 How to play the role of the functional committee of the board of directors Legal liability and risk control for false financial statements of directors and supervisors 	6
Securities and Futures Development Foundation of the Republic of China	12hr Practical Seminar for Initial Directors and Supervisors (including Independent) and Corporate Governance Supervisors	12
stock exchange	2023 Cathay Pacific Sustainable Finance & Climate Change Summit	6
stock exchange	2023 WIW Global Investor Week United Forum	3

Organizational chart of the Corporate Sustainability Implementation Group



Sustainable development results

Corporate Governance

- 1. With an integrity-based corporate culture, we maintain close interaction with stakeholders, establish good communication channels, understand the needs of stakeholders, and implement the company's sustainable development, protect the rights and interests of shareholders and strengthen the function of the board of directors as the direction of continuous efforts.
- 2. In order to strengthen the functions of the board of directors, all members of the

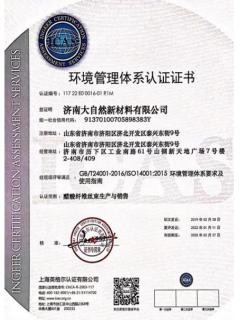
	board of directors are required to have operational judgment ability, accounting
	and financial analysis ability, operation and management ability, crisis
	management ability, crisis management ability, industry knowledge, international
	market view, leadership ability and decision-making ability, etc., to ensure the
	quality of decision-making of the board of directors.
	3. The Directors maintain a high degree of self-discipline and implement interest
	avoidance, and review the performance of the current year through the Board of
	Directors self-evaluation every year.
	1. Committed to sustainable development and the pursuit of long-term benefits, to
	create diversified value for stakeholders.
	2. Develop diversified products and high-end production technology, continue to
	strengthen product competitiveness and increase overall market share.
	3. Every year, we invest in the implementation of research and development plans for
economy	the development of new products and the improvement of manufacturing
	processes, and at the same time increase the proportion of automated production to
	improve overall production efficiency and reduce costs.
	4. Maintain existing customers and actively look for potential customers, develop
	potential emerging country markets by participating in foreign exhibitions, select
	partners from them, and grow together with them.
	1. Through the ISO 14001 environmental management system, we systematically do
	a good job in the overall environmental management of the company.
	2. The sewage treatment equipment was updated to ensure that the wastewater
	discharged meets the legal standards.
	3. Implement the classification and treatment of waste and effectively recycle it to
	reduce the overall pollution to the environment, and entrust the waste to local
	qualified treatment manufacturers to ensure the legality and safety of waste
	disposal.
	4. Strengthen the management of the manufacturing or transportation process of raw
environment	materials and its own products, protect work safety, and reduce the possibility of
	disasters.
	5. Although the cost of using natural gas and vapor as energy is higher, natural gas
	and vapor are low-carbon energy sources compared to gasoline and diesel to reduce
	the overall carbon footprint.
	6. Continuously track the intensity of greenhouse gas emissions to ensure that
	environmental protection is taken into account while maintaining the sustainable development of business activities.
	7. Implement the identification of risks and opportunities for climate change, and
	establish relevant response mechanisms.
society	Attaching importance to the harmony between labor and management and paying
Bociety	2. 11

- attention to the rights and interests of employees, we are committed to providing good employee benefits and implementing employee care to meet the needs of employees and effectively reduce the turnover rate.
- 2. Create a safe and healthy workplace environment for employees, continuously improve the workplace working environment, and ensure that each employee implements safety policies, and conducts work safety training and assessment for employees in all positions to reduce the occurrence of occupational injuries.
- 3. Conduct regular employee health check-ups and follow-up to maintain the physical and mental health of employees.

Management system

The company has passed four major certifications, including ISO 9001 quality management system, ISO 14001 environmental management system, ISO50001 energy management system and ISO 45001 occupational safety and health management system, and continues to maintain the validity of the certificates.











能源管理体系认证证书

济南大自然新材料有限公司

能源管理体系符合GB/T23331-2020/ISO50001:2018; RB/T102-2013《能源管理体系 纺织企业认证要求》

注册地址: 山东省济南市济阳区济北开发区泰兴东街9号 经营地址: 山东省济南市济阳区济北开发区泰兴东街9号 生产地址: 山东省济南市济阳区济北开发区泰兴东街9号

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管理体系 MANAGEMENT SYSTEM CNAS C043-M



濟南大自然 ISO50001



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2019年12月11日東2022年12月30日 2022年12月12日至2022年12月14日 2023 © 01 PJ 09 ELW 2025 © 12 PJ 30 EL

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能源管理体系认证证书

阿斯泰克 (山东) 环保纤维有限公司 能源管理体系符合GB/T23331-2020/ISO50001:2018; RB/T102-2013《能源管理体系 纺织企业认证要求》

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阿斯泰克 ISO50001



职业健康安全管理体系认证证书

认证编号: 117 24 S0 0029-01 R1M

姓证明: 中峰化学有限公司

统一社会信用代码: 91370400MA3CCGNN7P

山东省滕州市兖矿国泰化工有限公司南侧、国泰大道东侧 地址:

建立的管理体系符合: GB/T 45001-2020/ISO 45001:2018 职业健康安全管理体系 要求及 使用指南

认证范围: 醋酸纤维素的生产销售

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孟玄新材料 ISO45001

1-2 Stakeholder Discussion and Identification of Material

Topic

Stakeholder Identification

The Company selects the main stakeholders of the year through the business contacts of various departments within the enterprise, and then selects the main stakeholders of the year through the voting of department representatives:



Stakeholder Communication

All departments of the company communicate with stakeholders through existing channels, collect the topic that stakeholders are usually concerned about, the methods vary according to the nature of the business of each unit, there are routine handling methods, there are non-routine communication channels, and the topics concerned are also different by category, hoping to grasp the needs and expectations of stakeholders through diversified perspectives and enhance interaction with stakeholders.

Stakeholder Communication and Concern List

Stakeholders	What Key Stakeholders Mean to the Company	Departmental Unit	Focus on the Topic	Communication Channels between the Two Sides	The Frequency of Communication
Government	Government agencies supervise			On-site inspection	Irregularly
agencies (Jiyang County	and audit the company's	Public Works	Community Relationship	Training	Irregularly
Safety Supervision Bureau, Public Security Bureau)	compliance with various environmental laws and regulations	Office	Maintenance	Phone	Irregularly
	Government		Labor-	Official government websites, official documents, announcements	Irregularly
Government agencies (Human Resources and Social Security Bureau)	agencies supervise and audit the company's compliance with various labor laws and regulations	Human Resources Section	Employment Relationship, Occupational Safety and	Policy advocacy meetings of competent authorities	Irregularly
Becarity Daroua)			Health	Phone, email, messaging software	Irregularly
				Social insurance declaration	Monthly
	Government agencies supervise			Written declaration of hazardous waste	Monthly
Government agencies (EPA)	and audit the company's compliance with various	Public Works Office	Waste, Laws and Regulations are Followed	The network declares all waste generated	Annually
	environmental laws and regulations		are I onowed	On-site inspection	Irregularly
Government	Government agencies supervise and audit the		Waste, Laws and	Sign the agreement	Annually
Government agencies (Sewage treatment plant)	company's compliance with various environmental laws and regulations	Public Works Office	Regulations are Followed, Water Management	On-site inspection	Irregularly

Government agencies (Gas Company)	Government agencies supervise and audit the company's compliance with various environmental laws and regulations	Public Works Office	Energy, Climate Change	On-site inspection	Irregularly
	Government agencies supervise			On-site inspection	Irregularly
Government agencies	and audit the company's	Public Works	Carbon	Training	Irregularly
(Pollution Control Section)	compliance with various environmental laws and regulations	Office	Emissions	Phone	Irregularly
	Government agencies supervise			Document	Irregularly
Government agencies (Stock Exchange)	and audit the compliance practice of various financial laws and regulations of the company	Finance Department	Laws and Regulations are Followed	Phone, email	Irregularly
	The shareholders are the capital contributors of the			Shareholders' meeting	Shareholders' meeting
Shareholders/ Investors	company, and the company ensures that the shareholders have the right to fully know, participate and decide on major matters of the company	Finance Department	Laws and Regulations are Followed	Phone, email, communication software	Irregularly
	Customers are the main source of the company's			Customer satisfaction questionnaire	Annually
	revenue, the company pays			Exhibit	Irregularly
Client	attention to brand image operation and product quality, so that customers can enjoy good products and services	Operations Division	Brand Image	Phone, email, messaging software	Irregularly

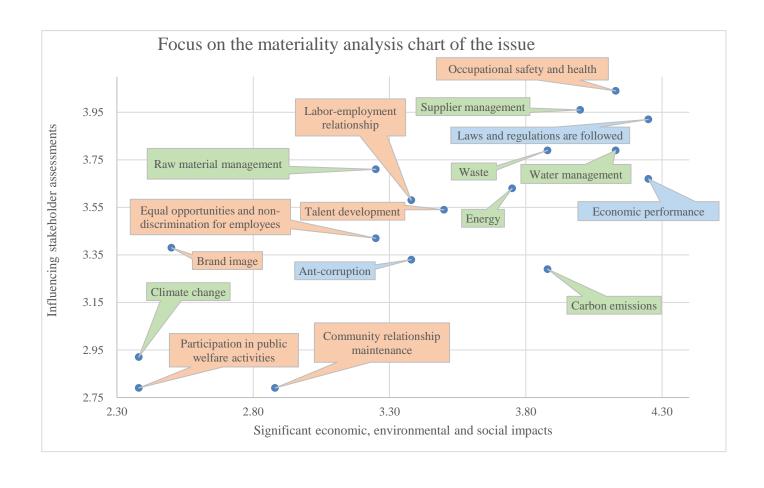
	Employees are an indispensable force in the company's			Phone, email, communication software	Irregularly
	operation, and the company is		Labor-	Written letters	Irregularly
Employee	committed to creating a workplace environment in which employees are physically and mentally healthy and diverse	Human Resources Section	Employment Relationship, Occupational Safety and Health	Safety training	Irregularly
	The company's products and			Sign the agreement	Annually
Supplier/ Contractor/ Outsourcers	services rely on many suppliers to provide raw materials and parts stably, and use the company's influence to require suppliers not to pollute the environment and violate human rights	Purchasing Department	Supplier Management	Phone, email, messaging software	Irregularly
	The company's			Meeting	Irregularly
Contractors	products and transportation services rely on	Storage and	Raw Material	Phone, email, communication software	Irregularly
(Vehicle transporters)	many suppliers to provide stable raw materials and parts for transportation and supply	Transportation Division	Management	Written letters	Irregularly

1-3 Identification of major issues

Focus on the Materiality Analysis of the Topic

This year's sustainability report follows the principles of the GRI Standards, analyzes and identifies the materiality of the topics of concern, and each department puts forward the actual concerns of stakeholders this year in its professional field, and refers to the GRI Sustainability Reporting Guidelines: 2021 Theme, and compiles a questionnaire list of 17 topic of concern as the option of this year's material topic.

The materiality analysis of topic of concern is based on the fact that the average scores of the assessment of stakeholders and the significant economic, environmental and social impacts of the impact are multiplied through questionnaire surveys, in which each department votes on behalf of the stakeholders behind them, and the high scores screen out the 6 material topic (6) that should be disclosed first this year (Figure) Economic performance, regulatory compliance, supplier management, water resource management, waste, occupational safety and health), and considering the characteristics of the chemical industry and the mandatory disclosure project of the chemical industry, a total of 3 supplementary topics include raw material management, labor relations and community relationship maintenance, which are summarized into 9 material topic that should be actively responded to this year, and their management policies, performance results and future commitments are explained in each chapter of this report. According to the impact scope of the issue, define the internal and external boundaries it covers.



Pay Attention to the List of Topics

Economic Aspect	1	Economic Performance	Social Aspect	11	Labor-Employment Relationship
Economic Aspect	2	Laws and Regulations are Followed	Social Aspect	12	Occupational Safety and Health
Economic Aspect	3	Anti-Corruption	Social Aspect	13	Talent Development
Environmental Aspect	4	Supplier Management	Social Aspect	14	Equal Opportunities and Non- Discrimination for Employees
Environmental Aspect	5	Raw Material Management	Social Aspect	15	Community Relationship Maintenance
Environmental Aspect	6	Energy	Social Aspect	16	Brand Image
Environmental Aspect	7	Carbon Emissions	Social Aspect	17	Participation in Public Welfare Activities
Environmental Aspect	8	Climate Change			
Environmental Aspect	9	Water Management			
Environmental Aspect	10	Waste			

Material Topic and Internal and External Boundaries

		I	nternal B	oundaries		Exte	ernal Bou	ndarie	es			
Material Topic	Description of Importance	Jinan Acetate Chmical Co., Ltd.	Acetek Material Co., Ltd.	Acetek Momentum Co., Ltd.	Empl oyee	Governm ent agencies	Sharehol ders/ Investors	Client	Suppl iers/ contra ctors/ outso urcers	Correspo nding Topic	Expose the project	Shosho
Economic performance	The company is committed to pursuing sustainable management and long-term interests, and strives to occupy a place in the global market share	•	•	•	•		•		•	Economi c performa nce	201-1 201-2 201-3 201-4	1.3 Business Policy and Performa nce

	and create diversified value for stakeholders										
Laws and regulations are followed	Comply with the laws and regulations of the operating base to build a sound corporate governance organization and an effective management and supervision mechanism to achieve the purpose of sustainable operation of the enterprise		•	·	•	•			Complian ce with environm ental protectio n, Socio- economic regulator y complian ce	2-27	1.6 Laws and regulatio ns are followed
Supplier management	The management of supplier survey, evaluation, performance tracking, etc., is conducive to improving the quality of purchased goods, obtaining preferential prices, shortening the delivery period, and timely delivery of services to	•	•	•				•	Mandator y disclosur e by the chemical industry, Procurem ent Practice, Supplier environm ental assessme nts Supplier social assessme nt	308-2	1.4 Supply partners

	provide better products and services								
Raw materia management		•	•		•		Mandator y disclosur e by the chemical industry, material	301-1 301-2 301-3	2.4 Raw materials and safety managem ent
Water	In recent years, climate change has caused uneven distribution of water resources, and companies should prevent problems before they occur and establish water resource use management mechanisms to	•	•	•	•		Water and discharge water	303-1 303-2 303-3 303-4 303-5	

	reduce water use and sewage discharge									
Castoff	Formulate waste treatment plans in accordance with laws and regulations, and strictly select compliant third-party treatment manufacturers to avoid harm to the local environment and fulfill environmentally friendly corporate social responsibility		•	•		•		Waste	306-1 306-2 306-3 306-4 306-5	2.3 Waste disposal and recycling
Labor- employment relationship		•	•	•	•			Labor- employm ent relationsh ip	401-1 401-2	3.1 Employe e structure 3.2 Compens ation and benefits

Occupational safety and health	Care for the safety of employees, annual health inspection and tracking, and establish a perfect occupational health management mechanism so that employees can work with peace of mind	•	•	•	•	•		Chemical industry mandator y disclosur e projects, occupational safety and health	403-1 403-2 403-3 403-4 403-5 403-6 403-7 403-8 403-9	3.3 Occupati onal Health and Safety
Community relationship maintenance						•		Mandator y disclosur e by the chemical industry, Local communi ties	413-2	3.4 Maintena nce of communi ty relations

1- 4 Sustainable Development Goals: SDGs

In response to the United Nations Sustainable Development Goals (SDGs) released by the United Nations in 2015, the Company responded to the 17 Sustainable Development Goals and 169 sub-goals in response to the actual actions to practice sustainable development and fulfill corporate social responsibility.

Major topics	SDGs	Respond to practices
Economic performance Compliance with laws and regulations	8 合適的工作	 Continue to make profits and give back to local causes. Lead the local economy and employ local people as laborers. R&D expenditures will account for 1.70% of net revenue in 2023. All authorities and responsible units strictly carry out business in accordance with the law, pay attention to the latest changes in laws and regulations to change the management system and operation mode, reduce the risk of
Supplier management	12 責任消費 及生産	 violating the law, and there are no major violations in 2023. Supplier evaluation is carried out every six months, and raw materials and auxiliary material suppliers are continuously required to meet the requirements. In 2023, 84% of raw material and auxiliary material suppliers have signed supplier commitments.
Raw material management, Waste Community relations maintenance	12 责任消費 及生產 11 永續城市與 社區	 Improve the production process to reduce waste, and entrust qualified manufacturers to clean up and transport waste, recycle and reuse packaging materials, and continue to reduce the amount at the source. The management of raw material transportation and storage, in order to establish a complete process regulations, the process of raw materials (acetic acid) after purification and continuous recycling. In order to reduce the impact on the local community of the factory, employees work according to safety operation specifications and strict assessment, and entrust external professional testing institutions to regularly monitor environmental hazards and announce the results.
energy	13 氣候行動	Continue to pay attention to climate change risk management and response measures, and manage energy use to reduce greenhouse gas emissions.
Water management	6 潔淨飲水與衛生	 Total water consumption increased from 312.314 million litres in 2022 to 337.037 litres in 2023 (due to the official launch of production by Acetek Environmental). The water quality of the discharge water is regularly tested, and the water quality results in the past three years are in line with the requirements of the local regulations and discharge water specifications.

Employment- employment relations	8 合適的工作 及經濟成長	 We provide salary and benefits, leave systems, insurance and pension planning in accordance with local labor-related laws and regulations at each business site. Adjust employee salaries and benefits according to the company's profitability to increase employees' centripetal force towards the company.
Occupational health and safety	3 健康與福祉	• Establish a leading group for production safety and a leading group for the prevention and treatment of occupational diseases, which are responsible for safety production and occupational health management.

Chapter 2 Corporate Governance

The company's corporate culture values integrity above all and strives to maintain the common prosperity of stakeholders such as shareholders, suppliers and customers. At the same time, it attaches importance to labor-management harmony, pays attention to the rights and interests of employees, and creates a safe and healthy workplace environment for employees; In order to protect the rights and interests of stakeholders, the Company has established good communication channels with shareholders, suppliers, customers and other stakeholders to grasp the requirements and expectations of the company in a timely manner.

The Board of Directors of the Company is committed to maximizing shareholder profits, while charting the Company's business vision and empowering professional managers to steer the business. In addition, independent directors, audit departments and independent accountants do their best to supervise and audit the company, avoid the company from contravening laws and regulations, and implement risk management and risk measurement to ensure stable operation, balanced profitability and sustainable development •

	Establish an effective corporate governance structure				
	Protect shareholders' rights				
Corporate governance objectives	Strengthen the functions of the Board of Directors				
	Increase information transparency				
	Respect the rights and interests of stakeholders				

2-1 Company Profile

The company is an overseas holding company established in the Cayman Islands in September 2014, Jinan Acetate Chemical company is mainly engaged in the production, sales and research and development of Acetate fiber tow, in order to grasp the vertical integration of material sources to the upstream, since 2016, it has established Acetek Material company as a joint venture with upstream supplier Lunan Chemicals Co., Ltd. and downstream strategic investor Qiyao Co., Ltd., mainly engaged in the production, sales and research and development of cellulose Acetate; In addition, in order to save production costs, the upstream integration into the production of acetate anhydride factory, in 2020 established Acetek Momentum company, mainly engaged in the production and sales of acetate anhydride. In 2023, we will complete the construction of a new silk bundle factory, Acetek Environmental Company, to expand

the capacity of tows bundle production

Acetate fiber tow belongs to the acetate industry, the main use is filter materials, the downstream application market includes cigarette filters (Filters), diaper drying layer, refill, non-woven mask, reverse osmosis film, sewage treatment, and in the medical aspect, there are blood filters; Some are also used in haute couture. About 75%-85% of the global acetate fiber production is Acetate, and more than 90% of the acetate tow is used in cigarette filters (Filters), the raw material of Acetate fiber is wood pulp, which is a natural recycled fiber, which is produced after a series of process technologies and becomes Acetate tow.

In recent years, due to the depletion of petrochemical resources caused by excessive use of plastics, the increase in carbon emissions and the pollution caused by plastic pellets to the environment, a trend of plastic reduction and plastic bans has been set off around the world, and enforced through legislation. Therefore, the application of plastic grade cellulose Acetate has been more and more valued by the market. In addition to its own cellulose Acetate pellet manufacturing production line to supply the needs of glasses frames and other products, the company also cooperates with downstream manufacturers to make the company's cellulose Acetate into various thicknesses of bioplastic film, which is used in soft and hard packaging and containers, or in injection molding bioplastic products, replacing traditional plastic products. According to market research statistics, the market size of replacing traditional plastics with bio-based materials is about 35 million metric tons per year, and the current global production capacity of bioplastics is about 2 million metric tons, which has great room for demand growth \circ







Acetate tow





Acetate flakes Acetate flakes



















Product application field diagram - vinegar tablets



Product application field diagram - tow

Basic Company Information

Company Name	British Cayman Islands business Jinan Acetate Chemical Co., LTD.			
The Location of the Headquarters	6F., No. 18, Lane 419, Guangfu South Road, Xinyi District, Taipei City			
Amount of Capital	NT\$862,861 thousand			
Sales in 2022	NT\$11,025,642 thousand			
Main Business Items	R&D, manufacturing and sales of cellulose Acetate, tow and acetate anhydride			
Total Production	34,966 tons of Acetate flakes; 33,634 tons of Acetate tows; 64,922 tons of Acetate tow			
Total Nnumber of Employees	522 people			
Main Operating Bases	Taipei, Taiwan; Jinan, China; Zaozhuang, China			
Product Sales Area	Acetate flakes: China, Italy, Taiwan and other regions Acetate tow: South America, North Africa, Eastern Europe, the Middle East, Central Asia, Southeast Asia and other 50 countries Acetate tow: China			
Ownership and Legal Form	Please refer to the Company's 2023 Annual Report, P57			

The company's current business projects are mainly engaged in the research and development, manufacturing and sales of cellulose Acetate, tow and acetate anhydride, and we understand that the key is to continue to make profits and continuously improve research and development, so the resources and achievements invested in research and development in recent years are as follows:

Unit: New Taiwan dollar thousand; %

Item / Year	2023	2022	2021	
R&D expenses	187,499	171,295	190,486	
Net operating income	11,025,642	4,269,391	2,714,866	
% of net revenue (%)	1.70	4.01	7.02	

The R&D expenses in 2023 will mainly invest in the improvement of the production process of existing products, and based on sustainable environmental reasons, and in line with customer needs, invest in the research and development of biodegradable green environmental protection materials, and increase products that meet environmental protection requirements to increase market share. For details of R&D achievements, technical descriptions and product applications, please refer to Annual Report P. 11272~P.77 °

In addition, in view of the volatile market factors, we also recognize the importance of diversification of our products to diversify the risks of the Company's product sales, and currently invest considerable R&D resources in the development of the following products.

Products	New product apps		
Acetate tow	Cigarette filters, water-based refills, garment materials, diapers, other filter materials, heated non-burning smoke (IQOS), etc.		
Base fabric (non-woven fabric)	Face masks, masks		
Plastic grade acetate	Special plates, plastic toys, packaging materials, instrument		
flakes	housings, tool handles, cellulose acetate films		
Cellulose triacetate	Protective film and organic permeable film of liquid crystal polarizer (PVA film).		

Important History of the Company

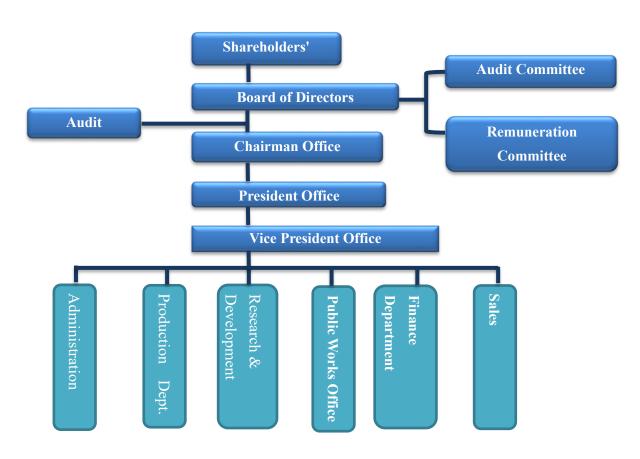
Year	Important Articles
1999	Established the Jinan Julong Fiber Co., Ltd. in Shandong, China that produces nylon air textured yarn.
2002	Jinan Julong Fiber Co., Ltd. changed its name to Jinan Daziran Fiber Co., Ltd.
2006	Jinan Daziran Fiber Co., Ltd. changed its name to Jinan Acetate Chemical Co., Ltd.
2009	Jinan Acetate Chemical Co., Ltd. obtained the product quality certification of customer Taeyoung Industry Corporation.
2010	Developed and changed the tow to wire-forming structure; developed a bundle roller device for cellulose acetate fiber in the R&D process of equipment. In addition, the process has increased the stability and uniformity of metering pumps; developed a cellulose fiber spinning metering pumps. Moreover, certify that the slurry quality meets

Year	Important Articles
	the specifications. Developed the spinning solution viscosity detection devices and obtained the respective patent certificate.
2012	Jinan Acetate Chemical Co., Ltd. awarded the High-Tech Enterprise Certificate. The equipment process improved the filtration quality and able to produce fine single nylon strands. The double-filter core filter has been developed. In order to ensure that the drying condition of tows in channel is more stable and adjustable, the spinning damper has been developed and obtained the respective patent.
2013	Jinan Acetate Chemical Co., Ltd. was 100% owned by the My Parents Living Technology Limited. Jinan Acetate Chemical Co., Ltd. renamed to the Jinan Acetate Chemical Co., Ltd.
2014	Jinan Acetate Chemical Co., Ltd. awarded the Top 100 Taiwan-invested enterprises in Shandong Province through the Shandong Provincial Economic and Information Technology Commission and the Shandong Provincial Department of Commerce. Applied for establishing the Jinan Acetate Chemical Co., LTD. in Cayman for the first time, the English name is Jinan Acetate Chemical Co., LTD. (Materials KY), all shareholders of My Parents Living Technology Ltd. transferred all shares to through shares-exchange way, the Materials KY holds 100% equity of Jinan Acetate Chemical Co., LTD., mainly for launching the stock exchange market in Taiwan and restructuring the organization.
2015	TWSE approved Materials KY the listing, in November the Materials KY stock was officially listed on TWSE.
2016	Acetek Material Co., Ltd. was established with Lunan Chemicals Payroll, and as of the date of publication of the annual report, 73.68% of the joint venture has been obtained.
2017	Acetek Material Co., Ltd. made trial production; successfully produced spinning grade and plastic grade vinegar sheets in Q3. Jinan Acetate Chemical Co., Ltd. (China) has 80% ownership of Acetek Material Co., Ltd.
2019	Acetek Chemicals Co., Ltd. was established, holding 80% of the shares, the strategic investment in Eleung Ltd., the Hong Kong subsidiary of LA / ES, Italy's second largest acetate plate. Acetek Material Co., Ltd. passed the qualification of High-Tech Enterprise.
2020	Acetek Momentum Co., Ltd. was established to build an acetic anhydride plant with a

Year	Important Articles
	theoretical capacity of 60,000 tons.
2021	In August, Acetek Momentum Co., Ltd. mass-produced for self-use, and sold acetate anhydride in the fourth quarter. In October, Acetate (Shandong) Environmental Fiber Co., Ltd. was established to build a filament factory with a theoretical capacity of 2,000 tons.
2022	Tow expanded production line with a theoretical capacity of 20,000 tons. Acetek Momentum Co., Ltd. has a theoretical production capacity of 60,000 tons of acetic anhydride.
2023	Acetek Environmental added 17,000 tons of theoretical capacity to tows capacity. The total output of tows reached 37,000 tons. Acetek Environmental has a filament fabric production capacity of 600 tons.

Organization

Jinan Acetate Chemical Co., LTD.



By Department	Main Duties			
Chairman Office	Establish operating plan and strategic guideline for company business operation and organizational management.			
Audit Committee	Supervise the business and financial status of the Group, the appropriate expression of financial statements and effective implementation of internal control.			
Remuneration Committee	Set and regularly review the policy, system, standard and structures of directors' and managers' performance assessment and salary & remuneration; and regularly assess and decide the remuneration of directors and managers.			
Audit	Responsible for evaluating and implementing the Company's auditing business and internal control; set forth improvement suggestions and continue to track down and improve the progress.			
General Manager Office	Perform the matters decided by the Board of Directors; comprehensively implement the Company's business objectives and future development.			
Vice President Office	Assist the general manager in daily affairs and project tasks; coordinate the Company's R&D resources and draft the R&D direction.			
Sales	Responsible for the planning of Company's product sales, customer service, market development strategy and developing direction; and the procurement and customs logistics of raw materials required for manufacturing; and make suitable adjustment of procurement strategy with market status.			
Research & Development	Responsible for the development of new products and specifications, production processes improvement and upgrading of automatic production.			
Production Department	Handle the production technology, online quality control, products manufacturing, schedule management, on-site management and related operations. Responsible for the construction of hardware facilities related to manufacturing, machine maintenance, production process design and related operations.			
Finance Department	Responsible for the company's accounting work and the formulation and implementation of accounting policies and systems, as well as the company's capital planning and scheduling, foreign exchange hedging operations, and the collection and preparation of budget information.			
Public Works Office	Factory expansion design evaluation, responsible for environmental management plan and outsourcing maintenance of equipment.			
Management Department	Responsible for the company's human resource management, organizational development planning, administrative and general affairs related matters management, and computer software and hardware setting, maintenance, management and replacement.			

External Association Involvement

The company actively participates in industry-related associations, understands the latest industry norms, and interacts closely with association members to understand the latest development trends in the industry.

Zaozhuang Chamber of Commerce of China Chamber of International Commerce/Vice President Jinan Taiwan Compatriots Investment Enterprise Association/Honorary President

Vice President of Jinan Association of Enterprises with Foreign Investment

Zaozhuang Enterprise Federation, Entrepreneur Association, Industrial Economics Federation/executive director National Taiwan Compatriots
Investment Enterprise
Association/Executive Deputy
Supervisor Chairman

2-2 Advanced Management and Integrity

The Company formulates the structure of corporate governance and relevant integrity and ethical standards in accordance with the Company Law of the Republic of China, the Securities and Exchange Law and other relevant laws and regulations. In order to implement the sustainable management philosophy, the Company is committed to maintaining corporate governance, protecting shareholders' rights and interests, and strengthening the functions of the Board of Directors. As a joint stock limited company, we strive for transparency in our decision-making based on the principle of seeking the best interests of our shareholders.

The company's management is committed to the responsibility of a good manager. Among them, the shareholders' meeting is the highest intention organ of the company, and the board of directors reports statutory important matters to the shareholders' meeting every year; the board of directors is the highest governance body, whose main duties are to supervise the company's business performance, avoid conflicts of interest and ensure that the company complies with various laws and regulations; the audit committee is responsible for supervising the company's business execution status and checking the accounting statements; the remuneration committee is responsible for regularly reviewing the performance evaluation and remuneration policies of directors and managers; and the audit office is responsible for the company's various audit operations and the company's internal control evaluation and implementation.

Board of Directors

In order to move towards sustainable management, the Company requires that in addition to having a professional background in related industries, rich practical experience, and proficiency in the development of the industry, the Company also hopes to strengthen the functions of the Board of Directors, requiring all Board members to have operational judgment ability, accounting and financial analysis ability, operation management ability, crisis management ability, industry knowledge, international market view, leadership ability and decision-making ability.

In addition, in order to diversify the members of the Board of Directors and provide the Board of Directors with overall consideration of corporate social responsibility when facing major decisions, the Board of Directors is re-elected every three years in accordance with the "Corporate Governance Code" and the "Director Election Method", and the Company has a total of 8 directors, of which 4 are independent directors (accounting for 50% of the number of directors), and the independent directors have legal and financial expertise, and they have no specific interest in the company's operations, which is due to their professionalism and independence. In 2023, a total of 14 meetings were held, with a 100% attendance rate. In order to further implement corporate governance and strengthen the functions of the Board of Directors, the Company also regularly arranges refresher training for directors on corporate operations and related governance issues, so as to enhance the professional knowledge of directors and enable them to continue to improve their operations, with a total of 60 hours of refresher courses for directors in 2023, 100% of

which are ESG-related. specialized

Job Title	Name	Specialized	Hours of Further Study	
Chairman	WANG, KO-CHANG	Business, Legal, Finance, Accounting	6	
Director	HSU, CHENG-TSAI	Business, Legal, Finance, Accounting	6	
Director	ERICSON FENSTERSEIFER	Business, Legal, Finance, Accounting	6	
Director	MENG, CHING-LI	Business, Legal, Finance, Accounting	6	
Independent Director	LIN, TZER-JONG	Business, Legal, Finance, Accounting	6	
Independent Director	LIN, WEN-CHENG	Business, Legal, Finance, Accounting	6	
Independent Director	YU, CHING-HSIEN	Business, Legal, Finance, Accounting	6	
Independent Director	LEE, KUANG-CHI	Business, Legal, Finance, Accounting	18	

Diversity of Directors Statistics

Diversified statistics/yearly			In 2023		In 2022		In 2021	
			Numbe	percentag	Numbe	percentag	Numbe	percentag
		r	e	r	e	r	e	
	gandan	man	8	100%	7	100%	7	100%
	gender	woman	0	0%	0	0%	0	0%
	age	Under 50	0	0%	0	0%	0	0%
J 4 .		50~60	1	12.50%	1	14.29%	1	14.29%
directo r		60 or more	7	87.50%	6	85.71%	6	85.71%
	Degre e	institute	2	25%	2	28.57%	2	28.57%
		Specialt y	6	75%	5	71.43%	5	71.43%
		other	0	0%	0	0%	0	0%

Note: Percentage of female directors = (number of female directors at the end of the year / number of directors at the end of the year) * 100%.

Percentage of male directors = (number of male directors at the end of the year / number of directors at the end of the year) * 100%.

The percentage of female directors + the percentage of male directors should be 100%.

In order to ensure the good operation of the Board of Directors, directors uphold a high degree of self-discipline among themselves to implement interest avoidance, and directors who have an interest in meeting matters and themselves or the legal person they represent should explain the important contents of their interests at the current board of directors, and if there is a risk of being harmful to the interests of the company, they shall not participate in discussions and voting, and should abstain from discussion and voting, and shall not exercise their voting rights on behalf of other directors, and none of the directors shall also serve as senior executives. The performance of the Board of Directors, individual Board members and functional committees is evaluated internally every year, and the Board of Directors will issue a questionnaire to the Board of Directors for self-evaluation, which is carried out once a year and the scoring of the evaluation indicators is determined. The results of the Board's performance evaluation shall be used as a reference for future selection or nomination of Directors; The results of the performance appraisal of individual directors can also be used as a reference for determining their individual remuneration, and the results of the overall operational performance evaluation of individual board members, the overall board of directors and functional committees (including audit committees and remuneration committees) in 2023 fall between "excellent" and "excellent".

Note: For details of the operation of the Board of Directors, please refer to the Company's 2023 Annual Report P.22~P.24; Director education experience P.10~P.11, Director Training P.32.

Audit Committee

In order to promote corporate governance, strengthen the functions of the Board of Directors, and enhance the competitiveness of the Company, the Company has established an Audit Committee. Its function is to assist the Board in fulfilling its supervisory controls over the execution of the Company's accounting, auditing, financial statements and internal operating processes. The committee consists of four members, all of whom are independent directors. In 2023, a total of 11 meetings were held, with a 100% attendance rate.

Note: For details of the Audit Committee, please refer to the Company's 20223Annual Report P.24~P.27.

Remuneration Committee

The Company has set up a Remuneration Committee, which is composed of 3 independent directors, and the remuneration policy of directors and managers is based on the value of their positions, contributions to the Company's operations and the standards of their peers, and the remuneration committee is responsible for formulating and regularly reviewing the policies, systems, standards and structures of performance evaluation and remuneration of directors and managers. At the same time, the remuneration of directors

and managers is regularly evaluated and determined. In the future, it is planned to combine the remuneration of directors and managers with the sustainable performance of the enterprise, so that the senior management can further implement the attention to corporate governance, green sustainability, labor rights and social participation. In 2023, a total of 5 meetings were held, with 100% attendance.

Note: For details of the Remuneration Committee, please refer to the Company's 20223Annual Report P.33~P.34.

Remuneration of Employees and Directors

The percentage or scope of the remuneration of employees and directors as stated in the articles of association: Article 14.5 of the articles of association of the company stipulates that if the company has "profit" in the company, it shall allocate not less than 1% of the profit as employee remuneration, and the employee remuneration shall be paid to the employees of the affiliated company who meet certain conditions; The Company may raise the amount of profit and set aside not more than three percent (3%) of the profit for the year as directors' remuneration.

Public welfare activities

Based on the concept of giving back to the local community, the company and its subsidiaries continue to participate in social welfare activities, and donate several funds every year for public welfare, giving back to local units and activities in need, and practicing corporate social responsibility.

2023 Grantees and Donation Amounts

Grantee	Donation amount
Juheng Financial Technology Co., Ltd	
"2023 Post-epidemic Gathering Together, Welcoming	NT\$100,000
the Dawn of Happiness" activity	
Taipei Wanfang Hospital	NT\$500,000
Village-level collective economic organizations in	
Shandong Province	100 000 DM D
Mushi Town, Duqian Village, Township Zhenxing	100,000 RMB
Road Repair	
Jinan Jiyang District Charity Federation	20,000 RMB







Mushi Town, Duqian Village, Township Zhenxing Road Repair Ceremony

Promote Corporate Governance

Develop a Sustainable Environment

- The Board of Directors should exercise due diligence as a good manager to urge the
 corporate to practice social responsibility, and review its implementation effectiveness
 and continuous improvement at any time to ensure the implementation of the corporate
 social responsibility policy.
- Integrate corporate social responsibility into the company's business activities and development direction.
- Respect the rights and interests of stakeholders, understand the reasonable requirements
 and expectations of stakeholders through diversified and appropriate channels, and
 appropriately respond to important topic of concern to stakeholders.
- 1. We comply with environment-related laws and regulations and related international standards, appropriately protect the natural environment, and strive for environmental sustainability in the execution of business activities.
- 2. Promote the improvement of the efficiency of the use of various resources, and use recycled materials with low impact on the environment, so that the earth's resources can be used sustainably. And according to the characteristics of the industry to establish a suitable environmental management system, environmental management units or personnel, promote and maintain environmental management related systems, and regularly hold environmental education courses for management and employees.
- 3. In order to reduce the carbon footprint, the main production raw material wood pulp suppliers have achieved the goal of carbon neutrality; In the future, the company will also invest in the establishment of an R&D center to develop biodegradable materials for cellulose pellets to replace existing petrochemical raw materials in line with the EU standard of carbon neutrality.
- 4. In order to improve the efficiency of water resources, we will make appropriate and sustainable use of water resources. Consideration of cost-effectiveness, technical and financial feasibility, maximum efforts should be made to minimize adverse effects on human health and the environment.
- 5. Actively invest in the development of innovative recovery technology, promote the recovery of cellulose acetate into primary raw materials, and recycle it; At the same time, develop green processes, reduce the use of water resources, lye, organic solvents and acetate anhydride, and achieve the goal of reducing resource consumption and carbon emissions
- Strengthen waste recycling, such as plastic vinegar film glasses frames, will cooperate with Italy supply to recycle waste rubber sheets, so that raw materials can be recycled and reused.
- 7. In 2024, the carbon inventory business will be carried out in advance to make efforts for net zero carbon emissions in the future.
- 1. Abide by labor laws and regulations, protect the legitimate rights and interests of employees, and abide by international labor human rights principles, including freedom of association, the right to collective bargaining, care for vulnerable groups, prohibition of child labor, elimination of all forms of forced labor, elimination of employment and employment discrimination, etc., and do not endanger the basic rights of workers. The employment policy of human resources is non-discriminatory and implements equality of remuneration, employment conditions, training and promotion opportunities.
- Provide a safe and healthy working environment for employees, including providing necessary health and emergency facilities, and strive to reduce the risk factors to the safety and health of employees to prevent occupational disasters.
- Assess the environmental and social impact of sourcing practices on source communities, and work with suppliers to enhance corporate social responsibility.
- 4. Participate in the activities of civic organizations, charitable organizations and local government agencies in community development and community education through commercial activities, in-kind donations, corporate volunteer services or other public welfare prescribes or other prescribes or other public welfare prescribes or other public welfare prescribes or other public welfare prescribes or other prescribes or

Ethical Integrity

The company regards compliance with government regulations as a prerequisite for the implementation of integrity management, and is committed to shaping the integrity concept of the company's colleagues, in order to implement the concept, it has formulated the "Integrity Management Code" and "Code of Ethical Conduct", and the relevant departments are responsible for implementing and promoting the formulation and supervision of the integrity management code and prevention plan organize internal advocacy meetings from time to time to arrange for senior management such as directors, employees and appointees to convey the importance of integrity; Externally, in order to prevent dishonest suppliers, customers or other business partners from engaging in business transactions, the company immediately stops trading with them once discovered, and lists them as the object of refusal. In addition, the company designates a special person to be responsible for the collection and disclosure of the company's information on the company's official website, and sets up a stakeholder opinion mailbox (mailbox: 4763@acetek.com.cn) for all kinds of stakeholders to contact the relevant authority and responsibility personnel of the company for information needs and feedback. There were no complaints in 2023.

Code of Conduct for Integrity

- 1. All colleagues of the company are prohibited from directly or indirectly providing, producing, demanding or accepting unfair benefits or any dishonest behavior in the course of engaging in business activities.
- Abide by the relevant corporate governance laws and regulations of the Republic of China as the basis for implementing honest management.
- 3. Analyze business activities with a high risk of dishonest conduct within the scope of business, and formulate operating procedures and behavioral guidelines for honest management, including preventing the following behaviors: 1. bribery and bribery; 2. making illegal political contributions; 3. improper charitable donations or sponsorships; 4. Offering or accepting unreasonable gifts, entertainment, or other improper benefits.
- 4. Directors and managers shall not obtain improper benefits to any third party by holding positions in the company.
- 5. The company has a proper reporting channel, and when colleagues discover violations of laws, regulations, this Code and the Code of Ethical Conduct, they can report the method and hand over to a special person to handle it, and the identity and content of the report are kept confidential.

Code of Ethical Conduct

- 1. Directors and managers shall not allow improper benefits to third parties who have an interest in them on the basis of their duties, so as to avoid conflicts of interest arising from personal interests interfering in the interests of the company.
- 2. Directors and managers shall not seek personal gain or compete with the company through the use of the company's property, information or position in the name of their position.
- 3. Directors and managers shall be obliged to keep confidential information they learn of in the course of their duties.
- 4. Directors and managers shall treat the company's purchasing suppliers and sales customers fairly, and shall not misrepresent important matters or obtain improper benefits in an unfair manner by manipulating, concealing or abusing information learned from their duties.
- 5. If a director or manager violates this standard, the company shall deal with it in accordance with relevant laws and regulations, and promptly disclose the relevant information of the violator at the public information observatory; Persons punished for violations of the provisions of these Guidelines may lodge a complaint in accordance with the relevant provisions.

2-3 Business Policy and Performance

Major issues	Economic performance				
Materiality Statement	The company is committed to the pursuit of sustainable management and lor term benefits, and strives to occupy a place in the global market share, a create diversified value for stakeholders.				
Policies/Commitments	We will continue to focus on optimizing the product cost structure, continuing the double-digit growth trend, grasping the business opportunities of the circular economy and continuing to extend the upstream and downstream opportunities of the industrial chain, so as to continue to create higher value for shareholders.				
Short-term goals	 Revenue and gross profit margin maintained a growth trend Continue to develop biodegradable products 				
Medium- and long-	Keep making profits				
term goals	 Maintain a return on equity of better than 20%. 				
Resources and action	 Added the new factory of Silk Bundle Factory, Acetek Environmental Company In order to expand the production capacity of vinegar tablets, Acetek Momentum Company increased the production line 				
Authority-in- charge/grievance mechanism	General Management Office/4763ir@acetek.com.cn				
Performance Outcomes	 In 2023, the revenue will increase by 158.25%. tow production capacity increased by 17,000 tons; The production capacity of vinegar tablets was increased by 5,000 tons 				

Management Policy

- 1. Targeting niche markets with more growth potential, such as emerging countries, enables stable revenue growth.
- In addition to general specification products, we also focus on the development of special specifications, and the future specification research and development of acetate tows is mainly in the crude single fiber and ultra-low single fiber series to meet the specification needs of different customers around the world.
- 3. Strengthen the on-the-job training of existing personnel, strengthen its own R&D capabilities, and cooperate with external resources, including research institutions and related institutions, to actively develop the strategic planning of products applied with acetate materials, with a view to rapidly accumulating experience and developing new technologies to ensure and enhance R&D competitiveness.
- 4. Provide perfect technical services, according to the needs of customers' products, tailored to provide a small number of diverse quality stable product needs.
- 5. Continue to seek upstream and downstream vertical integration opportunities, reduce costs, and expand downstream outlets.

Important Production and Marketing Policies

- 1. Through participation in internationally renowned exhibitions, as well as past experience in dealing with emerging economies, or through the services of agents, we will develop niche markets such as Africa, the Middle East, South America, and Southeast Asia.
- 2. In addition to the ability to produce general specification products, we also focus on the development of special specifications to meet the specifications of different customers around the world.
- 3. Long-term planning to expand acetate tow to other application products to expand product applications.

Future Development Strategy

- Product development: acetate tow due to the high-end production technology, so far only a few large manufacturers in the world, has been a short supply of the market, the company continues to deepen the research in the field of acetate tow technology, strengthen product competitiveness, in order to increase market share.
- Marketing strategy: Maintain existing customers, actively find potential customers by participating in foreign exhibitions, and develop potential emerging markets in order to expand business, and select high-quality customers with good relationships as partners to grow together.
- 3. Production strategy: The company invests in a considerable research and development plan every year, in addition to developing new product specifications, it also focuses on the improvement of process, efficiency and the increase of the proportion of automated production, so that the unit production cost is reduced.
- 4. Increase the expansion of the plastic grade cellulose acetate market, strengthen the demand for cellulose acetate in plastic-free and carbon-reducing effects, develop the application of the company's products in green packaging and containers, increase the added value of products, and improve the overall benefits of global carbon reduction.

Market Share

The company is engaged in the manufacture and sales of acetate tows, because there is no company with exactly the same business content in China, so the company's share is estimated from the global acetate tow shipments, and the Group's annual production capacity in 2023 is approximately 37,000 tons, and the global production capacity is approximately 750,000 tons, accounting for an estimated global market share of approximately 4.93%.

Production in the Last Three Years

Unit: New Taiwan dollar thousand; Mt

Year	2023			2022			2021		
Production Output / Major Products	Capacity	Quantity	Amount	Capacity	Quantity	Amount	Capacity	Quantity	Amount
Acetate tow	37,000	33,634	3,208,652	20,000	18,454	1,569,658	17,000	14,985	1,181,347
Acetate flakes	35,000	34,966	2,026,441	30,000	29,132	2,024,613	26,250	22,480	1,588,583
Acetic anhydride	60,000	64,922	327,482	60,000	58,217	377,228	12,500	1,752	6,881

Shipments and Sales in the Last Three Years

Unit: New Taiwan dollar thousand; Mt

Year	2023		2022			2021						
Shipments	Loc	cal	Expor	t (Note)	Lo	cal	Expor	t (Note)	Lo	ocal	Expor	t (Note)
& Sales/ Major Products	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Acetate tow	192	46,176	33,051	9,310,949	130	17,992	18,412	2,750,269	300	35,286	14,370	1,737,056
Acetate flakes	4,341	615,304	5,958	984,523	9,702	1,112,969	1,445	210,237	8,406	836,734	586	67,377
Acetic anhydride	3,478	68,690	-	-	6,479	177,924	-	-	901	38,413	-	-

Note: Export sales refer to areas outside Taiwan.

The Direct Economic Value Generated and Distributed by the Organization

Unit: New Taiwan dollar thousand

Item / Year	2023	2022	2021
Revenue	11,025,642	4,269,391	2,714,866
Operating costs	4,503,429	2,658,360	2,193,031
Employee compensation and benefits	365,818	172,617	122,324
Payment to the funder	1,015,671	337,379	307,141
Pay the government	914,233	139,473	5,245
Community investment	1,128	1,277	1,886
Retained economic value	4,225,363	960,285	85,239

Note: It mainly invests in R&D and enjoys the tax concession of R&D super-deduction, resulting in a decrease in government payments.

Government Subsidies Applied by the Organization in 2023

Unit: NT\$1,000

project	amount	illustrate
Tax deductions and credits	2,201	The input VAT of advanced manufacturing industry will be offset by 5% of the VAT payable
subsidy	13	The Public Employment and Talent Service Center
Investment subsidies, R&D subsidies and other related types of subsidies	1,114	Support funds for cost reduction and efficiency improvement in development zones
reward	220	Small Lift Gauge Rewards

2-4 Supply partners

Major issues	Supplier management
Materiality Statement	The investigation, evaluation, and performance tracking of suppliers are managed, which is conducive to improving the quality of purchased goods, obtaining preferential prices, shortening the supply period, and providing timely services to provide better products and services.
Policies/Commitments	Continue to do a good job in the supervision and management of suppliers, meet the relevant requirements of the company, and let the company continue to operate well.
Short-term goals	 Supplier evaluations are carried out on an ongoing basis every six months About 80% of the suppliers of raw materials and auxiliary materials have signed a letter of commitment to integrity management
Medium- and long- term goals	 Suppliers of raw materials are continuously required to meet the requirements About 90% of the suppliers of raw materials and auxiliary materials meet the requirements and sign a letter of commitment
Resources and action	In 2023, 25 major suppliers will be screened and a letter of commitment will be issued
Authority-in- charge/grievance mechanism	Procurement Service/+86 531 88164818
Performance Outcomes	84% Supplier Commitment Recovery Rate in 2023

Suppliers are important partners in our business growth, and their support is an indispensable part of our sustainable competitiveness. In addition, in order to fulfill corporate social responsibility, in addition to being closely related to the company, it is also closely related to the supply chain, no matter where in the supply chain, corporate social responsibility has become a common responsibility that enterprises must face. Therefore, we recognize that in promoting CSR, we need to consider the participation of our entire supply chain partners.

New Supplier Selection Criteria

- A. Business license and relevant permit certificates are required.
- B. After the production raw materials are provided with samples, small batches are taken and the trial is qualified.
- C. Those who deal with our company have preferential prices, stable quality, and timely delivery.
- D. ISO9001 and ISO14001 certifications are preferred.

The Company's procurement policy requires relevant personnel to avoid business transactions with suppliers involved in violation of the corporate social responsibility policy, and to stop transactions with suppliers immediately once discovered, and to be listed as a refusal object, and the Company's suppliers have no record of environmental and social impact before cooperating. In addition, raw material and auxiliary material suppliers are required to sign a letter of commitment that does not violate national laws, regulations and policies, does not use toxic and harmful substances, and undertakes corresponding integrity management, and the proportion of raw material and auxiliary material suppliers who have signed a supplier commitment letter in 2023 is 84%.

Regular Supplier Evaluations

Supplier evaluation will be carried out every six months, and the product quality, price, delivery time and after-sales service score of raw materials, auxiliary materials and spare parts suppliers will be scored to confirm that the products provided by suppliers meet the requirements of the company's specifications, and unqualified suppliers will terminate cooperation, and 1 suppliers have terminated cooperation in 2023 due to quality that does not meet the standard.

Correlation between Upstream, Middle and Downstream of the Industry

The company belongs to the midstream manufacturing of the production of secondary acetate tow in a wide range of applications, most of them are currently used in cigarette filters, upstream for the production of cellulose diacetate manufacturers, downstream are cigarette filter rod manufacturers or cigarette manufacturers, ink refills, diaper drying layer, sewage filter cores, etc. In 2016, the Group vertically integrated the material source and has established a joint venture with Lunan Chemicals Co., Ltd., which is the upstream supplier, and downstream strategic investor Qiyao Co., Ltd. and started to mass production since the second half of 2017, which mainly produces the cellulose diacetate to reduce the cost of raw materials, and processed through a series of process technologies, and then sold to downstream manufacturers such as filter rod manufacturers or cigarette manufacturers that manufacture cigarette filters. The tobacco industry, which is mainly used for its application, is relatively closed in operation. Therefore, in addition to direct sales, the Company also sell products through agents familiar

with the tobacco industry. In June 2020, Acetek Momentum Company was established to produce acetic anhydride as cellulose diacetate raw material and began mass production in Q4 of 2021, which is conducive to reducing and stabilizing production costs in addition to self-use, and contribute revenue.



Major Products and Their Main Uses

Product type	Major Product	Usage
Filtrate foreign matters	Acetate tow	Cigarette filters, water-based pen refills, diaper absorbing lining and clothes
Plastic sheets with high transparency and anti-climate	Acetate flakes	Glasses frame and high-class tool handles, etc.
Highly transparent, volatile liquid	Acetic anhydride	Production of cellulose diacetate

Supply Status of Main Materials

Product name	Major suppliers	Supply conditions
Wood/cotton	Bracell · Rayonier · Gaomi Yinying	good
Vinegar flakes	Credia	good
acetic acid	Medium-sizing	good
acetone	Jiabo Chemical	good

In order to reduce the impact of the material handling process on the environment, all raw materials and materials of the company are mainly purchased locally in the production area, please refer to the following table of localization of main raw materials for details.

Table of the Localization Status of the Main Raw Materials

Item / Year	2023	2022	2021
Proportion of local suppliers (%).	49.06%	45.10%	42.86%
Proportion of local procurement amount (%)	16.58%	34.97%	56.03%

Note: The location is the location of the manufacturing plant (Shandong Province)

2-5 Raw material safety management

The main raw materials used in the production of acetate tow are acetate flakes and acetone; The main raw materials used in the production of cellulose diacetate are wood pulp, acetic anhydride, etc. Among them, acetone and acetic anhydride are flammable liquids, which are prone to fire when leaking, so the company has formulated safe operation specifications and emergency response mechanisms for the abovementioned hazardous chemicals to avoid fire and reduce the risk of casualties.

In accordance with the Regulations on the Administration of Precursor Chemicals in the Mainland, the company will apply for a precursor drug purchase certificate to the public security organ of the county-level people's government where it is located before purchasing acetone and acetic anhydride, and the public security organ will send it to the supplier after approval, and the supplier will apply for a transportation certificate, and the transporter will transport acetone and acetic anhydride to the company with the transportation certificate.

In order to strengthen the use, storage, and waste liquid management and control of acetone and acetic anhydride, and prevent environmental pollution and fire accidents, the "Safety Management System for the Transportation, Handling and Qualification Inspection of Hazardous Chemicals" is specially formulated, requiring acetone and acetic anhydride to be collected and managed by a special person, and it is strictly forbidden to operate at the same time with electric welding, gas welding, and plasma, and keep away from the fire source.

The responsible personnel should always check the storage of acetone and acetic anhydride, and it is strictly forbidden to place flammable and explosive materials around the storage tank, and be equipped with complete fire-fighting facilities, such as fire extinguishers, fire shovels, fire buckets, foam spray paint and fire control consoles, etc., to ensure that acetone and acetic anhydride are stored in a safe state. In addition, in order to avoid the leakage and combustion of acetone and acetic anhydride, strictly control the sampling barrel and side trough to close the valve in time after the operation is completed, and eliminate static electricity when entering the acetone tank area, filtration workshop, dissolution workshop and recovery section, acetate section and intermediate tank area, and shall not carry mobile phones and fireworks into the premises involved in acetone production. The production waste liquid must be tested and cooled before it can be discharged into the sewage treatment tank through a special pipeline. The number of violations in FY2023 was zero under the company's good anagement system, and we will continue to manage with this goal.









Acetic anhydride reservoir

Fire console

Static Eliminator

Fire shovels and fire

2-6 Risk Management

Business operations face a variety of risks, and only the establishment of a sound risk control system, is the key to sustainable operation of enterprises, is, the company for the implementation of risk management policies and risk measurement standards, has formulated an internal control system and related risk management measures, and implemented in accordance with the measures, in order to reduce and prevent any risks that may be caused by the company's operation.

Risky Items	Risk Statement	Responses
Climate change risks	Increased rain and snow	 Check the drainage system regularly Add water pumps
Corporate governance risks	Violations of the law are punished	 Every year, according to the latest requirements of the Human Resources and Social Security Bureau, ensure the payment base Annual system certification confirms whether there are new laws and regulations, and updates the way business is carried out in accordance with the new law The occupational safety dual system operates and complies with the monthly government department assessment specifications Comply with laws and regulations and obtain pollution discharge permits
	Brand image promotion is blocked	Explore more promotion channels, from manufacturers' promotion meetings to online promotion
	The number of suppliers is small or the quality of suppliers is poor	 Increase high-quality suppliers, and give preference to low-priced, cost-effective, and high-priced alternatives Verify supplier qualifications before trading, including business license, credit history, production qualification and other information to ensure the quality of raw materials or service supply

	Exchange rate losses due to exchange rate changes	Forward exchange rate transactions with banks to reduce exchange rate impact			
Environmental pollution, Resource consumption	The sewage index exceeded the standard, Waste is increasing	 Increase the real-time monitoring data of sewage online monitoring equipment, and the environmental safety department will also monitor online. Waste is disposed of by a qualified third party. Bags are recycled and reused to reduce waste. Build a sewage pond to continuously reduce the amount of sewage. Add three-effect evaporator equipment to treat phosphorus in dilute acid. The first and second effects of concentrated water treatment are added to increase the amount of concentrated water treatment. 			
	Power	Under the condition of ensuring production cooperate with the government's requirements for peak power consumption and reduce unnecessar use of high-power power equipment			
	Increased carbon emissions	 The addition of RTO exhaust gas treatment facilities has increased natural gas and reduced exhaust gas emission concentration. After the recovery and venting scrubber increases the RTO regenerative combustion equipment, the emission meets the standard. It is expected that the carbon inventory will be carried out from 2024. Build photovoltaic power stations to reduce carbon emissions. 			
	Water management	After sewage treatment, it is reused as cooling circulating water to reduce water consumption			
	Chemical leaks, Fires	 Formulate special emergency plans and leakage site disposal plans Require personnel to use chemical substances in accordance with operational specifications and conduct education and training every year 			

Labor risks	Aging is serious and there is a shortage of young labor, The increase in competitors in the surrounding industry has led to an increase in the turnover rate	Increase recruitment channels, enrich welfare benefits, increase the recruitment of personnel in key and important positions and improve salaries, and recruit young talents
	High temperature operation, Noises, Dust	 Install air conditioning to improve the environment Provide protective equipment such as earplugs Masks are provided and humidified on site to reduce the amount of dust
Information security	Data loss due to system damage	 Arrange two hosts for data synchronization backup, if there is a problem with the first host, the second host can be functioned immediately, there is no time gap. In addition, the data is backed up by dedicated line transmission wheel and mobile hard disk.
	Power outages and abnormal air conditioning	 The information room is equipped with an uninterruptible power system (UPS) to cope with the situation of short-term power interruption Urgently turn on the fan for forced convection, if the temperature continues to rise, turn off the equipment in the computer room in order
	Storage server failure	Start the redundant storage server and copy the data from the redundant storage server to the original storage server.
	The network device is damaged	After calling the backup network device and completing the setting, replace the faulty device.

Note: For details on risk management, please refer to the 112 Annual Report P.101~P.104.

2-7 Laws and Regulations are Followed

Material Topic	Laws and Regulations are Followed
Description of Importance	Comply with the laws and regulations of the operating base to build a sound corporate governance organization and an effective management and supervision mechanism to achieve the purpose of sustainable operation of the enterprise.
Policies/ Commitments	Continue to pay attention to domestic and foreign policies and laws that have a potential impact on the company's business and finances, and formulate various corporate governance rules and measures, and the audit unit also checks the compliance of laws and regulations in accordance with the regulations and audit plan, and continuously cooperates with the update of internal regulations.
Short-Term Goals	 No major violations. Personnel regularly pay attention to the latest changes in laws and regulations, and change the management system and operation mode to comply with laws and regulations.
Medium- to Long-Term Goals	 Continuous absence of major violations. Ensure that the operation complies with the latest regulations.
Invest Resources in the Current Year/	1. No major violations in 2023.
Concrete Results	2. There are zero major deficiencies in the annual internal audit.
Responsible Department/	Departments responsible for each/
Grievance Mechanism	+86 531 88164818
Evaluation Mechanisms/	1. No major violations in 2023.
Outcomes	2. Annual internal audits have been performed.

The company includes Jinan Acetate Chemical Co., LTD. Taiwan Office, as well as three mainland subsidiaries Jinan Acetate Chemical Company, Acetek Material Company and Acetek Momentum Company, in order to comply with local government regulations and laws, we promise that all units with authority and responsibility will strictly implement business in accordance with the law, and pay attention to the latest changes in laws and regulations to change the management system and operation mode, hoping to achieve the goal of zero major violations.

Laws and Regulations are Followed						
Quality	Responsible Unit Description of the Management System		Violations of the Law or Penalties by the Competent Authorities			
Environment	Public Works Office, Safety and Environmental Protection Department	The environmental management of factories in mainland China shall be inspected, managed, declared or paid relevant fees in accordance with the relevant laws and regulations of the local government, and the public waste shall be entrusted to a private waste removal and treatment agency with the permission of the competent authority to remove and treat such waste. The company promises to meet the requirements of local government environmental protection laws and regulations, minimize the impact of pollution on the environment, and achieve the goal of sustainable use of earth resources.	There were no major violations in 2023			
Human rights	Human Resources Division	Comply with relevant laws and regulations by local governments, as well as comply with international human rights conventions, such as gender equality, the right to work and the prohibition of discrimination. Its human resources utilization policy does not discriminate on the basis of gender, race, socioeconomic class, age, marital and family status, etc., so as to implement equality and fairness in employment, employment conditions, salary, benefits, training, evaluation and promotion opportunities.	There were no major violations in 2023			
Labor	Human Resources Division	According to the local government laws and regulations to formulate relevant labor and salary rules and regulations, the company in Taiwan in accordance with the labor standards law and other related affairs, in the mainland strictly in accordance with laws and regulations to implement social insurance, housing provident fund withholding and payment system to protect the rights and interests of employees.	There were no major violations in 2023			

Occupational safety	Human Resources Division	Organize occupational health examinations for employees in accordance with the laws and regulations of the local government in mainland China, and issue health examination reports, and entrust a qualified third party to test the working environment for occupational hazard factors, and issue a test report, and the above report is reported to the competent authority for the record, so as to provide employees with sound labor protection supplies, continuously improve the working environment of employees, and meet the requirements of laws and regulations.	There were no major violations in 2023
Economy	Finance Department	Carry out accounting in accordance with the relevant provisions of the Accounting Law and the Tax Law, aggregate income, costs and expenses, correctly account for the company's business activities, implement various tax laws and regulations, and reasonably save taxes and reduce tax risks.	There were no major violations in 2023

Note: Major violations are NT\$1 million or more or other time-limited improvement matters.

Chapter 3 Sustainable Environment

3-1 Environmental Management

The World Economic Forum's (WEF) Global Risks Report 2023 highlights that six of the top 10 existential risks the world will face in the next decade. In the face of an existential crisis caused by climate change, the world must cooperate more effectively in mitigating and adapting to climate change in the next decade to avoid ecological collapse and continued global warming. In recent years, the company has continued to improve its manufacturing technology, actively promote waste reduction and emission reduction, energy conservation and carbon reduction, water resource recycling and reuse, and improve wastewater treatment efficiency, etc., and has listed environmental sustainability as the primary goal, and strives to fulfill its social responsibilities in environmental protection, and move towards sustainable operation with environmental friendliness. In order to systematically and comprehensively manage the environment and energy resources, Jinan Nature Company has introduced the ISO 14001 environmental management system in 2019, and Zhongfeng Chemical Company and Mengxuan New Materials Company have also introduced it in 2020 and 2023 respectively to ensure that the emission and waste disposal in the production process of the factory are in line with laws and regulations, and carry out normal management for major environmental issues; In 2020 and 2024 respectively, Jinan Nature Company and ASTEC Company will introduce ISO 50001 energy management systems, and plan major energy equipment improvement plans by establishing energy equipment identification and energy indicators for each plant, so as to continuously promote energy conservation and carbon reduction.

In terms of environmental protection expenditure, including the cost of general business waste removal, the cost of new and renovated environmental protection facilities, the cost of wastewater treatment and environmental protection fees, the total environmental protection expenditure in 2022 was 27,727,977 yuan, and in 2023 it was 30,702,824 yuanAccounting for more than 35% of environmental protection expenditure, Jinan Nature continues to invest in increasing related equipment to reduce the impact of the production process on the environment, showing the company's emphasis on environmental management.

List of Environmental Expenditures

Item / Year	2023	2022	2021
General business waste removal costs	2,125,862	2,311,427	1,713,483
Wastewater treatment costs	6,360,902	5,660,493	3,327,525
Environmental fees	11,045,651	3,508,302	416,736
The cost of upgrading environmental protection facilities will be added	11,170,409	16,247,755	88,486,310

Total 30,702,824 27,727,977 93,944,054

Note 1: Unit: New Taiwan dollar; Calculated by the average exchange rate of 1:4.396 in 2023, the scope of environmental protection expenditure disclosure is the mainland factory, and only administrative business is carried out in Taiwan.

- Note 2: The environmental protection fee includes the annual environmental protection fee, sewage discharge fee, domestic waste disposal fee levied by the Environmental Sanitation Bureau (fixed payment of CNY 8,000 per year) and sewage treatment fee levied by the Water Bureau.
- Note 3: The cost of wastewater treatment does not include labor costs, and the cost of chemicals and electricity in 2023 is CNY 2.42/m³ for Acetek Environmental is CNY 0.53/m³, for Jinan Acetate Chemical Company, CNY 8.91/m³ for Acetek Material Company and Acetek Momentum Company wastewater is discharged to Acetek Material Company Treatment. Therefore, Acetek Material Company includes Acetek Momentum Company pharmaceuticals and electricity costs

Environmental compliance with environmental regulations

In 2023, the company did not have any violations of laws and regulations such as water pollution, waste, poisons, soil and groundwater pollution, and all wastewater in the plant area was tested to meet the discharge standards before discharge, and all of them obtained the discharge permit issued by the local government; Detect data and comply with government regulations to monitor and upload data online; Waste disposal is entrusted to a qualified third party, and each treatment is also monitored and managed with clear verification and joint records, and the company does its best to be responsible for community residents and the surrounding environment.

Description of new environmental protection facilities to be renovated in 2023

Location of environmenta l protection facilities	New and renovated environmental protection facilities	Improvement purposes		
	40T Pure water machine+80T	Improve the pure water preparation rate and		
	pretreatment	reduce the discharge of wastewater.		
	The sewage pool was changed to a	Improve the efficiency of wind turbines and		
	maglev winder	eliminate energy-intensive equipment.		
Jinan Acetate	A sound barrier was installed on the south side of the RTO cooling tower	Reduce noise.		
	Make an activated carbon box	The UV photo-oxygen system of the sewage treatment station was changed to activated carbon adsorption to optimize the		

		treatment effect.
	Replace the sampling equipment in the online station	If the original sampling equipment is broken, replace it with a new sampling equipment to ensure the normal operation of the online equipment to comply with government regulations and monitor the uploaded data online.
	Immersion ultrafiltration	The new equipment reduces the treatment membrane flushing water and improves the treatment efficiency of the biochemical system.
	Closed cooler	In order to reduce the temperature of the sewage entering the biochemical tank, the high temperature of the sewage will cause fewer beneficial bacteria in the biochemical system and reduce the function of the biochemical tank.
Acetek Material	Polyporcelain film	The main function is the first filtration of suspended solids, and the service life has reached the end of the replacement (2 sets) to increase the water treatment capacity of the secondary sedimentation tank and reduce the external drainage treatment index.
	Nanofiltration membranes (nanofiltration membranes)	The main function is the second overwetted floating debris, and a new set is added to increase the treatment capacity (1 set→ increases the second set) to reduce the external drainage salt index.
	Ammonia nitrogen module	On-line monitoring of ammonia nitrogen data in sewage.

3-2 Water resource management

Among the many ESG indicators implemented by enterprises, the sustainable development of water resources has become an important part. Water is in short supply and has no substitutes, making it more essential than other natural resources. In view of this, the company continues to improve the manufacturing process, build water recycling and reuse facilities, rain and sewage diversion and discharge systems, and implement various water-saving measures to improve the efficiency of water resources use to achieve water balance, reduce the risk of water shortage, and solve the problem of water shortage in the enterprise. We also strictly monitor and manage waste water treatment to achieve the United Nations Sustainable Development Goals (SDGs) and ensure a sustainable freshwater supply and access to clean water for all.

Major issues	Water management
Materiality Statement	Water reuse can bring sustainable benefits to businesses. Jinan Nature collects and treats wastewater, which can be used for industrial processes and environmental irrigation, and uses the reclaimed water supply system as an alternative water source, which can not only offset water consumption costs and reduce operating costs, but also reduce the impact of enterprise water consumption by the abundant and dry seasons and seasons, and stabilize the operation of enterprises.
Policies/Commitments	 Do a good job in enterprise water conservation management, do a good job in water cost analysis, and reduce the water cost of unit products Actively promote new processes, adjust process conditions, improve the preparation rate of pure water, and reduce wastewater discharge Increase the construction of key energy-saving projects, achieve pollutant discharge standards, and carry out cleaner production audits The production wastewater treatment meets the discharge standards, and the treatment capacity reaches the amount of wastewater generated by production, so as to maintain the stable and normal operation of production Comply with government regulations and policies, and maintain zero violations and zero pollution fines
Short-term goals	 The unit water consumption per unit of acetate products in 2023 will be 12.92m³/t; In 2024, the unit consumption of water per unit of product is planned to be 12.60m³/t Technological transformation of three-effect evaporation treatment equipment to improve the treatment capacity of concentrated water Technological transformation of mother liquor drying and low-temperature evaporation equipment Renovation of the closed shed cover of the sewage treatment station 100% of the discharge water quality inspection meets the emission standards required by laws and regulations, and there are 0 pollution fines per year
Medium- and long- term goals	• In 2025~2027, the unit water consumption per unit of product is planned to be 12.50m³/t and will decrease year by year

technologically transform water resources-related Continue to environmental protection facilities, such as improving the comprehensive water treatment efficiency of membranes, adding a group of immersion ultrafiltration membranes, and increasing the treatment efficiency from $70\sim75\%$ to more than 95%. • Technological transformation of sludge process to reduce sludge moisture content from the original 80~85% to 65% • 100% of the discharge water quality inspection meets the emission standards required by laws and regulations, and there are 0 pollution fines per year Continue to cooperate with government regulations and policies to implement relevant control operations (such as the notice of the 2023/11 Jinan Water Balance Test Management Measures) The water intake engineering meter of inan Acetate Chemical is an online monitoring ultrasonic water meter (water meter model JX002) for water resource tax, with product quality supervision and testing report and product certificate The water-saving measures mainly adopt the combined automatic controlled airflow preheating technology of chemical fiber dry spinning to realize the comprehensive utilization of multi-device and cross-regional energy balance; The cooling circulation system reduces the amount of cold water, and only needs to replenish water regularly, saving a lot of industrial water; At the same time, the reclaimed water treated by the sewage treatment station is used for the greening of the project Rainwater and sewage diversion and drainage system: Rainwater is collected by the collection system and enters the rainwater pipe network to avoid excessive rainfall and flooding affecting the production of the Resources and action The production wastewater of inan Acetate Chemical is mainly distillation wastewater, oily wastewater, soft water preparation of concentrated water, and circulating cooling water system wastewater; After the domestic sewage is treated by the septic tank, it enters the collection tank of the sewage treatment station of the plant together with the production wastewater, and is discharged into the municipal sewage pipe network after being treated by the sewage treatment station of the plant to reach the A grade standard in Table 1 of the "Water Quality Standard for Sewage Discharge into Urban Sewers" (GB/T31962-2015). It is deeply processed and eventually flows into the Tuxiao River • Acetek Material Co., Ltd. uses steam condensate for production water, and the sewage treatment station adds membrane concentrate treatment facilities and three-effect evaporation mother liquor drying equipment and facilities, sludge drying treatment transformation, original three-effect evaporation system and new double-effect evaporation system transformation, etc Responsible inan Acetate Chemical / Astek-Anhui Department: +86-531-84232772 Acetek Environmental Co., Ltd./ Acetek Momentum-Huan Bao Department: **Department/Complaint**

Mechanism

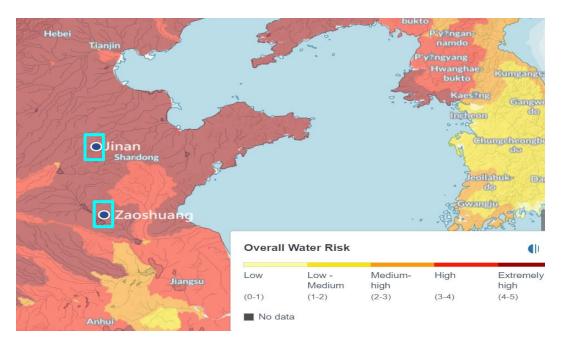
+86-632-2220077 • In 2022, the Group's total water consumption was 912.512 million litres, with a water intensity of 213.7334 per unit of annual turnover, and in 2023, the total water consumption was 1,059.931 million litres, with a water

Performance Outcomes

- intensity of 96.1332 per unit of annual turnover. Although the water consumption in 2023 increased by 147.419 million litres (approximately 16.16%) compared with 2022, the overall water intensity decreased by approximately 55.02% compared with 2022 due to the increase in the Group's annual production capacity and annual turnover, as well as the improvement of water use efficiency through the renovation of environmental protection facilities.
- The Urban and Rural Water Affairs Bureau of Jiyang District, Jinan City, announced that in 2023, water-saving enterprises and water-saving units of public institutions in Jiyang District, Jinan Acetate Chemical was rated as a water-saving enterprise unit in Jiyang District in 2023 after self-assessment, data review and on-site spot checks (Jiyang Shui Zi [2023] No. 14 document).

Mutual impact of shared water resources

Water is an increasingly scarce and valuable resource in today's society, and it is also necessary for the company's production and life. Jinan Acetate Chemical and Acetek Environmental are located in Jiyang District, Shandong Province, and Acetek Material and Acetek Momentum are located in Zaozhuang (Tengzhou) District, Shandong ProvinceScenario simulations from the World Resources Institute's (WRI) Aqueduct tool show that the risk of water scarcity in the region is > 80% by 2030. In order to cope with the risk of water shortage, the Group's factories have relevant daily water storage measures, Jinan Acetate Chemical has a circulating water tank that can store 1000 m³ of water, and three water storage tanks with a total of 60 m³; ASTEC has three water storage tanks, namely a raw water tank of 20 m³, a primary water tank of 40 m³ and a softened water tank of 40 m³. Acetek Material has a water storage tank that can store 400 m³ of desalinated water. Jinan Acetate Chemical, Acetek Environmental, Acetek Material and Acetek Momentum and their surrounding areas are not related to ecological conservation, so there is no concern about the impact on the water quality and water resources protection of the local nature reserves.



Water use and management

Jinan Acetate Chemical, Acetek Environmental, Acetek Material and Acetek Momentum take tap water and recycled water, and the sources of recycled water are analytical water and purchased vapor condensate, which are mainly reused in the process cooling system and regenerated into the production system, and the Group's recycled water has remained stable at more than 50% of the total water consumption for three consecutive years.

In 2023, due to the increase in production capacity and the addition of water used by Acetek Environmental, the water withdrawal will increase by 147.419 million liters compared with 2022, and the discharge and water consumption will increase with the increase of water withdrawal, so the water discharge will increase by 122.696 million liters (about 20.44%) compared with 2022. Water consumption increased by 24.723 million litres (about 7.92%) compared to 2022.

In terms of water intensity, the Group's total water consumption in 2022 was 912.512 million litres, with a water intensity of 213.7334 per unit of annual turnover. Although the total water consumption in 2023 increased to 1,059.931 million liters (an increase of about 16.16%), the water intensity per unit of annual turnover actually decreased to 96.1332 (a decrease of about 55.02%), mainly due to the significant increase in turnover in 2023 with the increase in production capacity, and the continuous optimization and renovation of environmental protection facilities to improve the overall water use efficiency. It shows that Jinan Acetate Chemical attaches great importance to and actively manages water resources.

Water use for three consecutive years

annual	unit	In 2023	In 2022	In 2021
Water Intake from Tap (A)	Millions of liters	497.731	387.634	210.691
Reclaimed Water Intake (B)	Millions of liters	562.200	524.878	378.449
Total Water Intake (A+B)	Millions of liters	1,059.931	912.512	589.140
Effluent Discharge (C)	Millions of liters	722.894	600.198	323.847
Total Water Consumption (A+B-C)	Millions of liters	337.037	312.314	265.293
Recycled water accounts for the total annual water withdrawal	%	53.04%	57.52%	64.24%

Water intensity (Water withdrawal/annual	Annual turnover NT\$ million	96.1332	213.7334	217.0055
turnover)	1			

Wastewater discharge treatment

In terms of wastewater discharge, the wastewater produced by daily production and life is collected and treated at the sewage treatment facilities in the factory, and the discharge water is sampled and inspected from time to time to ensure that the discharge water quality meets the relevant standards of local environmental protection laws and regulations before it can be discharged to the subsequent urban sewage treatment plant, and there will be no wastewater inspection exceeding the standard in 2023, and the discharge water will continue to be controlled in accordance with the relevant laws and regulations. In terms of drainage areas, the wastewater from Jinan Acetate Chemical, Acetek Environmental was discharged to Jiyang Sewage Treatment Plant, and Acetek Momentum was discharged to Acetek Material for pretreatment, and then discharged to Yinhe Water (Tengzhou Mushi) Co., Ltd. together with Acetek Material Company's wastewater.

2023 Wastewater Discharge Standards

Controlle d Items/Bus iness Offices	рН	Ammonia nitrogen content	Chemical oxygen demand	water temp eratu re	dissolved oxygen	SS (Floats)	Sulfate	Total dissolved solids
Jinan Acetate	6.5-9.5	45	500	15-35	This item is not monitored	230	This item is not monitored	This item is not monitored
Acetek Material	6.5-9.5	45	500	15-35	2-3	400	600	2000
Acetek Momentum	6.5-9.5	45	500	15-35	2-3	400	400	1500
Acetek Environme ntal	6.5-9.5	45	500	15-35	This item is not monitored	230	This item is not monitored	1500

 $[\]stackrel{\text{\tiny \pm}}{=} 1 : pH \text{ Values are unitless; The unit of water temperature is °C; The rest of the project units are mg/L ° Note 2: Effluent discharge standards are based on local government regulations.}$

2023 Measured Values of Sewage Discharge

Controlle		Ammonia	Chemical	water	dissolved	SS		Total dissolved
d	pН	nitrogen	oxygen	temperatu		(Floats)	Sulfate	solids
Items/Bus		content	demand	re	oxygen	(Floats)		Solius

iness Offices								
Jinan Acetate	7.67	1.85	48.4	15-35	This item is not monitored	16	This item is not monitored	This item is not monitored
Acetek Material	7.72	0.845	157	15-35	2-3	21	352	1076
Acetek Momentum	-	-	-	This item is not monitored	This item is not monitored	25	259	1185
Acetek Environme ntal	7.53	0.493	65.2	15-35	This item is not monitored	8	This item is not monitored	936

註:pH Values are unitless; The unit of water temperature is $^{\circ}$ C; The rest of the project units are mg/L $^{\circ}$



Wastewater treatment process



Wastewater treatment plants



Sewage treatment tanks



 $Was tewater \ online \ monitoring \ system$

3-3 Waste treatment and recycling

The company's overall business activities and manufacturing process waste sources include general industrial waste and hazardous industrial waste. General waste sources such as domestic garbage, sludge, waste filter cloth, waste filter cake, waste silk, of which waste silk can be disposed of and transferred, and recycled by Jinan Acetate Chemical; The rest is regularly cleaned and transported by the Jiyang County Environmental Sanitation Bureau and the Mushi Town Environmental Sanitation Institute or entrusted to a qualified cleaner for follow-up treatment, some of which are incinerated and part of the waste residue is provided to the surrounding farmers as fuel, effectively making the best use of materials and reducing waste.

Hazardous business waste is waste activated carbon, waste lubricating oil, waste engine oil, waste engine oil empty barrels, waste slurry residue, distillation residue, three-effect residue, waste UV lamp, etc., of which the source of waste activated carbon is the use of 3-5 years of activated carbon after reaching the service life, handed over to the local qualified hazardous waste treatment manufacturer for treatment and regeneration, reused as sewage filtration and other materials, improve the value of activated carbon reuse; Waste lubricating oil is also collected and reused by local qualified hazardous waste treatment manufacturers; Waste lamps are buried; Others are directly disposed of by subsequent incineration.

The hazardous business waste (hazardous waste) generated by the plant is temporarily stored in the hazardous waste room, the storage conditions meet the environmental protection requirements, the packaging containers are intact, the types and characteristics of the partition storage and weight counting, the use of anti-corrosion, anti-seepage ground and skirts, set up to prevent the spread of leakage to the external environment interception, diversion, collection facilities, with emergency pool, windproof, rainproof, sunscreen and other related standards and specifications. The relevant personnel of each plant will conduct environmental and operation process inspection records on the waste storage or temporary storage area from time to time, and then entrust a third-party professional and qualified cleaning and transportation treatment organization or reuse organization to carry out subsequent disposal such as removal and recycling according to the type of waste. In 2023, the recycling rate of general industrial waste (inhouse) will be 15.85%, and the recycling rate of hazardous waste will be 0%.

Before cooperating with a third-party removal and recycling manufacturer, the company will first confirm that the manufacturer has obtained a license and issued a license, has the equivalent level of a permit removal project and the license is still within the time limit, and actually reviews its license before signing a contract for decontamination or a contract for entrusting removal. According to the hazardous waste management plan (national platform) and the disposal party signs a contract of more than 1 ton, make an appointment for personnel to clean and transport to save transportation energy. The transfer form has the signatures of the three parties (the company/transportation company/disposal agency) and the disposal method, according to which the transfer process is supervised, and the transportation unit without the transfer bill shall not be carried, and the disposal unit shall not receive it, so as to ensure that the company's

waste removal and transportation flow is in accordance with the laws and regulations and the company's contract provisions, and jointly contribute to environmental protection. In 2023, the company did not have any serious leakage incidents or illegal pollution incidents due to improper disposal of waste or raw materials, and in 2024, it will continue to take 0 environmental violations/fines (year) and 0 environmental pollution (year) as one of the waste management goals.

Annual waste recycling rate (in-house)

% Recycling Rate	In 2023	In 2022	In 2021
General Waste	15.85%	22.91%	13.65%

Major issues	Waste management
Materiality Statement	 The purpose of hazardous waste management is to reduce the harm caused by hazardous waste to society, the environment and the population, and must meet the requirements of the superior environmental management department and do a good job of harmless treatment Controlling waste generation and reducing the amount of disposal can reduce the impact on the environment The waste generated in the production process should be reasonably controlled and stored correctly to reduce the harm to employees Hazardous waste compliance treatment is conducive to the environmental remediation of the plant and creates a good investment environment
Policies/Commitments	 We are working to reduce waste through before, during, and post-production measures such as source management, process waste reduction, and end-of-line recycling and disposal, and we are committed to promoting waste reuse and reducing the amount of landfill Specific measures to reduce the generation of industrial solid waste and promote comprehensive utilization. Reduce from the source, improve the efficiency of resource utilization, cultivate advanced technology, improve the level of cleaner production, and carry out cleaner production audits Establish an environmental protection agency, with a special person in charge and a sound environmental management system. Regularly carry out standardized environmental management evaluation indicators for hazardous waste
Short-term goals	 Waste engine oil can be recycled and reused by the disposal unit entrusted with the qualification 100% compliant waste disposal rate Environmental violations/fines (year) 0; Environmental pollution (year) 0 pcs
Medium- and long- term goals	 Regularly carry out standardized environmental management evaluation indicators for hazardous waste Carry out training on relevant laws, regulations, rules and relevant normative documents every year 100% waste compliance disposal rate Environmental violations/fines (year) 0; Environmental pollution (year) 0 pcs

• Establish a solid waste intelligent supervision platform for hazardous waste storage

- Waste production, storage, and transfer shall be declared in accordance with the provisions of the hazardous waste management plan, and the factory shall be independently inspected and managed (the pre-plan at the beginning of the year, if the production exceeds the estimated amount of hazardous waste during the year, it is necessary to submit an application for change to the government for approval before the excess hazardous waste can be disposed of)
- Preparation of hazardous waste management system: Formulate management plans in accordance with relevant national or regional standards and specifications, and formulate emergency response plans for sudden hazardous waste pollution incidents
- In order to increase the recycling rate of waste and hazardous waste, we optimize the output rate
- The responsible department signs a contract with the qualified company to monitor and track the transfer process of the waste disposal plant to ensure the legality and safety of the final treatment
- Transfer process: According to the hazardous waste management plan (national platform) and the disposal party signs a contract of more than 1 ton, make an appointment for personnel to clean and transport to save transportation energy. The company (the transferor) / the transport company (carrier) / the disposer (the receiver) have the signatures of the three parties and the disposal method on the transfer bill, according to which the transfer process is supervised

Authority-incharge/grievance mechanism

Resources and action

Jinan Acetate Chemical/ Acetek Environmental-Safety and Environmental Protection Department: +86-531-84232772

Acetek Material/ Acetek Momentum-Ministry of Environmental Protection:

+86-632-2220077

- In 2023, we will complete emergency drills and training for hazardous waste leakage
- Implement the information disclosure system for the prevention and control of hazardous waste pollution, and post hazardous waste in a conspicuous position





Performance Outcomes

In 2023, 12 independent inspections will be completed, and hardware facilities such as ground seepage prevention, visualization windows, and storage area zoning will be upgraded



 According to the new hazardous waste management measures implemented after July 1, 2023, the labels of hazardous waste storage sites have been replaced in accordance with relevant national and local standards and specifications. Hazardous waste containers and packaging are labelled with a comprehensive range of styles





Dtum labels

Hazardous waste repository identification

- Revise the "2023 Hazardous Waste Management Plan" according to the actual situation and transfer hazardous waste in compliance
- In FY2023, the internal recycling rate of general industrial waste is 15.85% (natural recycling: waste silk); Hazardous business waste is entrusted to a third-party qualified removal and transportation manufacturer

In 2023, there will be 0 environmental fines and 0 environmental pollution violations

Total weight of waste and how it is disposed of

General Waste

Unit: metric tons

		In 20)23		In 2022			In 2021		
annual category (Disposal method)	Jinan Acetate	Acetek Material	Acetek Momen tum	Acete k Envir onme ntal	Jinan Acetate	Acetek Material	Acetek Momen tum	Jinan Acetate	Acetek Material	Acetek Momen tum
Household waste (incineration)	105.70	164.97	19.20	-	75.30	195.99	16.80	84.00	366.60	5.40
Sludge (incineration).	3.99	-	-	-	-	-	-	-	-	-
Waste Silk (Reuse)	119.13	-	-	-	143.80	-	-	101.40	-	-
Waste filter cloth/waste filter cake (incineration)	286.48	-	-	52.02	195.92	-	-	185.45	-	-
Gross weight (metric tons)	751.49				627.81			742.85		

Note: Because the Taiwan office is located in an urban building and is not a factory, it only produces a small amount of general livelihood waste and resource recycling waste, which is cleared, buried or recycled by the local cleaning team, and the amount of waste generated is not counted.

Hazardous industrial waste

Unit: metric tons

annual	In 2023			In 2022			In 2021		
category (Disposal method)	Jinan Acetate	Acetek Material	Acetek Momen tum	Jinan Acetate	Acetek Material	Acetek Moment um	Jinan Acetate	Acetek Material	Acetek Momen tum
Spent activated carbon	20.89	0.10	0.08	76.37	0.02	-	24.72	-	-
Waste lubricating oil	3.17	-	-	11.75	-	-	3.45	-	-
Waste UV lamps	0.02	-	0.01	0.04	-	-	-	-	-
Spent acid	0.69	-	-	1.30	-	-	-	-	-
HW34 waste slurry	-	29.49	-	-	54.00	-	-	-	-
HW34 spent acid	-	-	-	-	8.14	-	-	71.67	-
Contaminating waste	-	103.13	-	-	130.12	-	-	299.74	-
Waste engine oil and used oil drums	-	0.87	-	-	-	-	-	0.99	-
Waste slurry residue	-	88.60	-	-	55.05	-	-	10.43	-
Rectification residue	3.28	38.76	-	-	145.28	-	-	-	-
Acetic anhydride distillation residue	-	-	51.46	-	-	52.21	-	-	-
Triple effect residue	-	-	217.87	-	-	171.34	-	-	-
Laboratory wastes vs. on- line monitoring wastes	-	0.60	-	-	-	-	-	-	-
Gross weight (metric tons)	559.02		705.63			411.00			

Note: In 2021, Acetek Momentum will be added, and it will begin to dispose of hazardous business waste in 2022; In 2023, Acetek Environmental will be added, and it is expected to start disposing of hazardous industrial waste in 2024.







Waste dlag



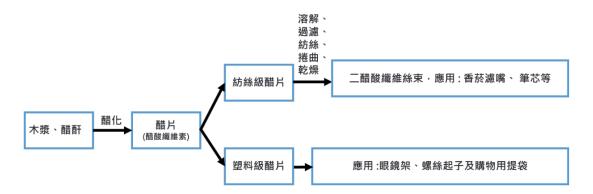
Waste recycling ponds



Waste clean-up in action

3-4 Raw material and safety management

The company's full product line includes acetic anhydride produced by Acetek Momentum, flakes (Acetate flakes) produced by Acetek Material and tow (Acetate tow) manufactured by Jinan Acetate Chemical. Acetic anhydride raw materials include acetic acid, hydrogen phosphate diamine; The raw materials of flakes include natural fibers such as wood pulp, cotton pulp and chemical raw materials such as acetic acid, acetic anhydride, sulfuric acid, etc., which can be divided into spinning-grade flakes or plastic-grade flakes according to the different degrees of vinegaration, which are used in different end products. The spinning grade acetate flakes can be finally made into tow through acetone dissolution, filter pressing, spinning, crimping, drying, swinging, baling and other processes, and other raw materials such as white oil, oil, activated carbon, etc. will also be used in the tow manufacturing process. The rest still have raw materials related to packaging materials, such as space material bags, oil ton barrels, pallets, paper tubes, backing boards, upper and lower covers, etc. Because the main raw material of vinegar chips is wood pulp or cotton pulp, it is a renewable material, and the wastewater in the production process is relatively easy to treat and has less emissions, so it meets the needs of the current society to pursue sustainable development.



List of main raw materials

category	The main types of raw materials					
Non-renewable raw materials	White oil, acetone, oil, acetic anhydride, acetic acid, hydrogen diamine					
Renewable raw materials	Acetate flakes, filter aid, activated carbon, wood pulp					



Oil: Acetate flakes, filter aid, acetone, acetic anhydride, wood

, _

Major issues	Raw material management
Materiality Statement	Raw material management is an indispensable part of the manufacturing production process, which is directly related to the cost control, production efficiency, product quality and market competitiveness of enterprises. Scientific and effective raw material management is one of the effective ways for enterprises to reduce product costs, save reserve funds and improve economic benefits, through continuous optimization of raw material management, enterprises can maintain advantages in the fierce market competition, and achieve long-term stable development.
Policies/Commitments	 In response to the needs of environmental protection, we give priority to the selection of renewable and biodegradable natural polymer materials, and develop better production technologies to reduce waste and pollution in the production process, and improve the reuse rate of recyclable materials, so as to achieve energy saving and consumption reduction, and reduce environmental pollution and resource consumption Regularly inspect all aspects of raw material management to ensure compliance with relevant regulations and company policies Research and development of better production technologies to reduce waste and pollution in the production process; Reduce resource consumption by recycling and reusing raw materials Correctly plan the material demand to avoid the shutdown line affecting the customer's delivery: the production department puts forward the material demand according to the schedule, and the relevant units prepare the inventory appropriately according to the material demand, but do not add additional inventory, and provide the required materials for the production department under the premise of occupying as little capital as possible, and eliminate the waste of resources caused by excess materials or overdue scrapping and production shutdown due to lack of materials
Short-term goals	 Each batch of raw materials is inspected to ensure compliance with relevant regulations and company policies Scientific scheduling, minimize production switching time, improve the efficiency of raw material use and output Reduce inventory backlog and improve raw material turnover utilization Raw materials, space packages, recycling, and reuse within the group; Oil tonne drum recycling group internal turnover and reuse For domestic shipments of filament, the business is required to communicate with customers, and packaging materials, paper tubes, and pallets (shipped together with products) are recycled, selected, and recycled
Medium- and long- term goals	 Each batch of raw materials is inspected to ensure compliance with relevant regulations and company policies Continuously improve the production process and increase production efficiency Improve the material turnover rate, reduce inventory sluggishness, increase the recycling of recyclable materials, increase the frequency of reuse, make full use of the highest value of materials, and reduce excessive purchase of materials

The recycling rate of the internal turnover and reuse of raw materials space package recycling group is 116% in 23 years, and it is expected to increase by 10% in 2027 • The recovery rate of oil drum recycling group is 59% in 23 years, and it is expected to increase by 10% in 2027 • The domestic shipment of filament requires business to communicate with customers and improve the recycling rate of customers' packaging materials, paper tubes and stacked boards. In 2023, 1 customer has been recycled, and it is expected that a second customer will be added for longterm recycling in 2024, and it is intended to strive for 3 customers to recycle packaging materials from fixed shipment customers • Each batch of raw materials is inspected • Scientific scheduling, reduce production switching time, improve the efficiency of raw material use and output • Reduction of packaging materials: Negotiate with wood pulp suppliers to simplify the outer packaging of wood pulp rolls • The pallet is recycled to reduce consumption; Reduce inventory overstock and improve utilization Resources and action • Improve the process technology and improve the efficiency of raw materials; Daily maintenance of the equipment, effectively provide the equipment appropriateness, and avoid the waste of raw materials due to equipment failure • Space Bag and Oil Ton Barrel Recycling Group Internal Turnover and Reuse • The domestic shipment of filament yarn is recycled by the client packaging materials, paper tubes, and pallets Jinan Acetate/ Acetek Environmental - Storage and Transportation Authority-in-Department: +86-531-84232772 charge/grievance Acetek Material/ Acetek Momentum-Storage and Transportation Division: mechanism +86-632-2220077 • Inspection of raw materials for each batch: 1,148 batches of wood pulp and cotton pulp will be inspected in 2023, and a total of 20 quality assurance inspectors will conduct annual incoming inspection/process inspection/finished product inspection, and the inspection instruments used include balances, muffle furnaces, moisture analyzers, whiteness spectrophotometers, testers. atomic absorption spectrometers, viscometers, etc • Scientific scheduling, reduce production switching time (spinning-grade vinegar tablets/plastic-grade vinegar tablets), improve the efficiency of raw material use and output: 16 times of line change in 2022 and 10 times Performance Outcomes in 2023, each line change takes 10 hours, saving a total of 60 hours • Reduction of packaging materials: implemented from 2023 • Brazil wood pulp has eliminated the use of plastic film packaging • Ryan hardwood pulp no longer uses kraft paper packaging • Pallet recycling: Since 2022, the wooden pallet has been gradually replaced with plastic pallet, and from 2023, 100% of the pallet delivered to Jinan Acetate will be completely made of plastic pallet and recycled, and no wooden pallet has been purchased since 2023, reducing the consumption of packaging materials • Reduce inventory backlog and improve utilization rate: Capacity

- allocation is changed to most production of spinning-grade vinegar flakes, and reducing plastic-grade vinegar flakes can reduce the inventory of plastic-grade vinegar flakes, improve inventory turnover and reduce inventory costs
- Improve the process technology and improve the efficiency of raw materials: the original 1 ton of vinegar flakes can only produce 1 ton of tow, and after the process is improved, 0.9 tons of vinegar flakes can be used to produce 1 ton of tow
- Space Bag Recycling/Oil Drum Recycling: 116% space bag recovery rate and 59% oil barrel recovery rate
- Domestic shipments of filament are recycled by the client: In 2023, the first single customer has delivered 16.3% of the packaging material recycling pallet, 11.4% of the paper tube, 20% of the backing board, and 15.19% of the upper and lower covers.
- The cost of manpower and time spent on the recycling and finishing procedures of space bales / oil tonne barrels recycling/filament domestic shipment packaging materials (e.g. quantity counting, sorting, washing, drying, stacking and sorting in storage areas, etc.):
 - Acetek Material Co., Ltd.'s raw material space package recycling group internal turnover and reuse, after the workshop is fed, the personnel will sort, fold and pack 30 pieces/pallet, transport them to the recycling area for placement, arrange logistics vehicles for loading and transfer according to the number of recycling, Acetek Material production and reuse will transport 54 vehicles in 2023, and the transportation cost of manual vehicles will be about 140,400 yuan, with a recovery rate of 116%
 - The internal turnover and reuse of oil tonne barrel recycling group will be transported to Acetek Momentum together with the tonne bag, with a recovery rate of 59% in 2023
 - 3) Domestic shipments of filament are recycled by the client packaging materials, paper tubes, and pallets: manually selected and recycled, and the labor cost is about NT\$4,400

Renewable and non-renewable materials

Due to the characteristics of the company's products, the proportion of renewable raw materials used in the manufacturing process is relatively high; The process raw materials of Zhongfeng Chemical Company and Mengxuan New Materials Company are mostly non-renewable raw materials. In the past three years, the total raw material usage was 104,798.142 metric tons in 2021, 201,005.962 metric tons in 2022, and 236,190.380 metric tons in 2023. The proportion of renewable raw materials used will be 29.22% in 2021, 17.80% in 2022, and 24.65% in 2023.

Overview of raw material usage

Unit: metric tons

annual category	In 2023		In 2022		In 2021	
Non-renewable raw materials	177,972.046	75.35%	165,227.305	82.20%	74,177.997	70.78%
Renewable raw materials	58,218.334	24.65%	35,778.657	17.80%	30,620.145	29.22%
total	236,190.380		201,005.962		104,798.142	

Note 1: Non-renewable raw materials: non-renewable resources in the short term, such as minerals, metals, petrochemical raw materials (petroleum refining), etc.

Materials can be recycled and reused in the manufacturing process

30% dilute acid is produced in the production process of the acetate finished product line of Acetek Material, and the acetic acid with 99.5% content can be re-entered into the raw material storage tank after filtration, extraction and distillation by the acetic acid recovery system, and can be reused as the raw material of the acetate cellulose production line to reduce material consumption.

Recycling of products and packaging materials by the client

The company's industry belongs to the middle of the value chain, and after the product is shipped to the customer, it still needs to be made into the final product by the customer before it can be provided to the end consumer; And the product attribute is a consumable, so it is impossible to recycle the product at the end of the product life cycle, but the filament products are packaged and sent to domestic customers with the packaging materials, and the recycling of the packaging materials shipped by the first customer has been completed in 2023, with a recycling ratio of 16.3% for pallets, 11.4% for paper tubes, 20% for backing plates, and 15.19% for upper and lower covers. In the future, we will continue to recycle packaging materials for domestic filament customers and increase the recycling rate, so as to reduce the consumption of packaging materials year by year and make a contribution to a friendly environment.

Recycling and reuse within the recycling packaging group

Thinking about the reuse of raw materials and packaging materials, connecting upstream and downstream processes, and strengthening material management, the waste packaging materials generated by the company's mainland operations are reused at the time of shipment, among which the waste space bags are recycled to Zhongfeng Chemical Co., Ltd. and the empty barrels are recycled to Mengxuan New Materials Co., Ltd. From the information of the purchase volume and recycling volume in the table below,

Note 2: Renewable raw materials: Renewable raw materials can be obtained from many sources that can be quickly restored through ecological recycling or agricultural processes (agricultural products) or petrochemical recycling raw materials (e.g. recycled plastics), resulting in services that are not in short supply and can be used sustainably for future generations.

it can be found that the recycling ratio remains stable, indicating that the Company's implementation of waste packaging materials reuse has achieved significant results, and adheres to the 3R principle of 'Reduce, Reuse, and Recycle' for waste reduction and reuse, in line with the Company's action goal of strengthening the use of resources to be environmentally friendly and implementing the sustainable use of the earth's resources.

Overview of the recycling and use of waste packaging materials

Type of packaging material	Space Pack			Tons of oil drums		
annual project	In 2023	In 2022	In 2021	In 2023	In 2022	In 2021
Purchase Quantity (pcs)	24,863	18,171	14,219	408	341	217
Recycling amount (pcs)	28,770	19,644	15,510	242	244	182
Percentage recycled (%)	116%	108%	109%	59%	72%	84%



Waste Space Bag



1 ton empty drum

In 2021, Jinan Acetate Chemical won the Green Factory Award from the Jinan Municipal Bureau of Industry and Information Technology, demonstrating that its efforts in sustainable environment have been recognized, and the Group will continue to fulfill its corporate social responsibility of being environmentally friendly \circ



3-5 Energy Management

In 2020 and 2024 respectively, Jinan Acetate Chemical and Acetek Environmental will introduce ISO 50001 energy management systems to continuously promote energy conservation and carbon reduction by establishing energy equipment identification and energy indicators for each plant, and planning major energy equipment improvement plans.

Major issues	energy management				
Materiality Statement	Continuously saving energy consumption and improving energy efficiency is a global trend, and continuously promoting energy-saving policies and measures and effectively implementing energy management can not only reduce carbon emissions and enable the company to gradually move towards the goal of green and low-carbon production, but also simultaneously enhance the company's goodwill perception and create a high-quality environment.				
Policies/Commitments	 Comply with the energy conservation policies, industrial policies, industrial skill standards and self-inspection of energy consumption capacity levels of the national and local governments Through the analysis of the project's energy-using system and energy-using units, the energy-saving problems and the energy-saving potential that can be developed in the next step are summarized Implement power-saving measures in offices, public areas, workshops, and staff dormitories From time to time, we will advocate the concept and habits of energy conservation and carbon reduction and the national energy conservation policy to all employees 2023 Government Cleaner Production Policy Cooperation: Energy Saving/Optimization of Production Equipment Continuously matching energy management system certification (ISO 50001 energy management system) Continue to promote energy management and improve energy use Actively carry out equipment transformation to reduce energy consumption Lean operation, precise control, reduce waste, control steam consumption, reduce steam unit consumption 				
Short-term goals	 J Jinan Acetate Chemical: In 2023, the water purifier will be replaced to improve the pure water preparation rate; Replace the cooling water tower to improve the utilization rate of circulating water; Replace the new air compressor to improve energy efficiency and save electricity It is expected that the waste heat recovery plan will be completed in 2024 (the technical transformation of the existing RTO equipment will increase the function of waste heat recovery and utilization) The energy consumption target per unit of product in 2024 is expected to be 1050tce/t Acetek Material: 				

• Steam is an important energy consumption energy of Acetek Material recovery unit, which is related to the final benefit of the vinegar flakes of the product. 80% of the steam consumption is in the recovery unit, and the control of steam consumption is one of the important assessment indicators of the recovery unit • In 2024, the steam unit consumption index of the recovery unit will be controlled within 2.30 • Acetek Momentum: • By adjusting the air ratio (gas and air ratio), the tonnage consumption of natural gas in the cracking furnace is reduced, and the goal is to reduce it year by year · The LNG gasification station will be added to move towards selfsufficiency, which is expected to be opened in 2024 • Jinan Acetate Chemical: 2025-2027 target energy consumption per unit of product is 950tce/t • Acetek Material Co., Ltd.: The unit steam consumption of the recovery unit strives to be controlled within 2.20 • Acetek Momentum Co., Ltd.: Transform the cracker burner to reduce the tonnage consumption of natural gas Medium- and long-• Monthly electricity statistical analysis monitors energy consumption trends, and proposes improvement plans for areas with high energy term goals consumption • Carry out energy management system certification • The total amount of self-consumption energy (photovoltaic power generation) has increased · Green procurement will be implemented for newly purchased equipment, and priority will be given to those with environmental certification/environmental labels • Jinan Acetate Chemical: • Strengthen energy metering: calibrate measuring instruments to ensure accuracy · Actively learn and understand new energy-saving technologies and processes · Increase the use of recycled water (replace the cooling tower and improve the recycled water utilization). · Adjustment and optimization of existing equipment (replacement of water purifier / replacement of cooling tower / replacement of new air compressor) • Acetek Material: Resources and action • The equipment of the recycling unit is stable and normal, and it is regularly maintained, overhauled and maintained (once a year, and there is no abnormality in 2023) • When the equipment is abnormal, it should be repaired and dealt with in a timely manner, and it is strictly forbidden to work with illness • As an important KPI assessment index of the recovery unit, the steam unit consumption is evaluated and evaluated on a weekly and monthly

• Retrofit the pyrolysis furnace burner (sectional renovation cost, annual maintenance during the renovation period, no impact on production)

basisAcetek Momentum:

Authority-incharge/grievance mechanism

Jinan Acetate / Acetek Environmental -Safety and Environmental Protection

Department: +86-531-84232772

Acetek Material / Acetek Momentum -Recycling Section/Acetic Acid

Section: +86-632-2220077

● Jinan Nature Company:

• In 2023, the energy consumption per unit of product will be 1,100tce/t;

• Energy-saving performance of cleaner production plan in 2023:

Lilici	• Energy-saving performance of cleaner production plan in 2023:						
numbering	The name of the scenario	Investment (10,000 yuan)	Implementation time	Environmental benefits	Economic benefits		
F1	Strengthen the automated management of natural gas use	1.2	2023.5	Saving natural gas combustion helps reduce CO2 emissions	The annual saving of natural gas is 115,500 m3, and the monthly saving is 404,300 yuan		
F2	Upgrading of waste gas from sewage treatment stations	1.52	2023.8				
F6	Filter replacement	4.2	2023.6	It saves 32,000 kWh of electricity per year	Save 25,600 yuan in electricity bills annually		

Performance Outcomes

Note: The currencies in the above table are RMB

- Acetek Material: In 2023, the steam unit consumption of the recovery unit will be 2.28
- Acetek Momentum:
 - By adjusting the air-gas ratio (gas and air ratio), the tonnage consumption of natural gas in the cracking furnace will be reduced to 86Nm³/ton of acetic anhydride in 2023, and the tonnage consumption of natural gas in the cracking furnace will be reduced to 87Nm³/ton of acetic anhydride in 2022 (compared with the tonnage consumption of natural gas in 2022, it will be reduced by 1 Nm³/ton of acetic anhydride).
 - In 2023, the boiler steam consumption will be reduced to 85Nm³/ton of steam by adjusting the boiler air ratio (gas and air ratio) ratio (Acetek Momentum steam source: 100% natural gas)









carburetor

Gas storage tanks

Gas storage tanks

Most of the Company's current energy sources are non-renewable energy, including gasoline, diesel, natural gas, purchased electricity and steam. In 2022, the total energy consumption in 2023 will be 2,704,495.37 GJ, of which the photovoltaic power generation consumption will be 2,273.93 GJ, and the renewable energy utilization rate will be 008% \circ

In 2023, due to the increase in production capacity and equipment and the entry into operation of Acetek Environmental, the energy consumption will increase compared with 2022, in order to reduce the risk of over-reliance on a single energy source resulting in the company's operation, the company has maintained diversified energy sources, and the top three energy sources for stable use in the process are steam, natural gas and purchased electricity, accounting for 56% of the overall energy use in 202347% \(33.87% \cdot 9.51% \cdot \) The energy intensity per million yuan of turnover in 2023 is 245.2914GJ, and the energy intensity per million yuan of turnover in 2022 is 523.8402GJ, although the overall energy consumption in 2023 will increase by about 21% compared with 2022, but the energy intensity in 2023 will decrease by about 53% compared with 2022 due to the increase of 158.25% in 2023 revenue compared with 2022.

Non-renewable energy consumption

Unit: GJ (1 billion joules)

anı	nual	Electricity consumption	gasoline	diesel fuel	The amount of steam	natural gas	total
20	023	257,157.63	608.68	1,195.57	1,527,137.55	916,122.01	2,702,221.44
20	022	192,536.07	597.96	1,040.66	1,333,727.28	708,576.75	2,236,478.72
20	021	140,300.51	613.81	847.15	1,253,839.07	270,125.81	1,665,726.35

Note 1: Unit: billion joules (GJ), the scope of disclosure is the mainland plant, but the electricity consumption includes the Taipei office. Note 2: Transportation oil includes: production oil and business transportation oil; The data of gasoline and diesel fuel refer to the actual consumption of business transportation oil, cargo loading and unloading oil, and boiler oil in the current year. Note 3: The energy used to produce steam is coal.

Note 4: Energy conversion factor: electricity 3,600 kJ/kwH, gasoline 32,604 kJ/L, diesel 35,112kJ/L, coal 24,620kJ/kg, natural gas 33,440kJ/m3.

Note 5: Carbon emission coefficient of Taiwan power in 2023: 0.494 kg CO2 e/kWh; In 2021, the average CO2 emission factor of provincial electricity in Shandong Province was 0.6838 kgCO2/kWh

(Announcement of the National Bureau of Statistics on the Release of Carbon Dioxide Emission Factors for Electricity in 2021 (Index No. 000014672/2024-00149)).

Renewable energy usage and consumption

Unit: billion joules (GJ); %

annual	Photovoltaic power generation	Photovoltaic power consumption	Total energy consumption	Renewable energy use rate
2023	2,273.93	2,273.93	2,704,495.37	0.08%

Energy intensity

Unit: GJ (1 billion joules) / NT\$ million

annual	Total energy consumption (GJ)	turnover (NT\$ million)	Energy intensity (GJ / NT\$ million).
2023	2,704,495.37	11,025.642	245.2914
2022	2,236,478.72	4,269.391	523.8402
2021	1,665,726.35	2,714.866	613.5575

3-6 Greenhouse gas management

The Company's principal place of operation is in Shandong Province, China, and the greenhouse gas emissions in 2021 and 2022 are estimated carbon dioxide equivalent based on Scope 1 and Scope 2 energy sources such as gasoline, diesel, natural gas, steam consumption, and electricity consumption multiplied by emission factors. However, extreme climate caused by greenhouse gases is an important environmental problem faced by the world, in order to have a more accurate understanding of the greenhouse gas emissions of each plant, at the end of 2023, we will start to conduct independent inventory of Scope 1 (Category 1), Scope 1 (Category 2) and Scope 3 (Category 3~6) with reference to ISO 14064-1, and it is expected that in 2024, a third-party impartial unit [Adhering to United Accounting Firm] will be entrusted to inspect Scope 1 (Category 1) and Scope 2 of greenhouse gases(Category 2) inventory and 2023 is the first year of the inventory with reference to ISO 14064-1:2018, so 2023 is set as the base year.

According to the results of the 2023 GHG Inventory, Scope 1 (Scope 1) direct GHG emissions from gasoline, diesel, natural gas or anthropogenic systems/fugitives used in stationary or mobile combustion sources or industrial systems accounted for approximately 30.18%, and Scope 2 (Scope 2) from purchased electricity, The indirect use of purchased vapor accounted for about 25.36% of the greenhouse gas emissions, and the indirect greenhouse gas emissions from the use of other external energy sources in Scope 3 (Category 3~6) accounted for about 44.46%. In 2023, the annual greenhouse gas emission equivalent and greenhouse gas emission intensity were lower than those in 2022. Since carbon dioxide reduction and energy conservation are important directions of the company, except for greenhouse gases, there are no major environmental pollutants such as ozone-depleting substances (ODS) or nitrogen oxides (NOx) and sulfur oxides (SOx). The Company's specific measures to save energy and reduce greenhouse gas emissions are mainly through the Company's promotion of employees to save energy, etc., to save costs and effectively reduce greenhouse gas emissions.

Scope 1 (Category 1): Direct GHG emissions

• The 2023 inventory of direct greenhouse gas emission sources owned or controlled by the Company includes four categories: 1) stationary combustion sources such as regenerative incinerators (RTOs) and boiler equipment for natural gas and liquefied natural gas, and emergency generators for diesel fuel; 2) Mobile combustion sources, such as official vehicles and forklifts using gasoline and diesel; 3) Acetylene, welding rods, and VOCs used in industrial processes; 4) Man-made systems/spills such as refrigerants from air conditioning equipment, refrigerators, industrial equipment, official vehicles, fire extinguishers, septic tanks (CH₄) and sewage treatment plants, etc.

Scope 2 (Scope 2): Indirect GHG emissions from energy

• The Company's 2023 inventory includes the use of electrical facilities and equipment that use

purchased electricity and vapor facilities and equipment that use purchased energy.

Scope 3 (Scope 3~6): Other indirect GHG emissions

• Indirect emissions owned by other companies but generated by the organization's activities, including indirect emissions from transportation use, products used by the organization, emissions from the use of products from the organization, and other categories. In consideration of its control to identify and quantify the explanation, the Company selects the following three items for inventory:

1) upstream raw material transportation; 2) Transportation of downstream products; 3) Procurement of raw materials, electricity, energy and fuel upstream mining and transmission and distribution carbon footprint (Taiwan).

Annual greenhouse gas emission statistics - analysis by source type

Emission source type/year		Scope 1 (Class 1) direct Greenhouse gas emissions	Scope 2 (Class 2) Energy indirect Greenhouse gas emissions	Scope 3 (Class 3~6) Other indirect Greenhouse gas emissions	Annual emissions equivalent (metric tons CO2e/year)
In 2023 (Notes 1	Emission equivalent (metric tons CO2e/year)	59,770.43	50,227.63	88,022.80	198,020.86
and 2)	Category Proportion (%).	30.18%	25.36%	44.46%	100%
In 2022 (Note 3)	Emission equivalent (metric tons CO2e/year)	59,300.13	37,778.04	Not checked	97,078.17
	Category Proportion (%).	61.08%	38.92%	-	100%
In 2021 (Note 3)	Emission equivalent (metric tons CO2e/year)	22,667.75	27,783.93	Not checked	50,451.68
	Category Proportion (%).	44.93%	55.07%	-	100%

- Note 1: ISO 14061-1 self-monitoring of greenhouse gases will be conducted at the end of 2023, and the greenhouse gas inventory will be based on 2023, and the scope of the inventory includes Scope 1~Scope 3.
- Note 2: For details of the 2023 emission factors, please refer to the Group's greenhouse gas inventory report (inventory year 2023).

• Note 3: The data for 2021~2022 only includes Scope 1~Scope 2, of which Scope 2 adjusts the emission coefficient according to the current situation, and re-estimates the greenhouse gas emission equivalent and the proportion of the scope.

Annual greenhouse gas emissions intensity

annual	Annual emissions equivalent (metric tons CO2e)	Annual revenue (NT\$ million)	Annual greenhouse gas emissions intensity (metric tons CO2e/NT\$ million)
2023	198,020.86	11,025.642	17.96
2022	97,078.17	4,269.391	22.74
2021	50,451.68	2,714.866	18.58

3-7 Climate Change Risk Management and Response

The Company has established an internal control system and internal audit system, and established a corporate social responsibility code to implement integrated environmental, social and governance risk management related to sustainable operations. Due to the extreme weather caused by global warming, as well as the increasing importance of energy and climate change issues in recent years, the Company needs to fulfill its corporate sustainability responsibilities in order to develop sustainably in the industry. According to the structure of the Task Force on Climate-related Financial Disclosures (TCFD), which is divided into governance, strategy, risk management, indicators and targets, each member of the Corporate Sustainability Implementation Group identifies climate-related risks and opportunities, formulates follow-up response strategies, and reports to the Board of Directors on a regular basis every year, and the Board of Directors monitors the effectiveness of implementation.

Govern	Tactics	Risk Management	Indicators and Targets
The Company's governance of climate-related risks and opportunities.		Climate-related risk management processes.	Indicators and targets for assessing and managing climate-related topic.
	Refer to the 2023 Short, Medium and Long-Term Climate Risks and Opportunities Table.	The risk identification, assessment and management process is as follows: • The members of the Corporate sustainability implementation group completed the collection of climate and environmental background information • Climate risk and operational scope assessment • Establish a project inventory of climate risks and opportunities • Create an internal operational impact questionnaire • Members of the Corporate Sustainability Implementation Group conduct climate risk opportunity and operational impact analysis	Prioritizing the use of relatively low-carbon energy sources to reduce the carbon footprint of products.
The general manager shall serve as the chairman of climate risk and		Decide on major risk projects Step4 Step4 Conduct annual rolling reviews of the effectiveness of implementation strategies and goals through corporate sustainability implementation team meetings	Scope 1 emissions in 2023
opportunity governance, and the heads of each first- level unit shall carry out	The company discussed the 2°C scenario (2DS) at the meeting of the Sustainable Development Committee, and simultaneously used the tools provided by TCCIP (Climate Change Integrated Service Platform) as the assessment reference of the climate change artists rick scenario and finally	The company's risk management system has integrated climate risks and opportunities into the operation of all units.	were 59,300.13 metric tons CO2e; Scope 2 emissions were 178,416.73 metric tons CO2e.

Climate-related shocks and risk response

classify	face	project	Financial impact on the company	tactics	Response measures and targets
		Market information is uncertain	Changes in domestic and foreign economic and financial conditions and laws and regulations may affect the company's revenue, maintenance costs, exchange rates and interest rates, etc., resulting in changes in the company's profit and loss and cash flow, including: capital loss, capital gap, credit risk, etc.; The financial impact is moderate.	Keep abreast of market trends and assess the impact of market changes on the Group's operations	home and abroad in a timely manner, so as
TCFD (Climate- related Financial Disclosures)	Transition Risks - Markets	Rising raw material costs	Climate change may cause a shortage of raw materials and low environmental impact raw material requirements, and carbon tariffs in various countries have been required, increasing the company's operating costs; The financial impact is moderate	Maintain more than two suppliers of major raw materials to ensure the stability and autonomy of the supply of goods; Keep an eye on the market price of raw materials	conditions to reduce the impact of cost changes on the company's profit and loss. 3. Continuously monitor the regulatory

i	pportunity- Resource efficiency	Reduce water consumption and consumption	Water reuse can bring sustainable benefits to businesses. Jinan Nature collects and treats wastewater, which can be used for industrial processes and environmental irrigation, and uses the reclaimed water supply system as an alternative water source, which can not only offset water consumption costs and reduce operating costs, but also reduce the impact of enterprise water consumption by the abundant and dry seasons and seasons, and stabilize the operation of enterprises.	 3. 4. 	Do a good job in enterprise water-saving management, do a good job in water cost analysis, and reduce the cost of water per unit of product Actively promote new processes, adjust process conditions, improve the preparation rate of pure water, and reduce wastewater discharge Increase the construction of key energy-saving projects, achieve pollutant discharge standards, and carry out cleaner production audits The production wastewater treatment meets the discharge standards, and the treatment capacity reaches the amount of wastewater generated by production, so as to maintain the stable and normal operation of production Comply with government regulations and policies, and maintain zero violations and
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2023 Climate Risks and Opportunities Table							
No.	Climate Change Risk Topic	Risk Level	Time Frame	No.	Climate Change Opportunities Topic	Opportunity Level	Time Frame
R1	Increase the price of greenhouse gas emissions	middle	long-term	01	Adopt a more efficient mode of transportation	low	Short, medium and long term
R2	Strengthen emissions reporting obligations	middle	long-term	O2	Use more efficient production and distribution processes	middle	long-term
R3	Requirements and regulation of existing products and services	middle	long-term	O3	Recycling	middle	long-term
R4	Risk of litigation	low	Short, medium and long term	O4	Switch to more efficient buildings	low	Short, medium and long term
R5	Replace existing products and services with low-carbon commodities	middle	long-term	O5	Reduce water consumption and consumption	middle	Long term
R6	Investments in new technologies fail	low	Short, medium and long term	O6	Use low-carbon energy	middle	long-term
R7	The cost of low-carbon technology transition	middle	long-term	07	Adopt incentive policies	middle	long-term
R8	Changes in customer behavior	low	Short, medium and long term	08	Use new technologies	middle	long-term
R9	Market information is uncertain	middle	Long term	09	Participation in the carbon trading market	middle	long-term
R10	Rising raw material costs	middle	Long term	O10	Shift to decentralized energy	low	Short, medium and long term
R11	Shifting consumer preferences - industry stigmatization	low	Short, medium and long term				
R12	Stakeholder concerns and negative feedback are increasing	low	Short, medium and long term				in the medium-
R13	The severity of extreme weather events such as typhoons and floods has increased	low	Short, medium and long term				
R14	Changes in rainfall (water) patterns and extreme changes in climate patterns	low	Short, medium and long term				
R15	Average temperatures rise	low	long term				
R16	Sea level rise	low	long term				

Chapter 4 Social Care

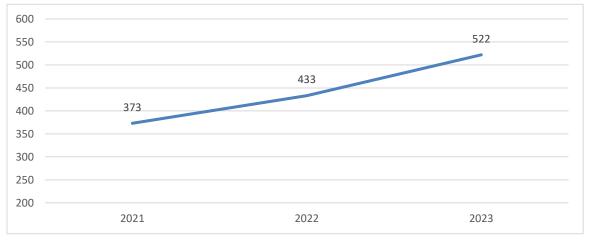
4-1 Employee Structure

Perfect human structure is conducive to the sustainable development of the company, the company recruits the corresponding number of male and female employees according to the nature of production technology and operation content, the proportion of men and women is equal, and there is no difference in gender, race, religion and marital status, a reasonable ratio of male and female employees, in addition to being conducive to recruitment, is also conducive to creating a harmonious working atmosphere.

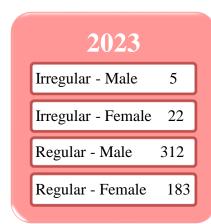
The company's factories are located in Jinan and Zaozhuang areas of mainland China, of which the total number of employees accounts for 98.66% of the company, as of December 31, 2023, the total number of full-time employees is 522 (including 7 in Taiwan), no dispatch, part-time personnel. The number of employees in 2023 will increase by 89, mainly due to the completion of the construction and production of the new plant Acetate (Shandong) Environmental Fiber Co., Ltd., resulting in an increase in personnel.

In order to protect the legitimate rights and interests of employees, the company signs a labor contract with each employee, and in order to prevent enterprises from dismissing workers at will, stabilize the number of employees to safeguard the rights and interests of the enterprise, employees in mainland China who are newly employed and renewed for the first time when the labor contract expires, sign a fixed-term labor contract, and the labor contract expires from the second renewal, and then sign an indefinite-term labor contract in accordance with local laws and regulations. Therefore, most of them are fixed-term labor contracts.

Total Number of Employees (People)



Employment Contracts - By Gender



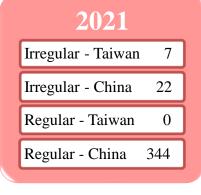
Irregular - Male 15 Irregular - Female 21 Regular - Male 257 Regular - Female 140

2021	
Irregular - Male	12
Irregular - Female	17
Regular - Male	232
Regular - Female	112

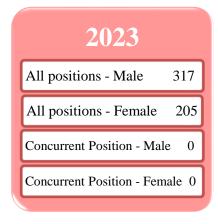
Employment Contracts - By Region

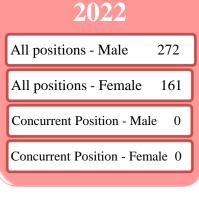


2022	
Irregular - Taiwan	6
Irregular - China	30
Regular - Taiwan	1
Regular - China	396



Types of Employment - By Gender





2021
All positions - Male 244
All positions - Female 129
Concurrent Position - Male 0
Concurrent Position - Female 0

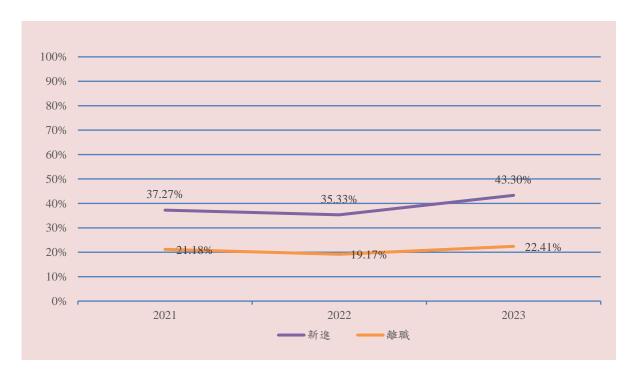
Note 1: There will be no dispatches and part-time workers in 2020, 2021 and 2023.

Due to the particularity of product production technology, the need for factory operators to be guarded 24 hours a day, the current implementation of 12 hours of two-shift operation, although not heavy labor work and

pay overtime wages, but there are still some employees can not adapt to long hours of work, and the high turnover rate of employees and grass-roots staff on the production line is a common phenomenon in mainland China, most of the reasons for resignation are caused by factors such as failure to adapt to the working or living environment, career planning, marriage, moving and returning to their hometowns, so the new and turnover rate of employees is higherIn 2023, the total number of employees leaving will be 117, and the total number of new employees will be 226, which is an increase compared with the turnover rate and new employment rate in 2022. The resignation is due to the increase in competition in the nearby industry, the employee resigned, but the resignation handover is carried out in accordance with the internal standard measures, so that the company can timely deploy employees and recruit manpower, and in order to solve the problem of excessive personnel turnover, the company plans to improve production technology to improve the degree of automated production and reduce the need for personnel to work for a long time.

In the future, the company will continue to pay attention to the rights and interests of employees and implement the policy of employee care, so as to meet the needs of employees, reduce the rate of new hires and turnovers, and establish a stable employee group, so as to facilitate the healthy and sustainable development of the company.

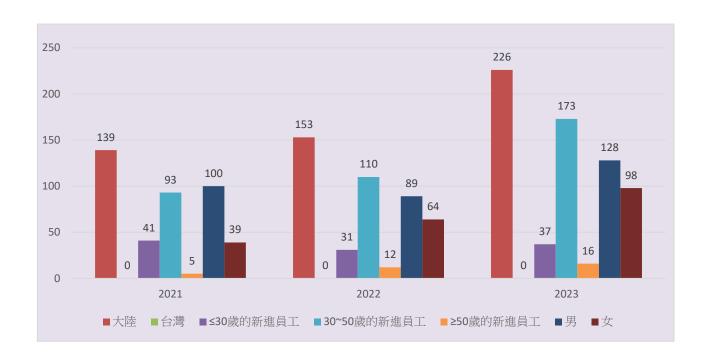
New Employee Entry and Turnover Rate



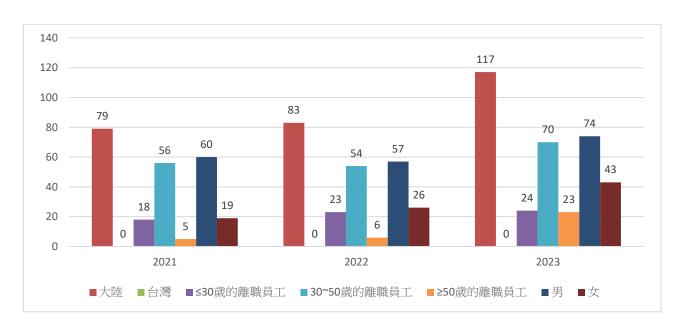
Note 1: New Entry Rate: Total number of new employees / Total number of employees.

Note 2: Turnover Rate: Total number of employees leaving/total number of employees.

New Employees by Region, Age and Gender/Number



Turnoyer Employees by Region, Age and Gender/Number



4-2 Compensation and Benefits

Material Topic	Labor-Employment Relationship				
Description of Importance	Good employee welfare and communication to enhance employees' consciousness and sense of identity, improve employees' work efficiency, and make the company and employees achieve a win-win situation.				
Policies/ Commitments	Continue to pay attention to the rights and interests of employees, and implement employee care policies in order to meet the needs of employees.				
Short-Term Goals	1.5% reduction in turnover rate. Salary increases based on performance.				
Medium- to Long-Term Goals	Continue to reduce the turnover rate. Continuous provision of statutory benefits and retirement protection system.				
Invest Resources in the Current Year/ Concrete Results	In 2023, in order to improve safety awareness, a new safety project bonus will be added, and safety performance scores will be evaluated in accordance with the company's safety system. 2. Employee welfare expenses totaled NT\$365,818 thousand.				
Responsible Department/	Human Resources Division/				
Grievance Mechanism	+86 531 88164818				
Evaluation Mechanisms/	In 2023, the amount of year-end bonuses will be increased				
Outcomes	Employee benefits increased compared to last year				

Fair and generous salary and welfare system, can effectively retain enterprise talents, the company is a high-tech enterprise, for the introduction of talents and the stability of employees, compared with other processing and manufacturing enterprises higher requirements, in order to reduce the cost of new employee training, retain skilled employees to improve production stability and product quality, the company in accordance with the local labor related laws and regulations of each operating base to provide salary and benefits, vacation system, insurance and pension planning, etc., so that each employee can work with peace of mind, in the improvement of the working environment, In terms of improving wages and benefits, we will gradually improve them every year according to the company's own conditions.

Employee Bonofite Ducanous	Regular Employees		
Employee Benefits Program	China	Taiwan	
Social insurance (five insurances) / labor insurance, health insurance		·	
Housing provident fund	•		
Marriage Leave, bereavement Leave		·	
Family leave	•		
Childcare remains without pay		·	
Retirement system in accordance with the law	•	•	
Business Employer's Liability Insurance (Accident Insurance)		·	
Year-end bonus	•	•	
Holiday benefits		·	
Birthday gift certificate	•		
Regular health check-ups			

Note: The company has Jinan, Zaozhuang (production plant) and Taiwan office (listing place) as important operating bases in China.

Description of Compensation and Benefits in China

- 1. Increase salary bonus, the company every six months evaluation, as the basis for salary adjustment, salary has increased continuously in the past three years.
- Humanized leave system, employees enjoy a comprehensive leave system, in addition to public leave, there are also
 marriage leave, bereavement leave, family leave, maternity leave, sick leave, work-related injury leave, etc., and public
 leave can be freely adjusted.

Explanation of the Labor Retirement System in China

- 1. A sound employee insurance and retirement security system, in accordance with government policies and regulations, gives all employees (except employees who have reached the retirement age) to pay five insurances and one housing fund, which is jointly borne by the state, the company and individuals in accordance with the provisions of laws and regulations, of which the company and individual part is withheld and paid by the company, and the personal part is deducted from the salary; at present, the social security contribution ratio is 25.42% for enterprises and 10.3% for individuals, which meets the requirements of laws and regulations.
- All employees are supplemented with commercial employer's liability insurance (accident insurance) so that each employee can be fully protected; at the same time, the company provides employees who meet the retirement conditions in accordance with laws and regulations to assist in retirement procedures.

Compensation and Benefits Description in Taiwan

The Group began to employ Taiwanese employees in 2014, and established a Taiwan office in 2015, with a total of 7
Taiwanese employees by the end of 2023, and the relevant leave, labor insurance, labor retirement system, etc., are
implemented in accordance with the laws and regulations of Taiwan, and employee salaries and bonuses are paid according
to the company's operating performance and personal work performance.

Explanation of the Labor Retirement System in Taiwan

In accordance with the "Labor Standards Law" and the "Labor Pension Regulations", the measures for the management of
employee retirement are formulated, and each employee is allocated a retirement pension in accordance with the law, and
6% of the pension is allocated to the company and individual on a monthly basis and deposited into the special account of
the Labor Insurance Bureau for Labor Pension.

Employees Stay on Dahyeitting	Condon	Year		
Employees Stay on Babysitting	Gender	2023	2022	2021
The number of employees elicible for children stay	Male	0	0	0
The number of employees eligible for childcare stay	Female	6	3	3
Number of ampleyees applying for shildeers stay	Male	0	0	0
Number of employees applying for childcare stay	Female	6	3	3
Number of employees who should be reinstated after	Male	0	0	0
the expiration of the childcare leave period (A)	Female	3	3	3
Number of employees who actually return to work after	Male	0	0	0
the expiration of the childcare leave period (B) (including early reinstatement)	Female	3	3	2
Detum to make (D/A)	Male	-	-	-
Return to work rate (B/A)	Female	100%	100%	100%
Number of employees who have completed their	Male	0	0	0
childcare leave in the previous year and are still employed for 12 months after reinstatement (C)	Female	3	1	2
Potentian rate (C/provious year P)	Male	-	-	-
Retention rate (C/previous year B)	Female	100%	100%	100%

4-3 Occupational Health and Safety

In order to establish a safe, healthy and comfortable working environment, effectively protect the occupational safety and health of employees, and prevent the risk of occupational accidents or hazards, Jinan Nature Company, Zhongfeng Chemical Company, Mengxuan New Materials Company and Astertech Company have established the "Safety Production Leading Group" and the "Occupational Disease Prevention and Control Leading Group". Comply with laws and regulations (such as the Law on Work Safety, the Law on the Prevention and Treatment of Occupational Diseases, the Law on Labor Contracts, the Law on Fire Protection, the Law on the Safety of Special Equipment, the Law on Emergency Response, the Regulations on the Safety Management of Hazardous Chemicals, the Regulations on Work-related Injury Insurance, the Regulations on Work Safety Permits, and the Measures for the Implementation of the Fire Safety Responsibility System). Formulate internal occupational safety and health management policies, management methods and operating procedures, and conduct various occupational safety and health education and training and simulated emergency response drills for occupational safety accidents every year, so that employees in all positions can accurately understand the relevant health and safety risks and hazard treatment at all steps, so as to strive to achieve the management goal of "zero occupational safety accidents" and build the company's occupational safety and health culture.

Major issues	Occupational safety and health management
Materiality Statement	Occupational safety and health is related to the company's human resources and related operating costs, and only by paying attention to the workplace safety and physical and mental health of each employee at all times can we avoid labor hazards, corporate injuries and social cost losses, and ensure the sustainable development of the enterprise. The concept and daily practice of occupational safety and health, through the active support of supervisors at all levels, are rooted down to the grassroots employees, and if each employee can pay careful attention to work safety in all work steps, they will be able to achieve production goals smoothly and safely; In addition, if all suppliers and contractors can also implement occupational safety and health management, it will help to enhance the occupational safety and health image of the overall value chain of the enterprise. Neglect of workplace safety and health measures may lead to accidents due to poor physical and mental condition of employees; Prolonged exposure to hazardous environments can also cause occupational

	diseases; In the eyent of a major accident such as a fire or explosion caused			
	by a solvent/gas leak, it may not only cause the factory to shut down for			
	several months and cause economic losses, but also affect the external			
	environment, the safety of residents in the surrounding community, and the			
	instability of the industrial value chain.			
	 The company's operations comply with local regulations 			
	and environmental, safety and health system standards			
	 Provide a safe and healthy working environment, reduce the 			
	risk of personnel performing operations, and avoid the occurrence of			
Dalisias/Commitments	hidden dangers			
Policies/Commitments	• Continue to communicate and consult stakeholders, and			
	incorporate relevant suggestions into future operational policies and			
	procedures management, and continue to optimize the occupational			
	safety and health system in the spirit of PDCA			
	 Implement contractor construction management 			
	• Continue to implement relevant occupational safety and			
	health regulations and ISO 45001 system requirements			
	• 0 accidents in environmental protection/fire			
	protection/occupational health; The incidence of occupational			
	diseases is zero			
	• 0 serious injuries and fatalities; The accident rate of minor			
	injuries is less than 10 people			
	• 100% completion rate of security inspection; The			
	implementation rate (rectification rate) of safety concerns is 100%.			
	• 100% of new employees in the third level of safety			
	education, 100% pass rate of other training			
Short-term goals	• 100% completion rate of emergency rescue drills; The			
מוואה דוו ומזביו ואוומ	perennial integrity rate of safety and fire protection facilities is 100%.			
	• 100% of the main person in charge, safety management			
	personnel, and special operations personnel training license			
	Zero major accidents of equipment (accidents with direct)			
	economic losses of more than 50,000 yuan caused by equipment)			
	• The pass rate of special equipment inspection is 100%, and			
	the intact rate of other equipment is more than 95%.			
	• 100% of contractors participate in safety education before			
	construction; The on-site sampling pass rate of the undertaker is 100%.			
	• 100% monitoring rate of key dangerous personnel; 100% of			
	the meetings were held for safety accidents			
	HIX HIXXHIRS MAIN HAIN INI BRININ RANIBAHIR			

● Jinan Acetate Chemical and Acetek En	vironmental:
Continue to implement relevant occupational safe	ety and health
regulations and ISO 45001 system requirements,	and expect to
achieve the following goals:	
• There were zero fatalities and seriou	s injuries (including
traffic liability).	
• Zero major fire (explosion) accidents;	There are zero major
environmental pollution accidents	
• zero incidents of acute poisoning; The	incidence of
occupational diseases among employees is zero	
• 100% of employees are trained in safet	y production
• 100% of special operations personnel a	nd special equipment
safety management operators are certified to work	
Medium- and long- • 100% rectification rate of accident haz	ards
term goals • 100% compliance rate of occupational	hazards
• 100% of employees exposed to occupat	tional disease hazards
were subject to regular physical examinations	
• 100% investment rate of safety product	tion expenses
• The number of young injured was less	than 5
Acetek Material and Acetek Mome	entum.: Continue to
implement relevant occupational safety and health	h regulations and ISO
45001 system requirements, and are expect	ted to upgrade the
classification to yellow by the end of 2024 and t	to blue by 2025; It is
expected to complete the three-level standardiza	ation review in 2025;
Implement the Basic Specifications for Enterpri	se Safety Production
Standardization (GB/T33000-2016) and the Gui-	delines for Chemical
Process Safety Control Management (AQ/T 3034	1-2022)
• Set up a "Work Safety Leading Group"	to be responsible for
the formulation and implementation of safe	ety production and
occupational health management policies.	Members include
supervisors and workers (non-supervisors)	
 Hold regular safety meetings to review 	the potential safety
Resources and action hazards reported by various departments, formula	ate improvement
solutions, and supervise the implementation perfe	ormance by the
dedicated unit	
Practical actions include:	
Identification of hidden dangers and ha	azards in the working
environment and operation methods, and risk class	sification and control

	 Maintenance, inspection and improvement of mechanical equipment, electrical and fire protection facilities Safe use, labeling and storage of hazardous chemicals Sampling, monitoring and improvement of the working environment Safety assessment and related management of contractors' inbound operations Formulate work safety rules and emergency response plans for implementation, and conduct irregular audits to confirm performance Formulate occupational safety and health training plans, and implement executive training and assessment Employees exchange knowledge related to the promotion of physical and mental health Set up occupational safety and health complaint telephone and mailbox to enable employees to consult and participate in system or process improvement Establish and improve the accident investigation process, and report major incidents in accordance with the law and procedures 				
Authority-in- charge/grieyance mechanism	Jinan Acetate/ Acetek-Safety and Environmental Protection Department: +86-531-84232772 Acetek Material/ Acetek Momentum - Safety Department - Occupational Health Division: +86-632-2220077				
Performance Outcomes	Implementation rate of occupational safety and health training	Jinan Acetate/ Acetek Completed 10 sessions with a 100% employee participation rate	Acetek Material/ Acetek Momentum Completed 24 sessions, with an employee participation rate of 97.07% (employees who did not participate in the training have completed the follow-up		

General (other) equipment uptime Rectification rate of	100% pass rate of special equipment inspection	training and assessment). 100% uptime rate of special equipment 96.42% of the average (other) met the target (target: 95% or more)
Contractor-related occupational safety and health management	Occupational safety and health requires a 100% contract rate. 100% of the participants participated in safety education before construction, 8 sessions were completed, and 70 people participated The on-site sampling pass rate of the safety and environmental protection department was 100%, and 6 sessions were completed	The preconstruction safety education rate was 100%, 8 sessions were completed, and 72 people participated The on-site sampling pass rate of the safety and environmental protection department was 100%, and 8 sessions were completed

Occupational health and safety management system

At present, Jinan Nature Co., Ltd., Acetek Material Co., Ltd., and Acetek Momentum Co., Ltd., have all passed the ISO 45001/GB-T45001 occupational safety and health management system certification and continue to maintain and manage them, and are committed to doing a good job in

occupational accident prevention, and through health promotion, moving towards a friendly workplace and fulfilling corporate social responsibility. Acetek Environmental has not yet obtained the ISO 45001 certification program due to the completion of the construction of the new tow factory in March 2023, but it is still managed in accordance with the occupational safety and health system standards of the other three plants, and the workers covered by the occupational safety and health management system of the four plants are currently all employees and non-employees, with a coverage rate of 100%

Number and prop workers covered be occupational safet management syste	y the y and health	In 2023				
Laws/regulations and systems followed by occupational safety and health management	Check the type	Jinan Acetate (Number of people)	Acetek Material (Number of people)	Acetek Momentum (Number of people)	Acetek (Number of people)	Number of workers included in the OSH system
Occupational	Internal Audit	174	155	43	130	502
Safety and Health Act	External labor inspections	174	155	43	130	502
ISO 45001	Internal Audit	174	155	43	0	372
	External verification	174	155	43	Q	372

Occupational safety and health management system management personnel

The occupational safety and health system management personnel of Jinan Acetate Chemical Co., Ltd., Acetek Material Co., Ltd., Acetek Momentum Co., Ltd. and Acetate (Shandong)
Environmental Fiber Co., Ltd. have considerable qualifications, relevant licenses and various environmental safety and health training; The number of registered safety engineers, safety management personnel, safety officers, and work-related injury prevention personnel should also meet the requirements of local laws and regulations.

Worker involvement, consultation and communication

Jinan Acetate Chemical Co., Ltd., Acetek Material Co., Ltd., Acetek Momentum Co., Ltd. and Acetate (Shandong) Environmental Fiber Co., have all set up a "Safety Production Leading Group" (equivalent to the Occupational Safety and Health Committee), which is composed of supervisors (members) at different levels and non-supervisors of various units to promote occupational safety culture and systems, so that safety policies can be implemented in the work of each employee, and the safety system can be optimized because of employee feedback.

The "Safety Production Leading Group" of Jinan Acetate Chemical is headed by the general manager, the deputy general manager and the deputy director of the safety and environmental protection department are the deputy leaders, and the heads of each classroom are members, with a total of 12 members, including 9 workers (non-supervisors), and the proportion of workers is 75%; The "Safety Production Leading Group" of Acetek Environmental is headed by the chairman of the board, and the vice president of production and the deputy section chief of the safety and environmental protection department are the deputy team leaders, with a total of 12 members, including 9 workers, and the proportion of workers is 75%; The "Safety Production Leading Group" of Acetek Material is headed by the general manager, and the deputy general manager and safety director are the deputy leaders, with a total of 18 members, including 15 workers, and the proportion of workers is 83%; Acetek Momentum is headed by the general manager, the deputy general manager, the safety director and the vice president of production are the deputy team leaders, with a total of 20 members, including 16 workers, and the proportion of workers is 80%.

The total number of people and the proportion of workers in the leading group for safety production in 2023

Number of members Company type	Safety Production Leading Group Total number of members	Worker (non- supervisor) Number of members	Worker (non- supervisor) Proportion%
Jinan Acetate	12	9	75%
Acetek Environmental	12	9	75%
Acetek Material	18	15	83%
Acetek Momentum	20	16	80%

The safety meeting of the leading group for production safety is required by law once a quarter, and at least 4 times a year to ensure long-term stable and safe production. In 2023, Jinan Acetate Chemical and Acetek Environmental actually held 17 safety meetings, Acetek Material actually held 22 safety meetings, and Acetek Momentum actually held 37 safety meetings.

Communication topics of the 2023 Safety Production Leading Group Safety Meeting:

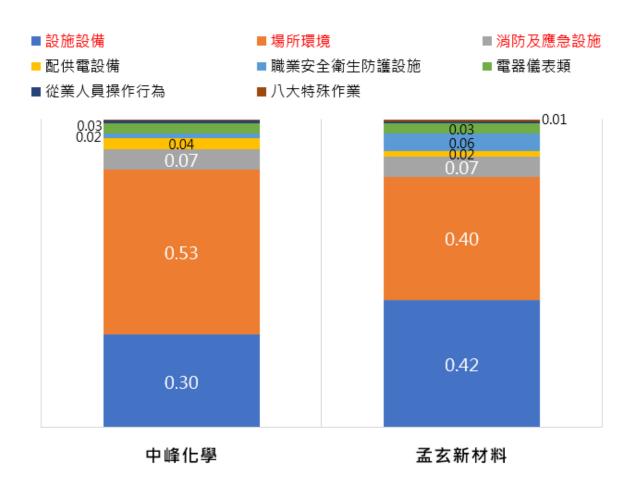
- ❖ Identification of hidden dangers and hazards in the working environment and operation methods, and risk classification and control
- ♦ Maintenance, inspection and improvement of mechanical equipment, electrical and fire protection facilities
- ♦ Safe use, labeling and storage of hazardous chemicals
- ♦ Sampling, monitoring and improvement of the working environment
- ♦ Safety assessment and related management of contractors' inbound operations
- ♦ Formulate work safety rules and emergency response plans for implementation, and conduct irregular audits to confirm performance

Hazard identification, risk assessment and accident investigation

Hazard identification and analysis

Jinan Acetate Chemical Co., Ltd., Acetate (Shandong) Environmental Fiber Co., Ltd., Acetek Material Co., Ltd. and Acetek Momentum Co., Ltd.. The safety department of the four factories is divided into major hidden dangers and general hidden dangers according to the judgment standards of major accidents in industrial and trade enterprises in accordance with local laws and regulations, and Jinan Acetate Company and Acetate Environmental Company shall conduct plant-level inspections once a month, workshop-level inspections once a month, team-level inspections once a week, and post inspections once a shift according to the company's dual-system management regulations, with an actual implementation rate of 100% in 2023 and no major hidden dangers. In 2023, Acetek Material Co., Ltd. plans to conduct 16 company-level inspections throughout the year, 12 actual inspections, and once a month to carry out company-level hidden danger investigations, with a 100% improvement completion rate of 5 major hidden dangers; Acetek Momentum Co., Ltd. planned a total of 16 company-level inspections throughout the year, and actually carried out 16 inspections, with a 100% improvement completion rate of 5 major hidden dangers. General hidden dangers can be divided into eight categories as shown in the figure below, Acetek Material Company and Acetek Momentum Company according to the proportion of the number of hidden dangers, the top three categories with the highest proportion of general hidden dangers are facilities and equipment, site environment and fire and emergency facilities, and corresponding improvement measures have been proposed.

一般隱患類別比例分析



In 2023, new safety and health facilities and equipment will be added to ensure the safety of employees

Jinan Acetate/Acetek Environmental	Acetek Material/Acetek Momentum
1. Carport charging pile	Information security management system
During the charging process, the live plug row	It adopts dual prevention management
is prone to electric shock and avoids electric	system/special operation
shock injury.	management/personnel positioning
2. Safety valve	management/intelligent video analysis
Ensure that the pressure of the equipment is	management, etc., and has a comprehensive
normal to prevent explosion and personal	security system management mode.
injury caused by overpressure.	Advantages of information system:
3. Pressure gauge	1. The platform content library quickly
Ensure that the pressure of the equipment is	improves the level of safety management: risk
normal to prevent explosion and personal	point management, hidden danger investigation
injury caused by overpressure.	card, and emergency disposal card all have
4. Fire extinguishers, fire hoses	public databases, and the platform has

As common fire-fighting equipment, fire extinguishers and fire hydrants can quickly extinguish fires in the initial stage of fire, prevent the spread of fire, and timely use of fire extinguishers can minimize the damage of fire and protect people's lives and property safety.

- established more than 400 inspection cards to reduce copywriting work and reduce the burden on enterprises.
- 2. Process-driven, easy to learn and easy to use: the whole process of special operations is operated on the mobile phone, and the electronic ticket is fully realized. One mobile phone supports multiple people to review, saying the cost of purchasing explosion-proof mobile phones for enterprises.
- 3. Robot service, reduce the burden:
- (1) The robot automatically captures and pushes laws, regulations and standards to reduce labor costs and management burdens;
- (2) The robot participates in verifying the name of the contractor, pushes the contractor's industrial and commercial information, qualification information, legal proceedings information, and automatically updates the contractor's qualification and other file information, so as to prevent and control the contractor's risk and save data entry time.
- 4. Content empowerment and saying enterprise costs: The platform continues to push learning materials such as accident cases and push exam question banks, so that enterprises can save a lot of training costs.
- 5. Risk avoidance and penalty avoidance safety assistant: The platform will closely focus on the implementation of legal responsibilities to help enterprises comprehensively protect against legal risks and avoid fines; Closely around the risk catalog, each risk point set up seven lines of defense to avoid accident risks; The dual prevention system has been fully implemented in front-line positions, promoting everyone to participate in safety work, and everyone stressing a safe safety culture.







Charging piles

Pressure gauge

Relief valve

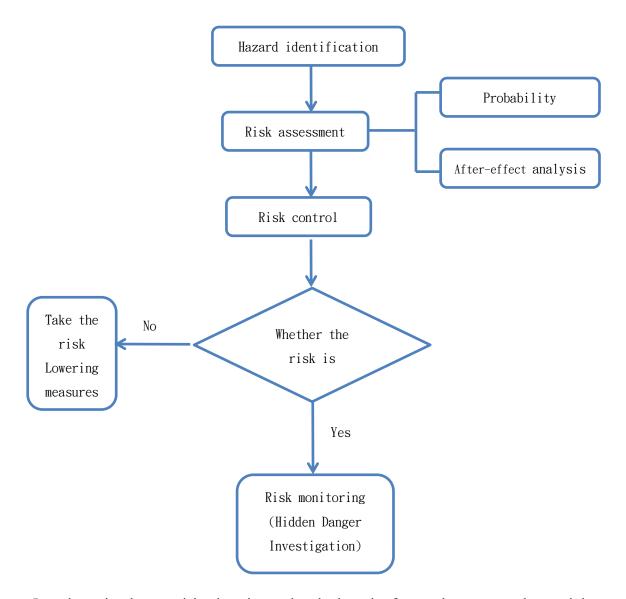
How to deal with hazards and hidden dangers

project	Responsible unit	Processing Processing
General hidden danger management	Heads of departments or relevant personnel	 According to the degree, it is divided into post level, team level, workshop level and company level Hidden dangers that can be rectified immediately should be implemented immediately and a special person should be arranged to confirm (e.g., pipeline flow direction marking, article safety marking) If it is difficult to eliminate it immediately, it should be analyzed in a timely manner, and reliable safety precautions should be formulated and rectified within a time limit to prevent it from developing into an accident
Management of major hidden dangers	Organize a leading group for production safety	 If it is judged or assessed to be a major accident hazard, an assessment report shall be prepared Key contents of the assessment report: Objectives and tasks of governance Methods and measures to be taken Funding and material implementation Institutions and people responsible for governance Timelines and requirements for governance Safety measures to prevent accidents during rectification periods

The company's existing risk points are re-evaluated for compliance with the risk assessment system every year. The operation activities are based on the work hazard safety risk analysis method R=L×S; R-degree of risk, L-likelihood of accidents (focusing on the frequency of accidents and the frequency of human exposure to such dangerous environments); S - The severity of the consequences of the accident (focusing on the degree and duration of the injury), 8 and below are acceptable risks, before 9 to 12 to reduce the risk area as much as possible, 15 and above are unacceptable risks, and the risk must be controlled below 15 through control measures. According to the operating condition hazard analysis (LEC) assessment method, the equipment and facilities are defined as acceptable risks with a risk value of 70 and below, before 70 to 160 is the risk area to be reduced as much as possible, and 160 and above are unacceptable risks, and the risk must be controlled below 160 through control measures.

Risks are graded from high to low in the score range, which can be divided into major risk, large risk, general risk and low risk. All risks must comply with operating procedures and procedures, and personnel corresponding to major risks must have relevant training and assessment, equipped with safety protection measures and work under guardians; If the risk is unacceptable, it is necessary to formulate control measures to reduce the risk level and achieve controllable risk. In accordance with the relevant requirements of the Guidance Manual for the Construction of Dual Prevention Mechanism for Small and Micro Enterprises in Jinan, we will continue to promote the construction of the company's dual prevention mechanism for hierarchical control of safety production risks and hidden danger investigation and management, promote the implementation of the company's main responsibility for safety production, improve safety risk management and control capabilities and intrinsic safety levels, and combine the actual work of the company's safety production. In 2023, Jinan Nature Company identified a total of 39 risk points, including 2 major risks, 10 large risks, 6 general risks, and 21 low risks. A total of 38 risk points were identified, including 2 major risks, 10 large risks, 6 general risks, and 20 low risks. A total of 292 annual risk management and control lists, 101 operational activities, and 191 equipment and facilities were reviewed annually by Zhongfeng Chemical Company; Mengxuan New Materials Co., Ltd. conducts an annual review of 193 current risk management and control lists, 57 operational activities, and 136 equipment and facilities.

Risk management and control process



In order to implement risk education and make it easier for employees to understand the concept of risk classification control and hidden danger investigation and management, so that they can apply this concept to various jobs in the future, large notices are also posted on the outdoor bulletin board in the factory area of Jinan Nature Company for visual management, so that colleagues can find information on the principles of risk control at any time.



All kinds of accident handling process:

1 > Spills, production incidents, near misses, and other incidents

The investigation team shall include the classroom supervisor, the classroom safety officer, the classroom process leader, the squad leader where the incident occurred and the relevant personnel on site, and the incident shall include the contractor site leader and the employees on site, and organize the accident investigation, analysis and report.

2 · Device events

The person in charge of the mechanical and electrical department shall organize the person in charge of the classroom where the equipment incident is located, the classroom safety officer, the squad leader where the incident occurred and the mechanical and electrical management personnel in charge of the area where the mechanical and electrical department is responsible, and the incident shall include the person in charge of the contractor site and the employees on the scene, and organize the investigation, analysis and report of the incident.

3 · Personal injury incidents and fire incidents

The inspection team is composed of the supervisor of the classroom where the incident occurred, the classroom safety officer, the person in charge of the classroom process, the squad leader where the incident occurred and the relevant personnel on the scene, the person in charge of the mechanical and electrical department and the area management personnel of the mechanical and electrical site, to jointly investigate, analyze and report the personal injury incident and the fire incident, if the incident involves the contractor, the person in charge of the contractor site and the employees on the scene.

4 \ Minor injury accidents

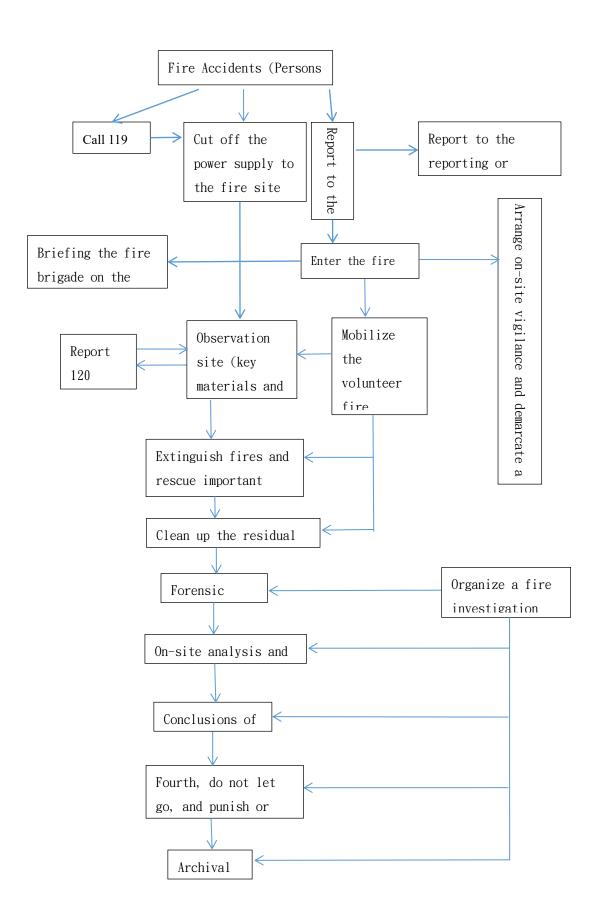
The Ministry of Safety shall organize the establishment of an investigation team, and the responsible classroom supervisor, the person in charge of the shift, the person in charge of the classroom where the accident occurred, the parties concerned, and the guardian shall form a temporary investigation team to be responsible for the investigation of the accident.

After the accident, the accident investigation adheres to the principle of four non-negligence:

- 1. The cause of the accident is not clear: with the help of relevant tools and methods, on the basis of finding out the direct causes of accidents and incidents, we should deeply analyze the management reasons and deep causes of accidents, and analyze the deep causes of accidents from the perspective of safety culture, so as to continuously improve the company's safety culture construction.
- 2. Corrective measures are not implemented: according to the analyzed reasons, formulate corresponding corrective measures, and supervise the implementation of the measures.
- 3. The responsible personnel will not be let go if they are not dealt with
- 4. Personnel are not allowed to be educated

At the end of each year, the Ministry of Safety is responsible for the statistical analysis of all accidents and incidents that occur in the current year, and counts all accidents and incidents that occur in the current year in accordance with the requirements of accident and event classification, analyzes the root causes of accidents, and formulates preventive measures to avoid the recurrence of accidents. In 2023, there were no major accidents in Jinan Nature Company, Asterk Company, Zhongfeng Chemical Company and Mengxuan New Materials Company, and no internal or external complaints or penalties for violating laws and regulations.

Fire Incident Investigation Process



Occupational safety and health education and training

The company attaches great importance to the establishment of safety culture, and diversified safety and health training courses, including new and in-service general safety and health education and training, hazard general training, fire training, emergency response drills, special license personnel training (hazardous chemicals management, safety officers, safety management personnel, first aid personnel, intermediate fire certificates, chemical automation control instrument operations, explosion-proof electrical operations, high-voltage electrical work, occupational health management personnel, high-altitude operations (installation, maintenance, and demolition operations at heights), refrigeration and air-conditioning operations, etc.) and health promotion courses; For contractors who are not employees of the company, hazard notification and safety advocacy are provided to ensure the safety awareness of all workers and reduce the occurrence of occupational injuries. If there is news about occupational accidents in related industries, in addition to the analysis of the cause by the special unit, similar risks and safety publicity will be carried out in the factory area. All education and training in the factory are provided free of charge, and training records and sign-in sheets will be properly kept in the designated unit.

Statistics of occupational safety and health training in 2023

Training programs	Total number of participants	Total training hours
In-house training	1,096	31,458
External training	62	2,288
Emergency response	514	304

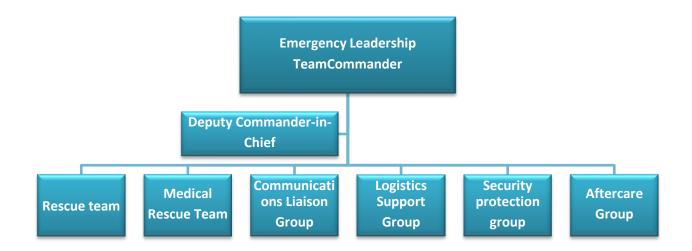
Emergency response process and organizational structure

Because the raw materials acetone and acetic anhydride used by the company are flammable liquids, they are key fire and explosion-proof units, and there is mainly a fire hazard. The production technology of cellulose diacetate and tow is advanced and mature, and most of the manufacturing process has been automated, with high safety and reliability, so the company's emergency response mechanism focuses on controlling and preventing the dangers that may occur after the accidental leakage of acetone, acetic anhydride and slurry.

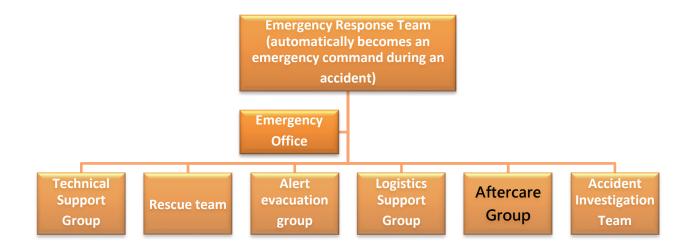
In order to deal with various emergencies, the company has specially formulated the "Safety Emergency Plan" and the "Emergency Plan for Environmental Emergencies"; Zhongfeng Chemical Co., Ltd. specially formulated the "Comprehensive Emergency Plan", "Special Emergency Plan for Fire and Leakage" and "On-site Disposal Plan", when there is a fire or leakage and other emergencies in the plant, according to the provisions of the emergency plan, the emergency team will be activated immediately, and the team members will shoulder their respective responsibilities according to the

division of labor in the daily emergency drill. Under the Company's good management system, there were no emergencies in 2023.

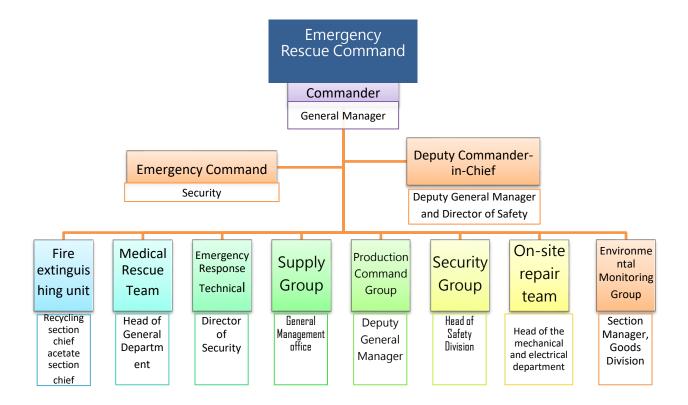
Emergency Response Organizational Structure - Jinan Acetate



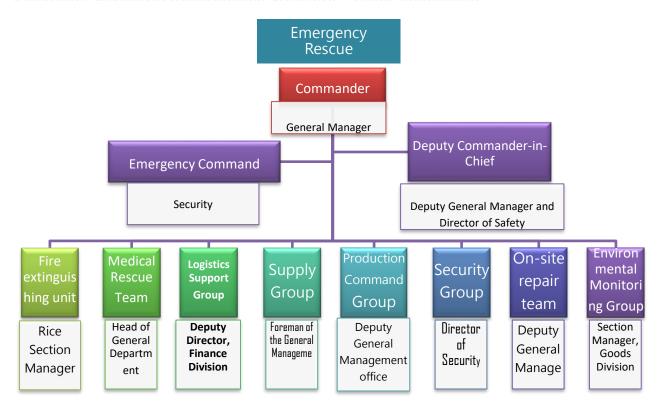
Emergency Response Organizational Structure - Acetek Environmental



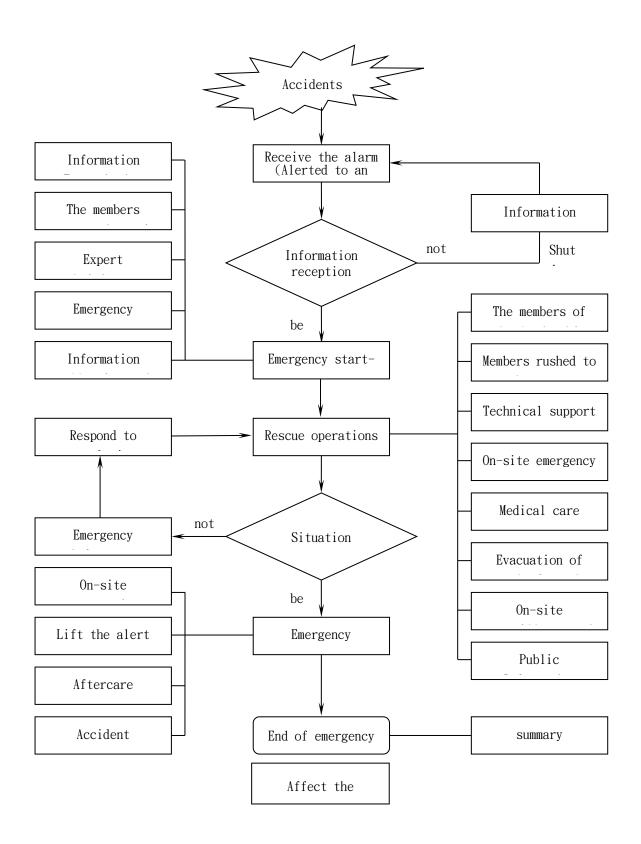
Emergency Response Organizational Structure - Acetek Material



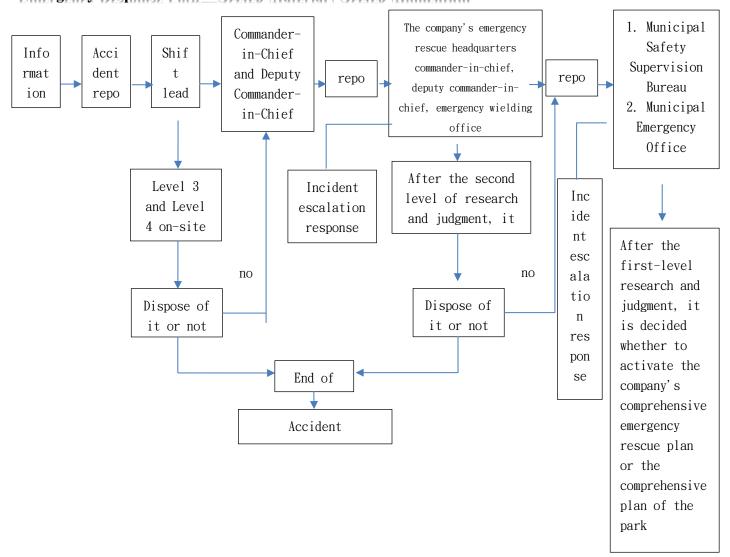
Emergency Response Organizational Structure - Acetek Momentum



Emergency Response Procedures - Jinan Acetate / Acetek Environmental



Emergency Response Flow—Acetek Material / Acetek Momentum



2023 Emergency Response Exercise - Jinan Acetate/Acetek Environmental

	Jinan Acetate Acetek Environmental			
Date of implementation	202	23/6/9		
Walkthrough projects	Fire pro	oject drills		
	and enhance their awareness of	f employees on the basic nd the use of fire extinguishers, f self-protection. For key s necessary to improve the ability		
Walkthrough content	The second secon			

	Jinan Acetate Acetek Environmental		
Date of implementation	2023/4/28		
Walkthrough projects	Flood control accident on-site disposal plan		

Walkthrough content	Description of the simulation condition: At about 14:00 p.m. on April 28, 2023, it rained heavily, and the rainwater drainage outlet was blocked for emergency repair operations, and at about 14:05, personnel B quickly responded to notify all departments after discovering it, and immediately placed the submersible pump at the rainwater discharge outlet Under the condition of ensuring safety, personnel C carried out power connection operations, and the rest of the personnel took sandbags to plug the leakage to prevent a large amount of rainwater from backing up. At around 14:20, all the preparations were completed and the drainage work began. The rescue was completed around 16:00. The job performers are as follows: 1. Personnel A gives a speech and precautions before the drill. 2. Person B places the submersible pump at the rainwater drain.
	2. Person B places the submersible pump at the rainwater drain.3. Personnel C conducts the submersible pump power connection operation.4. The rest of the personnel carry sandbags.

	Jinan Acetate Environmental		
Date of	2023/2/23		
implementation			
	1	`	
Walkthrough projects Walkthrough content	symptoms such as dizziness, headach process of replacing the filter cloth. 2. The leaders immediately contact departments (emergency repair and communication group, safety and se group) accident emergency rescue works. The emergency team immediately put the scene. Carried the poisoned person the drug substance workshop, and le transferring to the medical assistance. 4. The medical assistance team immediately put department of the medical assistance.	onnel A in the stock solution workshop of the first phase suddenly experienced the, and shortness of breath during the ed and coordinated with relevant rescue group, medical rescue group, curity group, security group, aftercare ork and reported the accident status. It on protective equipment and rushed to on A to the fresh air at the south gate of the person A rest against the wall before team. In the dialetter of the contact, inhalation, etc., and after the development of the person one until the medical staff arrived.	
	monitoring with a hand-held acetone meter to confirm whether the aceto concentration is at a safe concentration.		
	7. Provide relief materials needed for en	nergency relief in a timely manner.	

8. The emergency team personnel will check the accident area again to see if the acetone concentration is normal or whether there are other conditions, and after confirming that there are no hidden dangers, the alert will be lifted and the scene will be restored.

	Jinan Acetate	Environmental		
Date of implementation	2023/5/8			
Walkthrough	Emergency Response Plan for Fire	and Explosion Accident Project		
projects	(Acetone	Leak)		
	1. When the dope duty personnel inspects	ed the dope workshop on the first floor		
	of the first phase, they smelled the smel	ll of acetone gas, and found a small		
	amount of leakage in the acetone pipe v	valve during the on-site inspection.		
	After receiving the notification, the Min	nistry of Safety and Environmental		
	Protection immediately activated the en	nergency response plan, and the		
	emergency team immediately rushed to	the scene and notified other teams to		
	arrive at the scene. 2. After receiving the notice, the emergency team immediately put on protective			
	clothing and rushed to the scene to pull the cordon to prevent other personnel			
Walkthrough	from approaching. Use the nearest fire	hydrant (connected to the fire hose) to		
content	adsorb the leaking acetone with water to	o ensure that the wastewater flows into		
	the sewage pool and replace and tighter	n the leaking valve before Yang		
	Guang; The quality inspection departme	ent conducts on-site acetone		
	concentration monitoring with a hand-h	neld acetone meter to confirm whether		
	the acetone concentration is at a safe co	oncentration.		
	3. Confirm the physical condition of the	emergency repair personnel after the		
	completion of the emergency repair. The aftermath team makes records and deals with aftermath problems.			
	4. The emergency team will re-inspect the	e accident area and confirm that there		
	are no hidden dangers.			

2023 Emergency Response Exercise -Acetek Material/Acetek Momentum

	Acetek Material	Acetek Momentum	
Date of	2023/6/30	2023/6/27	
implementation Walkthrough projects	Solvent leakage project emergency drill	Emergency response plan for poisoning and choking items	
	The outlet pipe wall of the n-hexane	The pyrolysis gas pipeline on the first floor	
	storage tank was ruptured, which caused	of the 2# pyrolysis furnace rupture,	
	the solvent to leak and catch fire, and the	resulting in the leakage of pyrolysis gas,	
	inspection personnel were injured and	and the emergency disposal drill of	
	the on-site personnel were given	poisoning accident occurred during	
	emergency disposal drills.	personnel inspection.	
Walkthrough content	A BOARDERS.		

	Acetek Material	Acetek Momentum
Date of	2023/11/17	2023/12/27
implementation Walkthrough	Emergency drill for solvent leakage	Emergency drill for tank farm
projects	project	leakage project
Walkthrough	Acetic acid recovery rack dissolution	The root valve of the acetic anhydride storage tank was ruptured, and the acetic
content	leakage emergency disposal •	anhydride leaked out, causing the area to
		catch fire •
Photo		catch fire •

Contractor safety management

The company is committed to preventing disasters to ensure the safety and health of the company's employees, facilities, property and environment.

- 1 Business license, qualification category and level
- 2 · Work Safety License (Applicable to Construction, Hazardous Chemicals, Blasting Industry)
- 3 · Current rules and regulations
- 4. The safety production assessment certificate of the main person in charge, the person in charge of the project, and the safety management personnel and other personnel
- 5 The certification status of special operators and special equipment operators, and the training status of employees
- 6 · Safety performance, including construction experience, safety accident status files, safety hazard management files, etc
 - 7 · Work-related injury insurance, accident insurance, etc

Before entering the factory for construction, it is necessary to sign the external construction operation disclosure (construction details and related safety instructions), safety agreement, letter of commitment and training for external personnel (training photos, training test questions), and the contractor's occupational safety and health management will also be carried out during the construction period. When an accident occurs, the emergency response process will be initiated immediately according to the accident notification and investigation procedures, and the emergency response process will be dealt with quickly to prevent the accident from expanding and causing more serious harm.

Implementation of occupational safety and health management of contractors

item	Execute the project	Specifics
1	Safety training	 Before the safety department conducted safety precautions training for entering the factory After the training is completed, an on-site classroom safety officer will bring the construction unit to the construction site for pre-construction on-site training
2	Security checks	 Before construction, the person in charge of the relevant classroom and the safety officer shall inspect the safety equipment of the construction unit entering the factory, fill in the inspection form, and ensure that all the construction equipment are qualified and effective The person in charge of the relevant classroom shall supervise the safety of the contractor's construction site, and the safety officer of the safety department shall inspect the contractor's construction safety every day, and inform the contractor of the problems found in accordance with the establishment of supervision and inspection

		records for the contractor, and track the rectification process of the problem				
3	Access control management	After entering the factory training, the Ministry of Safety formulates the construction certificate of the construction personnel, and the construction personnel enter the factory with the certificate, and at the same time formulates the action route and temporary rest area of the construction personnel, and other areas are strictly prohibited from entering				
	Access					
4	control	Personnel entering the factory must enter the factory with a certificate				
	management					
5	Access control management	Personnel are registered and received into the factory by employees of the company				
6	Contractor management	Personnel entering the factory must be equipped with red vests				
7	Contractor management	Professional training for contractors before entering the factory for construction				
8	Contractor management	Contractors should enter and exit the factory area in a unified manner				
9	Contractor management	When entering the factory, you should put your mobile phone and smoke (fireworks) at the door				
10	Contractor management	Before entering the factory, the manufacturer needs to make an appointment and enter only after being approved by the organizer (The original written appointment will be changed to online appointment from 2024)				

2023 annual contractor on-site audit and spot check statistical table

Company type	Manufacturers	Missing categories	Number of missing items	Whether it has been improved
Jinan Acetate	A	Special operations - Hanging	1	be
Jinan Acetate	В	Company regulations - bring mobile	1	be
Jinan Acetate	C	Special operations - Hanging	1	be
Jinan Acetate	A	Special work - work at height without	1	be
Jinan Acetate	D	Uncivilized behavior	1	be
Acetek Environmental	E	Company regulations - bring mobile phones into the factory	1	be
Acetek Environmental	A	Special operations - high-altitude throwing without pulling the cordon	1	be
Acetek Environmental	F	Special work - work at height without wearing a seat belt	1	be
Acetek Environmental	G	Operation process - not according to the requirements of the freight elevator	1	be
Acetek Environmental	Н	Special operations - gas cylinders are not protected	1	be
Acetek Environmental	I	Special operations - high-altitude operations are not alerted	1	be
Acetek Environmental	J	Special Work - Work at Height Harness	1	be
Acetek Material K		Failed to participate in the construction progress meeting twice Illegal carrying of fireworks on site	2	be
Acetek Material	L	not	not	-
Acetek Material	M	Working at height without wearing a seat belt	1	be
Acetek Momentum	Acetek 1. The construction unit transports		2	be
Acetek Momentum	N not		not	-
Acetek Momentum O 1. The construction personnel play with mobile phones on site 2. On-site cigarette butts at the container of the construction unit 3. The construction personnel climbed over the two gates		3	be	

Statistical analysis of occupational hazards

According to the statistics and analysis data of employee occupational injuries and occupational diseases, the following table shows that in 2023, all employees did not have any deaths and occupational disease cases (including recordable occupational diseases) caused by occupational injuries, and the ratio of recordable occupational accidents in 2023 based on the total number of employees is 2.68%.

Statistical year		In 2023	In 2022	In 2021
Total hours elapsed		1,354,389	1,077,433	907,631
Fatal accidents caused by	Number	0	0	1
occupational injuries	ratio	0	0	1.10
Serious occupational	Number	0	0	0
injuries	ratio	0	0	0
Recordable occupational	Number	14	13	20
injuries	ratio	10.34	12.07	22.04
	Number	0	0	0
occupational disease	ratio	0	0	0
Recordable occupational	Number	0	0	0
diseases	ratio	0	0	0

Note 1: The rate is calculated based on every million hours worked.

Note 4: Occupational injury statistics only count injuries caused by accidents involving company cars, excluding personal traffic accident injuries caused by non-company vehicles.

Note 2: Serious occupational injury: An injury that results in death as a result of an occupational injury, or an injury that makes it impossible or difficult for a worker to return to his or her pre-injury health condition within six months, provided that the number of fatalities should be excluded from the statistics.

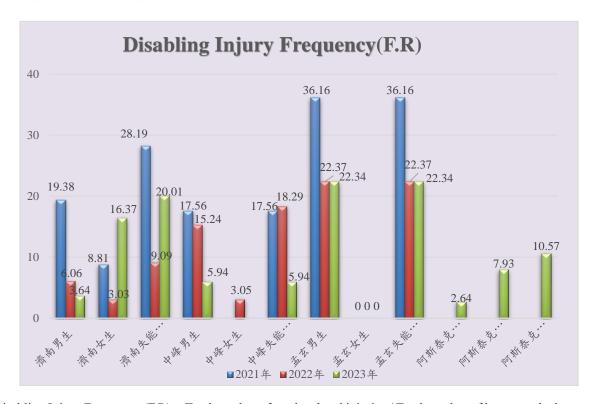
Note 3: Recordable Occupational Injury or Occupational Disease: An occupational injury or occupational disease resulting from any of the following, such as death, absence, work restriction or change of work, medical treatment beyond first aid, or loss of consciousness, or a significant injury or illness diagnosed by a physician or other licensed health care professional (even if it does not result in death, absence, restriction or change of work, medical treatment beyond first aid, or unconscious), but the statistics should include the number of deaths; Indicate whether minor injuries (work-related injuries resolved by on-site first aid) are excluded or included.

Recordable Occupational Injury Analysis Improvements in 2023

category	Number	Cause of occurrence	Eliminate hazards, take measures/actions	
Cuts	1	Accidentally got cut while taking	Hang the scissors on the wall and mark	
	-	scissors from a drawer	them with a safety tag	
fall	4	Slippery road surface leads to falls and injuries	The company is uniformly equipped with anti-smashing and anti-slip labor protection shoes	
Pinch wounds	1	The equipment is abnormal, and the equipment is accidentally pinched when pushing the equipment	The company completed the repair on the same day	
scald	2	 Accidentally burned by the chef while stir-frying; The black rubber tube that connects the pouring line falls off, causing hot acid to leak 	 Provision of insulated gloves; On-site rubber hoses, flanges, and valves are all inspected for leakage risks, and the fixing method is strengthened, risk analysis is carried out, and protective measures are formulated 	
Smashed	5	 The trachea hose is too long and poorly fixed leading to ejection; Replacing the pulley of the circulating fan is not carried out according to the procedure, resulting in the tool getting off and injuring the person; When lifting heavy objects, the backing plate falls down, resulting in employees being smashed; Items fell while clearing the passageway, causing injuries to employees 	 The electrical department of the instrument carries out fixed maintenance of the air source pipeline; Re-conduct safety education and training for personnel, preach the content of safety production and the safety matters that need to be paid attention to in the work of the day at the daily morning meeting, implement the safety production responsibility system for all employees, and develop good working habits; Heavier items shall be handled by electric ground cattle (forklifts) and shall not be carried manually; 	

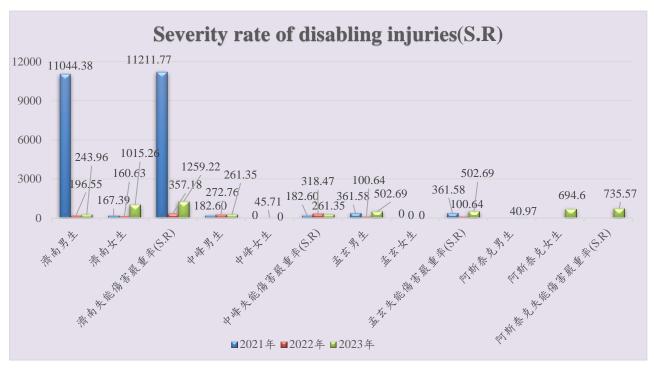
			Employees in this position are required to inform relevant personnel in advance when clearing the passage
sprain	1	When lifting heavy objects, the backing of the pad causes the	Heavier items shall be handled by electric ground cattle (forklifts) and
-F1	-	employee to sprain his leg	shall not be handled manually

Disabling Injury Frequency (F.R)



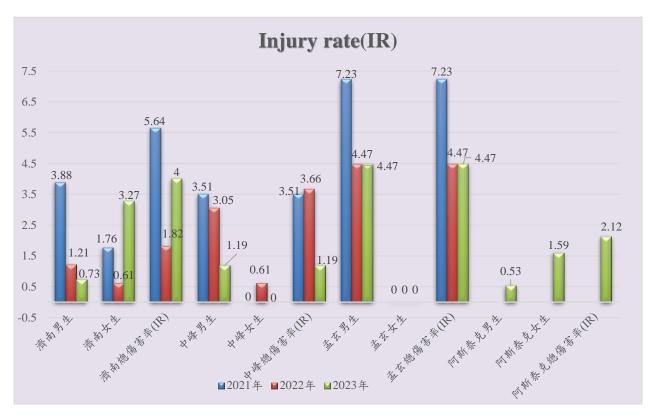
Note: Disabling Injury Frequency (F.R) = Total number of work-related injuries / Total number of hours worked \times 1,000,000.

Severity rate of disabling injuries(S.R)



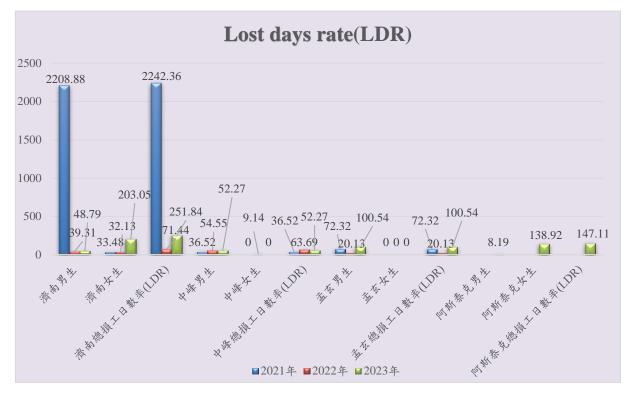
Note: Disabling Injury Severity Rate (S.R) = Total Days Lost / Total Hours Worked Experienced \times 1,000,000.

Injury rate(IR)



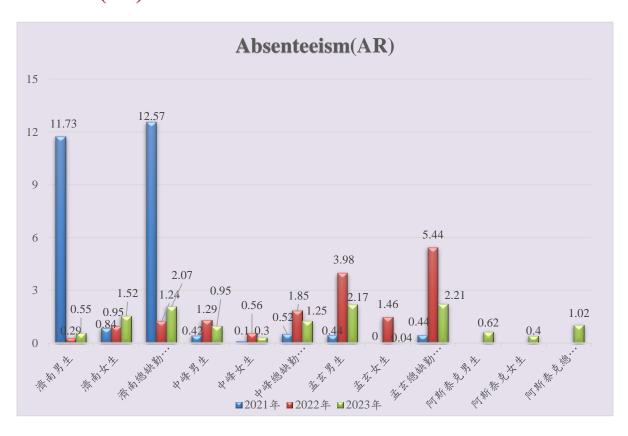
Note: Injury Rate (IR) = Total number of injuries / Total hours worked \times 200,000.

Lost days rate(LDR)



Note: Lost Days Rate (LDR) = Total Lost Days / Total Hours Worked Experienced × 200,000.

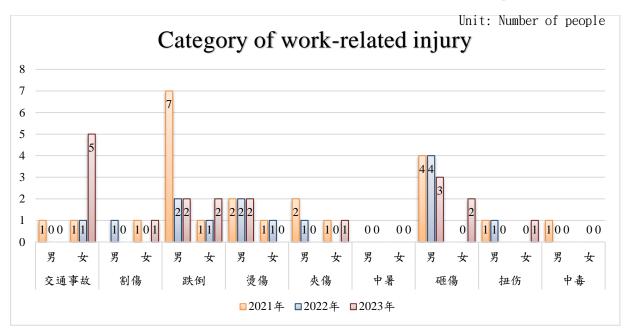
Absenteeism(AR)



Note 1: Absenteeism Rate (AR) = (Total Absence Days / Total Number of Days Worked) × 100%.

Note 2: Definition of absence, when an employee leaves his or her job due to incapacity. It includes sick leave (including work-related injuries and occupational diseases) and personal leave, excluding approved leave, maternity leave, paternity leave, bereavement leave, etc.

Statistics on the number of work-related injuries



Note: Jinan Acetate, Acetek Environmental, Acetek Material, and Acetek Momentum are combined.

Health check-up and health promotion

In accordance with the concept of labor workplace safety and health services advocated by the International Labor Organization (ILO) and the World Health Organization (WHO), the company regularly conducts occupational health examinations, and conducts occupational hazard tests for dust, chemical hazards, physical hazards and types of work. According to the inspection results, abnormal hierarchical management is carried out, and personal health guidance is provided to employees, and relevant health education and publicity are strengthened, re-inspection and tracking, and hazard factors are improved, so as to continuously manage the health of employees.

Implementation of the 2023 annual health check

Factory	Number of people who should be examined	The number of victims was measured (Occupational Health Checkup)	Track the situation	
Jinan Acetate	107	107	All 107 people participated in the occupational health examination: 73 people did not have abnormalities, 29 people had other obstacles, none of them involved occupational diseases, and 5 people with abnormalities had been re-examined. (Review result: 4 people qualified, 1 person transferred)	
Acetek Momentum	89	89	All 89 people participated in the occupational health examination: 66 people did not have abnormalities, 19 people suffered from other diseases, none of them involved occupational diseases, and 4 people with abnormalities have been re-examined. (Re-examination result: 4 people passed)	
Acetek Material	154	119	 119 people participated in occupational health examinations: 86 people who participated in occupational health examinations did not have abnormalities, and 33 people suffered from other diseases, none of which were involved in 	

			occupational diseases. • 35 people participated in the health examination: no occupational disease was affected.
Acetek Momentum	43	30	 30 people participated in the occupational health examination: 28 people did not have any abnormalities, 2 people were re-examined, and the re-examination results were qualified, and none of them involved occupational diseases. 13 people participated in the health examination: no occupational disease was affected.

Implementation of occupational hazard factor testing in 2023

Factory	Test items	Total inspection points	Detection of the type of work	Test results	
Jinan Acetate	10	166	10	There were 19 testing sites, and the test results all met the requirements of occupational exposure limits.	
Acetek Momentum	7	45	7	The test results were in line with the occupational exposure limits.	
Acetek Material	16	121	7	The noise exposure intensity of one type of acetate baling and grinding powder did not meet the requirements of the occupational exposure limit, and relevant improvements have been made in the future. In addition, all other tests meet the occupational exposure limits.	
Acetek Momentum	6	47	4	The test results were in line with the occupational exposure limits.	

Note: The test items include dust, chemical hazards, physical hazards, etc.

Health promotion and care for workers

The company's annual occupational health publicity week will carry out relevant education and publicity for employees, every year on Women's Day, Dragon Boat Festival, Mid-Autumn Festival, Spring Festival, Lantern Festival will be issued cash benefits to employees, personnel will count employees' birthday months and cash benefits, employees get married, family members die The company will give relative holidays and cash condolences benefits, the company will issue safety rewards to each employee every quarter in accordance with the safety system, and purchase heatstroke prevention and cooling supplies and heatstroke prevention and cooling drinks in summer, so that each employee can deeply feel the company's care. Relevant occupational safety-related announcements and employee health promotion promotions will also be published on the bulletin board from time to time. In 2023, in order to promote the physical and mental health of employees and express their work pressure, a two-day and one-night team building activity will be held, with a total of about 50~60 employees from Jinan Acetate Chemical and Acetek Environmental participating.







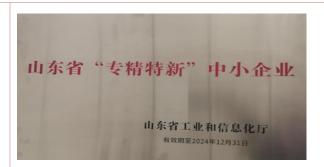
Qualifications

In 2015, Jinan Jinan Acetate Chemical Co., Ltd. obtained the third-level safety production standardization enterprise qualification issued by Jinan Safety Production Supervision and Administration Bureau, and passed the audit again in 2023; In 2021, it obtained the high-tech enterprise certificate; In 2022, it won the Shandong Province Specialized and New Small and Medium-sized Enterprise Award and the Shandong Gazelle Enterprise Award, the gazelle enterprise is a legal and compliant production and operation in Shandong Province, has crossed the entrepreneurial period, and has steadily entered a period of high growth with the support of new technologies, new formats and new models.

In 2021, Acetek Material Co., Ltd. won the Shandong Provincial Specialized and Special New Small and Medium-sized Enterprise Award, obtained the high-tech enterprise certificate, and won the 2020 Safety Production Standardization Demonstration Enterprise issued by the People's Government of Mushi Town, and the third-level safety production standardization enterprise qualification issued by the Acetek Material Emergency Management Bureau in 2019, all of which show that Jinan Acetate Group's efforts to attach importance to safety production have been affirmed. It is an important plus point to apply for high-tech enterprises and R&D expense subsidies and other related subsidies. In the future, the company will continue to maintain occupational safety and health, continue to innovate research and development and optimize manufacturing processes, and continue to move towards the goal of creating the greatest welfare for employees, shareholders and society •

Jinan Acetate	Acetek Material





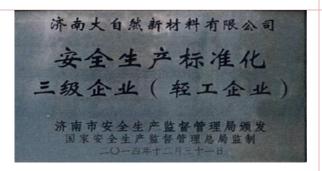






2020年度全镇经济社会发展考核
安全生产标准化示范企业
中共木石镇委员会 木石 二〇二一年六月

Note: : Jinan Acetate is the only awardwinning acetate related industry enterprise in Jinan • 本庄市醋酸纤维素 技术创新中心 中唯化学有限公司



Note: In 2019, Acetek Material obtained the third-level safety production standardization enterprise qualification issued by Acetek Material Emergency Management Bureau for a period of three years $^{\circ}$

4-4 Community relations maintenance

Major issues	Community relations maintenance	
Materiality Statement	Comply with local laws and regulations, prevent violations, maintain corporate reputation and image, and enhance community recognition of the	
Policies/Commitments	In order to protect the living environment of the community, the company formulates relevant management systems in accordance with the law, and internally trains employees to work according to safety operation specifications and strictly evaluate	
Short-term goals	Equipment related to environmental maintenance is continuously updated to reduce the impact of operational activities on the community	
Medium- and long-		
term goals	zero fines	
Resources and action	Conduct regular wastewater and exhaust gas monitoring to ensure compliance with standards	
Authority-in-		
charge/grievance	Public Works Department/12345 Public Hotline	
mechanism		
Performance In FY2023, we did not receive any complaints or penalties for violating		
Outcomes	and regulations	

The company's Acetek Materiall and Acetek Momentum factories are located in the industrial zone, and only Jinan Acetate and Acetek Environmental factories are adjacent to the residential area, internally trains employees to work according to safety operation specifications and strictly assesses, and entrusts external professional testing institutions to regularly monitor environmental hazards, including noise, organized and unorganized waste gas, wastewater, etc., which are monitored once a quarter. And according to the test report, according to the law, it will be truthfully announced on the company's website and the publicity board outside the factory area for community residents and the public to supervise.

In addition to the perfect system, the company has also invested resources in equipment renewal, replacing new recycling equipment and installing protective covers on production lines to reduce the hazards of exhaust gas. Sewage discharge is equipped with online monitoring equipment to monitor sewage discharge in real time and prevent wastewater discharge from exceeding the standard. In all respects, the impact of significant actual or potential negative conflicts on local communities is minimized.

If there are problems in the community, residents can also call the 12345 citizen hotline to

complain to the environmental authority, and the company has not received any complaints in 2023 and has not been punished for violating laws and regulations.

Factory management system

- Safe operating practices to avoid the leakage of chemical substances
- Emergency response mechanism training is conducted every year to avoid fires

Regularly supervised inspections

- Professional testing institutions regularly monitor environmental hazards
- •The test results are announced on the company's website and the publicity board outside the factory

Invest in improving equipment

- Replace the recycling equipment with new ones and install protective coverS
- Sewage discharge is equipped with online monitoring equipment

In order to assist the development of the local community, Acetek Material Co., Ltd. will sponsor 100,000 yuan of road repair for village-level collective economic organizations in Shandong Province in 2023, hoping to have a positive impact on the local community and practice corporate social responsibility.

Appendix 1: Sustainability Disclosure Indicators - Chemical Industry

numbering	index	Types of indicators	unit	The content of the report
One	Total Energy Consumption, Percentage of Purchased Electricity, Renewable Energy Utilization Rate and Total Voluntary Energy Consumption (Note 1)	quantify	Billion joules, Percentage (%)	3.5 Energy management The total energy consumption in FY2023 is 2,704,495.37 GJ, and the percentage of purchased electricity is 951%, renewable energy use rate 008%, the total amount of self-consumption energy is 2,273.93GJ
Two	Total water withdrawal, total water consumption, and discharge of waste (sewage) water as required by laws and regulations or voluntarily disclosed.	quantify	1,000 cubic meters (m³), Percentage (%)	3.2 Water resources management The total water intake is 1,059,931 m³ The total water consumption is 337,037 m³ 722,894 m³ of wastewater was discharged
Three	The total amount of hazardous waste produced during the production process of the product as required by laws and regulations or voluntarily disclosed and the percentage of recycling.	quantify	metric tons (t), Ratio (%)	3.3 Waste disposal and recycling In 2023, 559.02 tons of hazardous waste will be generated, mainly three-effect residues and contaminated waste, all of which will be cleaned up by qualified cleaning and transportation treatment manufacturers, and the recycling rate of hazardous business waste will be 0%.
Four	Describe the number and rate of occupational accidents	quantify	Ratio (%), quantity	4.3 Occupational health and safety

numbering	index	Types of indicators	unit	The content of the report
Five	Operations that have a significant actual or potential negative impact on the local community.	Qualitative narrative	not applicable	4.4 Community Relations Maintenance
Six	Specific and effective mechanisms and actions taken by the enterprise itself and its suppliers to reduce the negative impact on the environment or society.	Qualitative narrative	not applicable	2.4 Supply Partners
Seven	Product production by product category	quantify	Varies depending on the type of product	2.1 Company Profile2.3 Business Policiesand Performance

Note 1: The total amount of energy generated and self-consumed shall be defined in the Regulations on the Development of Renewable Energy, the Measures for the Implementation of Renewable Energy Certificates or relevant sub-laws.

Appendix II: GRI Standards Disclosure Comparison Table

★ for major topics

Notices of Use		·	Jinan Acetate Chemical Co., Ltd. has reported the content for the period from January 1, 2023 to December 31, 2023, in accordance with the GRI guidelines				
GRI 1 used		GRI 1: Foundation 2021	GRI 1: Foundation 2021				
GRI Industry used	Guideli	nes The company belongs to the chem industry guidelines	ical industry and does	s not yet l	nave GRI		
topic	Expose the project	Project Description	Project Description chapter		Reason for omission/ Necessary explanations		
		GRI 2: General Disclosi	ıre 2021				
	2-1	Organizational details	2.1 Company Profile				
Organizing	2-2	Entities included in organizational sustainability reporting	About this report:				
and reporting practices	2-3	Reporting period, frequency, and contact person	About this report:				
•	2-4	Information recompilation	About this report:				
	2-5	External assurance/assurance	About this report:				
	2-6	activities, value chains, and other business relationships	2.1 Company Profile 2.4 Supply Partners				
Activities & Workers	2-7	employee	4.1 Staff structure				
	2-8	Workers who are not employees	4.1 Staff structure				
	2-9	Governance structure and composition	2.2 Advanced management and integrity				
	2-10	Nomination and selection of the highest governance unit	2.2 Advanced management and integrity				
	2-11	Chairman of the highest governance unit	2.2 Advanced management and integrity				
govern	2-12	The role of the highest governance unit in overseeing impact management	2.2 Advanced management and integrity				
	2-13	Head of impact management	1.1 Sustainable development strategy				
	2-14	The role of the highest governance unit in perpetual reporting	1.1 Sustainable development strategy				
	2-15	conflict of interest	2.2 Advanced management and integrity				

	2-16	Communicate key milestones	2.2 Advanced management and integrity	
	2-17	The collective intellect of the highest governance unit	2.2 Advanced management and integrity	
	2-18	Performance evaluation of the highest governance unit	2.2 Advanced management and integrity	
	2-19	Remuneration Policy	2.2 Advanced management and integrity	
	2-20	Compensation Decision Process	2.2 Advanced management and integrity	
	2-21	Percentage of total annual compensation	_	Confidentiality Restrictions / Salary is the confidential domain of the Company and will not be disclosed
	2-22	A statement on the sustainability strategy	The words of the operator	
	2-23	Policy commitments	2.4. Supply partners	
	2-24	Incorporate policy commitments	2.4. Supply partners	
Strategies, Policies and	2-25	Procedures for remedying negative shocks	2.2 Advanced management and integrity 2.6 Compliance with Laws	
Practices	2-26	A mechanism for seeking advice and raising concerns	2.2 Advanced management and integrity 2.6 Compliance with Laws	
	2-27	compliance	2.6 Compliance with Laws	
	2-28	Membership in public associations	2.1 Company Profile	
Stakaholdoro	2-29	Stakeholders agree on the policy	1.2 Stakeholders agree 1.3 Identification of major issues	
Stakeholders agree	2-30	Group Agreements	_	Not applicable/The Company does not have a

				group agreement
				with its employees
		GRI 3: Material Them	es 2021	employees
	3-1	The process for deciding on material topics	1.2 Stakeholders agree 1.3 Identification of major issues	
Major topics	3-2	List of major topics	1.2 Stakeholders agree 1.3 Identification of major issues	
	3-3	Material topic management	2.6 Compliance with Laws	
		Economic aspec	t	
★ Economic perf	formance			
GRI 3: Material Themes 2021	3-3	Material topic management	2.3 Business Policies and Performance	
	201-1	The direct economic value generated and distributed by the organization	2.3 Business Policies and Performance	
GRI 201: Economic Performance	201-2	The financial impact of climate change and other risks and opportunities	3.7 Climate Change Risk Management and Response	
2016	201-3	Define benefit plan obligations and other retirement plans	4.2 Salary and benefits	
	201-4	Financial subsidy from the Government	2.3 Business Policies and Performance	
Procurement 1	Practice	es		
GRI 204: Procurement Practices 2016	204-1	Proportion of procurement spend from local suppliers	2.4 Supply Partners	
		Environmental Surf	aces	
★ Raw material r	managem	nent		
GRI 3: Material Themes 2021	3-3	Material topic management	3.4 Raw material and safety management	
GRI 301:	301-1	The weight or volume of the material used	3.4 Raw material and safety management	
Materials 2016	301-2	Renewable materials used	3.4 Raw material and safety management	
Management Guidelines	301-3	Recycling of products and their packaging materials	3.4 Raw material and safety management	
★ Energy manag	ement.			
GRI 3: Material	3-3	Material topic management	3.5 Energy management	

Themes 2021			
	302-1	Energy consumption within the organization	3.5 Energy management
GRI 302:	302-2	Energy consumption outside the organization	3.5 Energy management
Energy 2016 Management	302-3	Energy intensity	3.5 Energy management
Guidelines	302-4	Reduce energy consumption	3.5 Energy management
	302-5	Reduce the energy demand for products and services	3.5 Energy management
★ Water manage	ement		
GRI 3: Material Themes 2021	3-3	Material topic management	3.2 Water resources management
	303-1	Mutual impact of shared water resources	3.2 Water resources management
GRI 303: Water and	303-2	Management of drainage-related shocks	3.2 Water resources management
Effluent Water 2018	303-3	Water withdrawal	3.2 Water resources management
Management Guidelines	303-4	Displacement	3.2 Water resources management
Effluent Water 2018 Management Guidelines emission	303-5	Water consumption	3.2 Water resources management
emission			
	305-1	Direct (Scope 1) greenhouse gas emissions	3.6 Greenhouse gas management
GRI 305:	305-2	Indirect (Scope 2) greenhouse gas emissions from energy	3.6 Greenhouse gas management
Emissions 2016	305-3	Other indirect (Scope 3) greenhouse gas emissions	3.6 Greenhouse gas management
	305-4	Greenhouse gas emissions intensity	3.6 Greenhouse gas management
★ Castoff.			
GRI 3: Material Themes 2021	3-3	Material topic management	3.3 Waste disposal and recycling
	306-1	Waste generation has a significant impact on waste	3.3 Waste disposal and recycling
GRI 306: Waste 2020	306-2	Management of significant impacts related to waste	3.3 Waste disposal and recycling
Management Policy	306-3	Waste generation	3.3 Waste disposal and recycling
	306-4	Disposal and transfer of waste	3.3 Waste disposal and recycling

	306-5	Direct disposal of waste	3.3 Waste disposal and recycling
★ Supplier envire	onmenta	assessment	
GRI 3: Material Themes 2021	3-3	Material topic management	2.4 Supply Partners
GRI 308: Supplier	308-1	Use environmental criteria to screen new suppliers	2.4 Supply Partners
Environmental Assessment 2016	308-2	The negative impact of the supply chain on the environment, and the actions taken	2.4 Supply Partners
		Social aspect	
★ Employmen	t-emplo	yment relations	
GRI 3: Material Themes 2021	3-3	Material topic management	4.2 Salary and benefits
GRI 401:	401-1	New and former employees	4.1 Staff structure
Employment- Employment Relations	401-2	Benefits offered to full-time employees, excluding temporary or part-time employees	4.2 Salary and benefits
2016	401-3	Parental leave	4.2 Salary and benefits
★ Occupational	health an	d safety	
GRI 3: Material Themes 2021	3-3	Material topic management	4.3 Occupational health and safety
	403-1	Occupational health and safety management system	4.3 Occupational health and safety
	403-2	Hazard identification, risk assessment, and accident investigation	4.3 Occupational health and safety
	403-3	Occupational health services	4.3 Occupational health and safety
GRI 403: Occupational	403-4	Participation, consultation and communication with workers related to occupational safety and health	4.3 Occupational health and safety
Health and Safety 2018	403-5	Worker training on occupational safety and health	4.3 Occupational health and safety
Management Policy	403-6	Worker health promotion	4.3 Occupational health and safety
	403-7	Prevent and mitigate the impact of occupational health and safety directly related to business relationships	4.3 Occupational health and safety
	403-8	Workers covered by the Occupational Health and Safety Management System	4.3 Occupational health and safety
	403-9	Occupational injuries	4.3 Occupational health and safety

	403-10	occupational disease	4.3 Occupational health and safety
★ Local commun	nities		
GRI 3: Material Themes 2021	3-3	Material topic management	4.4 Community Relations Maintenance
GRI 413: Local	413-1	Operational activities through local community communication, impact assessment and development plan	4.4 Community Relations Maintenance
Communities 2016	413-2	Operations that have a significant actual or potential negative impact on the local community	4.4 Community Relations Maintenance
★ Supplier Socia	l Assessm	nent	
GRI 3: Material Themes 2021	3-3	Material topic management	2.4 Supply Partners
GRI 414: Supplier	414-1	New suppliers use social criteria screening	2.4 Supply Partners
Social Assessment 2016	414-2	Negative social shocks in the supply chain and actions taken	2.4 Supply Partners

Appendix III: Climate-related information of listed companies

The risks and opportunities caused by climate change to the company and the relevant countermeasures taken by the company

project	The company responds
1. Describe the Board of Directors and management's oversight and governance of climate-related risks and opportunities	 The governance of climate risks and opportunities and the annual sustainable risk management issues shall be reported by the general manager to the board of directors every year, and the board of directors shall supervise the implementation effectiveness. The general manager shall serve as the chairman of the climate risk and opportunity governance, and each level unit shall be in charge of risk identification, assessment and treatment. Elaborate on the supervision and governance methods of the above two points: Oversight Responsibilities of the Board of Directors Strategic Positioning for Climate Change: The Board considers climate-related risks and opportunities to be a core strategic issue for the Company's long-term development and considers them on the Board's agenda. Ensuring transparency: The Company regularly reports to investors and other stakeholders on the Company's climate change response measures, including risk management, carbon reduction progress, and resource allocation. Management's governance responsibilities Risk assessment and management process: Management has developed a robust process for identifying, assessing and responding to climate risks to ensure that all climate-related risks (including physical risks, transition risks, etc.) can be addressed in a timely manner. These processes should be integrated into the company's overall risk management framework. Set key performance indicators (KPIs): Management needs to establish, monitor and report on key performance indicators related to climate risks, such as reducing greenhouse gas emissions and improving energy efficiency. Therefore, we have formulated a plan for future greenhouse gas reduction. Opportunity exploration and innovation: In addition to risk response, management needs to actively explore business opportunities brought

for the effectiveness of climate change-related decisions.

4. Resource allocation and countermeasures

- Fund allocation and investment decisions: Companies should formulate relevant capital allocation plans for climate risks, and invest in carbon reduction technologies, environmental protection facilities, and climate-resilient infrastructure to ensure that companies can continue to respond to climate change challenges.
- **Supply chain risk management**: Climate-related risks should extend to the company's entire supply chain, including risk assessment and adjustment of raw material procurement, product transportation, warehousing and other links.

5. Response to external policies and regulations

- Compliance with global standards and regulations: The Board of Directors and management closely monitor changes in climate-related policies, regulations, and international standards, both domestically and internationally, and ensure that the Company's business operations comply with these requirements.
- **Flexibility to respond to policy changes**: Companies should have the ability to flexibly adjust their business models and operational strategies to ensure that they can respond quickly to climate-related regulations or policy changes, such as carbon pricing and emission limits.

6. Stakeholder engagement and communication

- **Investor Communications**: The Company will regularly disclose information on climate risks and opportunities to investors, and maintain transparency through annual reports, sustainability reports and thematic meetings.
- Social Responsibility and Cooperation: The company actively participates in industry cooperation and public policy discussions related to climate change, and maintains contact with governments, non-governmental organizations and academia to jointly promote industry climate action.

Through the above mechanism, the Board of Directors and management will be able to fully control the risks and opportunities brought about by climate change, ensuring that the Company can continue to remain competitive and promote sustainable development in the changing external environment.

When identifying the impact of climate risks and opportunities on the business, strategy and financial aspects of Jinan Natural Materials Stocks, we can analyze them from different perspectives in the short, medium and long term, covering the company's core business such as cellulose diacetate production, as well as related strategies and financial planning. Here's the detailed analytical framework:

1. Short-term effects

1.1 Climate risk

- At the business level: Extreme weather, such as heavy rain or heat waves, may affect the operations of the company's production sites. These disasters can lead to production disruptions, supply chain delays, and volatile raw material prices.
- **Strategically**: Companies need to make contingency adjustments to extreme weather events, such as setting up backup production facilities or strengthening supply chain resilience to ensure a stable supply of raw materials.
- **Financial:** Short-term climate disasters can increase production and transportation costs and affect profitability. In addition, companies may need to increase their investments in insurance and emergency funds to address sudden climate risks.

1.2 Climate opportunities

- **Business level**: With the increase in demand for sustainable and low-carbon products driven by environmental policies, the market demand for environmentally friendly materials such as cellulose diacetate is likely to grow rapidly, creating new sales opportunities for the company.
- Strategically: The company can further strengthen the R&D and marketing of environmentally friendly products, and increase investment in sustainable products to attract more attention from consumers and investors.
- **Financial**: As market demand increases, the company is expected to increase revenue, improve cash flow and improve margins in the near term.

2. Medium-term impact

2.1 Climate risk

- At the business level: Tighter environmental regulations will impact production costs, especially in areas such as emission limits, energy efficiency requirements and carbon pricing, and companies may face pressure from rising compliance costs. In addition, rising energy costs can have a direct impact on production costs.
- Strategically: Companies need to invest in green technologies and equipment to reduce carbon emissions and energy consumption. At the same time, work with suppliers to implement sustainable supply chain strategies to reduce the long-term impact of climate risks on production.
- Financial: In the medium term, these upgrades will drive up the company's capital expenditure, but will result in long-term cost savings through improved energy efficiency and reduced carbon emissions, as well as increase its attractiveness to environmental investors.

2.2 Climate opportunities

Business level: As the global decarbonization process accelerates, the demand for low-carbon materials and degradable products increases, especially in the cellulose-based materials sector, which allows companies to gain more market share.

2. Describe how the identified climate risks and opportunities impact the company's business, strategy and finances (short-term, medium-term, long-term)

- At the strategic level, companies can consider expanding production lines and focusing on the development of environmentally friendly material products and increasing market share to seize the opportunities brought by the low-carbon transition.
- **Financial level**: The company's environmental innovation and product expansion will likely bring stable revenue growth, attract more support from long-term environmental investment funds, and improve the company's capital structure.

3. Long-term effects

3.1 Climate risk

- At the business level: The structural impact of climate change on the global economy and market demand could change the competitive landscape in the industries in which companies operate. Stricter global decarbonization targets are likely to drive further technology and product upgrades, and companies may risk losing market share if they fail to keep pace.
- At the strategic level, companies should establish a long-term climate risk management framework, actively integrate into the global climate governance system, and promote the full transformation of products to low-carbon and renewable products to maintain competitiveness.
- **Finance**: In the longer term, companies will need to make significant investments in the energy transition, low-carbon technologies and sustainable supply chains, which can put pressure on capital needs and capital structure. However, a good response to long-term climate risks can strengthen a company's market position and enhance shareholder returns.

3.2 Climate opportunities

- At the business level: Global demand for renewable materials and environmentally friendly products will continue to grow over the long term, and the company can leverage its technological advantages to seize the market and become a leader in a low-carbon economy.
- At the strategic level, the company should be committed to R&D and innovation for a long time, promote the circular economy model, and actively participate in the formulation of industry standards to enhance its global influence.
- **Finance**: By achieving low-carbon transformation and technological innovation, the company will obtain a more stable source of income and higher market capitalization performance in the long run, and may attract more international capital in the field of sustainable development.

summary

In the face of climate risks and opportunities, Jinan Natural New Materials (Shares) should make corresponding business, strategic and financial adjustments for different time horizons. In the short term, companies should strengthen their preparedness to address climate risks while seizing market transition opportunities. In the medium term, we should invest more in green technologies and sustainable production, and drive business transformation. In the long term, a complete climate risk management framework should be established to maintain technological and product innovation to ensure that companies continue to grow and have a competitive advantage in a low-carbon economy.

		面向⇔	項目↩	對公司的財務衝擊↩	策略⊲				
			市場訊息不確定《	國內外經濟、金融情勢及法規變動可能影響公司收入、維運成本、匯率利率等,進而造成公司 損益及現金流量變化,包含:資本損失、資金缺口、信用風險等;財務面衝擊度中度。⊌	隨時掌握市場趣勢並評估市場變 化對本集團營運之影響				
3.	Describe the financial impact of extreme weather events and transition		轉型風險 -市場中 原物料成本上升← 原物料成本上升← 碳關稅陸續要求,增加公司營 成本;財務面衝擊度中度中		主要原物科維持二家以上之供應 商,以確保貨源之穩定性及自主				
	events and transition actions	機會一全資源效率	減少用水量和耗 水量~	水資源再利用可為企業帶來持續性的效益。濟南大自然將廢水匯集處理後,可用於工業製程及環境澆灌,以再生水供應系統作為替代性水源,除可以 <u>抵減耗水</u> 畫、降低營運成本,更可降低企業 <u>用水受豐枯水</u> 期及季節的影響、穩定企業運作。↩	1.→做好企業節水管理,做好用 水成本分析,降低單位產品 用水成本。 2.→積極推廣新工藝,調整工藝 條件,提高純水製備率,減 少廢水排出。 3.→加大節能重點工程建設,實 現污染物達標排放,進行清 潔生產審核工作。 4.→生產廢水處理達標排放,處 理能力達到生產產生廢水 理能力達到生產產定正常運 5.→符合政策,維持零 達規麥汙染罰單。				
		1		1					
4.	Describe how the process	In accordance with the	risk management po	olicy, the following measures are im	plemented				
	of identifying, assessing	• When the sustain	nability team assesse	s ESG risks, it also assesses climate	risks.				
	and managing climate risks	• The sustainabili	ty implementation g	group meeting discussed and resol	ved major ESG risks and climate	e risks, which were			
	is integrated into the	approved by the	general manager.						
	overall risk management	Set implementation	ion strategic targets l	pased on approved ESG risks and cl	imate risks.				
	system	• Report annually	to the Board of Dire	ctors on the implementation of ESG	risks and climate risks.				
5.	If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and key financial impacts used should be described.	Scenario analysis	Report annually to the Board of Directors on the implementation of ESG risks and climate risks. Scenario analysis has not been used to assess resilience to climate change risks.						

	project	Respond to strategies and objectives				
6. If there is a transition plate to address and managorilimate-related risks describe the content of the	Transition risk - rising cost of raw materials	 The execution of all businesses is handled in accordance with important domestic and foreign policies and laws and regulations Pay attention to important policy development trends and legal changes at home and abroad in a timely manner, so as to take appropriate measures and countermeasures in a timely manner in response to changes in the market environment Pay attention to the fluctuation of raw material market prices at any time, and maintain a good relationship with suppliers The quotation of customers is appropriately adjusted according to market conditions to reduce the impact of cost changes on the company's profit and loss Continuously monitor the regulatory requirements of carbon tariffs in various countries 				
plan, and the metrics and targets used to identify and manage physical and transition risks.	Opportunity - Reduction of water consumption and consumption	 Through supplier ESG assessment, we seek competitive low-carbon suppliers Set water intensity targets: The Group's total water intensity per unit of annual turnover was 213.7334 in 2022 and 96.1332 in 2023. In 2023, the overall water use intensity will decrease by 55.02% compared with 2022. The unit water consumption per unit product of acetate products in 2023 will be 12.92m³/t; In 2024, the unit consumption of water per unit of product is planned to be 12.60m³/t Technological transformation of three-effect evaporation treatment equipment to improve the treatment capacity of concentrated water Technical transformation of mother liquor drying and low-temperature evaporation equipment Renovation of the closed shed cover of the sewage treatment station 100% of the discharge water quality inspection meets the emission standards required by laws and regulations, and there are 0 pollution fines per year 				
7. If internal carbon pricing i used as a planning tool, the basis for price setting should be stated.	Internal carbon pricing has not yet					

8.	If climate-related targets	Emission reduction targets	Strategic action
	are set, information such as the activities covered, the scope of greenhouse gas emissions, the planning timeline, and the progress made in achieving them each year should be stated. If carbon offsets or renewable energy certificates (RECs) are used to achieve the relevant targets, the source and quantity of carbon reduction credits or renewable energy certificates (RECs) to be exchanged should be stated.	 3. Reduce Scope 1+2 greenhouse gas emissions by 30% and Scope 3 by 20% by FY2050 4. After FY2050, carbon neutrality will achieve the goal of net-zero carbon emissions 	 Installation of solar photovoltaic panels at each plant to increase solar energy self-consumption (2023-2030) Purchase of Electric Vehicles for Official Vehicles and Installation of Electric Vehicle Piles by Factories (2023-2030) Phased replacement of energy-saving efficiency Level 1 products in refrigeration and air-conditioning systems through green procurement, purchase of eco-labelled infrastructure equipment (2023-2030) Strengthen high-temperature vapor recovery and utilization to reduce energy use (2023-2030) Energy-saving projects for facilities and equipment at each plant and renewal of energy-consuming equipment (2030-2040) Purchase renewable energy certificates on the renewable energy trading platform to meet emission reduction targets (2040-2050) Afforestation, purchasing forest land and planting trees in Xinjiang across the country to achieve carbon neutrality and netzero carbon emissions (after 2050)
9.	Greenhouse Gas Inventory and Assurance and Reduction Targets, Strategies and Specific Action Plans (Fill in 1-1) and (1-2) separately.	As shown in the table below	

1-1 Greenhouse gas inventory information

Describe the greenhouse gas emissions (metric tons_{CO2e}), intensity (metric tons CO2e/million yuan), data coverage and confidence of greenhouse

gases in the most recent two years.

category		2023		2022	Confirmation Institution and Confirmation Statement (Verification Certificate)
Scope 1	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	
Jinan Nature Company, Asterk Company, Zhongfeng Chemical Company, Mengxuan New	59,770.43	5.4210	59,300.13	13.8896	
Scope 2	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	As in Appendix IV
Jinan Nature Company, Asterk Company, Zhongfeng Chemical Company,	50,227.63	4.5555	37,778.04	8.8486	
Scope 3	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	Total emissions (metric tons CO2e)	Intensity (metric tons CO2e/million RMB)	
parent company	-		-		

Note: The revenue in 2023 is 11,025.642 million, and the revenue in 2022 is 4,269.391 million.

1-2 Greenhouse gas reduction targets, strategies and specific action plans

Describe the base year of greenhouse gas reduction and its data, reduction targets, strategies, specific action plans and the achievement of reduction targets.

Emission reduction targets		Strategic action	Plan your schedule
Compared to the base year of 2023	1、	Installation of solar photovoltaic panels at each plant to increase solar	1. In 2024-2030, achieve emission
1 · Reduce Scope 1+2 greenhouse gas emissions by		energy self-consumption (2023-2030)	reduction target 1
15% and Scope 3 by 5% by FY2030	2、	Purchase of Electric Vehicles for Official Vehicles and Installation of	2. In 2030-2040, achieve emission
2 Reduce Scope 1+2 greenhouse gas emissions by		Electric Vehicle Piles by Factories (2023-2030)	reduction target 2
25% and Scope 3 by 10% by FY2040	3、	Phased replacement of energy-saving efficiency Level 1 products in	3. From 2040 to 2050, achieve the
3 Reduce Scope 1+2 greenhouse gas emissions by		refrigeration and air-conditioning systems through green	emission reduction target 3
30% and Scope 3 by 20% by FY2050		procurement, purchase of eco-labelled infrastructure equipment	4. After FY2050, we will achieve the
4 · After FY2050, carbon neutrality will achieve the		(2023-2030)	emission reduction target 4
goal of net-zero carbon emissions	4、	Strengthen high-temperature vapor recovery and utilization to reduce	
		energy use (2023-2030)	
	5、	Energy-saving projects for facilities and equipment at each plant and	
		renewal of energy-consuming equipment (2030-2040)	
	6、	Purchase renewable energy certificates on the renewable energy	
		trading platform to meet emission reduction targets (2040-2050)	
	7、	Afforestation, purchasing forest land and planting trees in Xinjiang	
		across the country to achieve carbon neutrality and net-zero carbon	
		emissions (after 2050)	
The Company uses 2023 as the base year and exp	pects	to disclose the status of achievement from the 2024 annual r	eport.

Appendix IV: Accountants' Limited Assuran



會計師有限確信報告

濟南大自然新材料股份有限公司 公鑒:

濟南大自然新材料股份有限公司民國 112 年永續報告書,業經本會計師針 對濟南大自然新材料股份有限公司所揭露之績效指標執行確信程序竣事,並出 具有限確信報告。

確信標的資訊與適用基準

濟南大自然新材料股份有限公司所揭露之績效指標(以下簡稱「標的資訊」) 與適用基準,請詳附件一「確信項目彙總表」。

管理階層之責任

管理階層之責任係依照臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」及全球永續性報告協會(Global Reporting Initiative, GRI)發布之通用準則及主題準則編製標的資訊,且維持與標的資訊編製有關之必要內部控制,以確保標的資訊未存有導因於舞弊或錯誤之重大不實表達。

會計師之責任

本會計師之責任係依照確信準則 3000 號「非屬歷史性財務資訊查核或核閱之確信案件」規劃及執行有限確信案件,基於所執行之程序與所獲取之證據,對標的資訊(詳附件一)是否未存有重大不實表達取得有限確信,並出具有限確信報告。相較於合理確信案件,有限確信案件所執行程序之性質及時間不同,其範圍亦較小,故於有限確信案件所取得之確信程度亦明顯低於合理確信案件中取得者。

本會計師係基於專業判斷規劃及執行確信程序,以獲取相關標的資訊之有 限確信證據,且任何內部控制均受有先天限制,因此未必能查出所有業已存在之 重大不實表達。本會計師執行確信程序包括:

 對參與編製標的資訊之管理階層及相關人員進行查詢,以瞭解編製標的資訊 之政策、流程、內部控制及資訊系統,以辨認可能存有重大不實表達之領域;

- 1 -

② 台南所/ 70848 台南市安平區永華路二段248號16樓之3
② 高雄所/ 80284 高雄市苓雅區建國一路109號9樓之3

傳承/堅定/當責

Legendary & Steadfast Accountancy

2. 對標的資訊選取樣本進行檢查、驗算、重新執行、觀察及分析性程序等程序, 以取得有限確信之證據。

先天限制

由於諸多確信項目係屬非財務資訊,相較於財務資訊之確信受有更多先天 限制,故該等資訊之相關性、重大性與正確性之解釋可能涉及更多管理階層之重 大判斷、假設與解釋,不同利害關係人對該等資訊亦可能有不同之解讀。

獨立性及品質管理規範

本會計師及所隸屬會計師事務所已遵循會計師職業道德規範中有關獨立性 及其他道德規範之規定,該規範之基本原則為正直、公正客觀、專業能力及專業 上應有之注意、保密及專業行為。

本會計師所隸屬會計師事務所適用品質管理準則 1 號「會計師事務所之品質管理」,該品質管理準則規定會計師事務所設計、付諸實行及執行品質管理制度,包含與遵循職業道德規範、專業準則及所適用法令有關之政策或程序。

確信結論

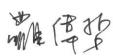
依據所執行之程序與所獲取之證據,本會計師並未發現標的資訊在所有重 大方面有未依照適用基準編製而須作修正之情事。

其他事項

本確信報告出具後,濟南大自然新材料股份有限公司對任何確信標的資訊或適用基準之變更,本會計師將不負就該等資訊重新執行確信工作之責任。

秉承聯合會計師事務所

會計師 羅 偉 哲





中 華 民 國 113 年 8 月 23 日

確信項目彙總表

編	標 的	資 訴	#1.	क्षे	章	\$5	適	用	基	進
號	徐 时	資 新	. 到	765	平	Klı	7.60	л		-1-
1.	材料 KY	2023 年] 3.5	5 能	源管	理		,,,	易所「上	
	消耗能源總量	2,704,495.37 十億焦耳						.,.,,	申報永續	
	外購電力百分比	9.51%					,		去」第4	
	再生能源使用率	0.08%					''		-之二編 原總量、	
	自發自用能源總量	2,273.93 十億焦耳					.,		r心里 L、再生	
									自發自用	
							源總量	,		
2.	材料 KY	2023 年	3.2	2 水	資源	東管	臺灣證	券交	易所「上	_市
	總取水量	1,059,931 千立方公尺	理				公司編	製與	申報永續	輯報
	總耗水量	337,037 千立方公尺						.,	去」第4	
	依法規要求或自願	722,894 千立方公尺					'' '	一之二編		
	揭露之廢(污)水排						二:總取水量、總耗量、依法規要求或自			
	放量								要承或自 亏)水排	
	and the second second	and to the street and an at more the total					一個路之	- / 彼 ()	7 7 7 4	FAX
3.	註:報告書中水資源相關內容使用單位為百萬公			2 成	棄生	仙佬		. 半 六	易所「上	· 古
٥.	材料 KY	2023 年		り 穴	,	7 处			刃/川 ユ 申報永縛	
	有害廢棄物總量	559.02 公噸	"	- > -	712		• • •		- TR. 76.79 去 - 第 4	
	回收百分比	0%	Ш						一之二絲	
							三:依	法規	要求或自	願
							揭露之	產品	生產過程	星所
							製造之	有害	廢棄物絲	息量
			\perp				及回收			
4.	材料 KY	2023 年] 4.	3 聪	浅紫白	建康	1		易所「上	
	職業災害人數	14 人	與	安全	Ē			,-,	申報永續	
	比率 2.68% 告書作業辦 第一項附表									
	23	the III when a shall she who had to the -	-						一之二 業災害人	
		ξ災害人數/年度總員工人 μ μ μ μ μ μ μ μ μ μ μ μ μ μ μ					及比率		未火舌人	、数
	教;小数點第三位無條	件指去					及几年			

(接次頁)

(承前頁)

編	標的	資言	凡堂	计 應	章	節	適	用	基	準
號										
5.	材料 KY 針對營運活動地點	, 包含了濟南大自然	4	.4 社	上區員	關係	臺灣	證券交	易所「」	上市
	司、中峰化學公司、孟玄新村	料公司與阿斯泰克公	月角	隹護			公司	編製與	申報永紹	賣報
	等子公司工廠進行環境評估	與監控,投入資源設何	睛				告書	作業辦法	去」第4	1條
	减少環境上的危害,減少對	當地社區產生顯著實際	*				第一	項附表-	一之二為	烏號
	或潛在負面衝突之影響。20	支				五:	對當地社	土區具有	首顯	
	違反法令遭受處罰的情形。					著實	際或潛	在負面往	哲擊	
	CARCON CONTRACTOR						之營	運活動		
6.	1. 新供應商篩選機制一採取	環境及社會標準:	2	.4 供	應夥	伴	臺灣	證券交	易所「_	上市
	(1)需具有營業執照及相關	背 許可證明。					公司	編製與	申報永紹	賣報
	(2)生產用原物料提供樣品	品採小批量試用合格後	•				告書	作業辦法	去」第一	1條
	(3)與本公司往來在價格	8				第一	項附表-	一之二統	烏號	
	定並能及時供貨。					六:	企業本	身及其任	共應	
	(4)具有 ISO9001、ISO14	001 之認證者為優先。					商為	降低對理	環境或社	土會
	2. 既有供應商管理機制:						之負	面衝擊戶	听採取二	と具
	(1)避免與違反企業社會方	首任政策的供應商交易	,				體、	有效機能	制及作為	為
	一旦發現即停止合作並	.列為拒絕對象。								
	(2)評估供應商的產品質量	查、價格、交貨期和售額	夋							
	服務,確保符合公司規	範,不合格者將終止	\$							
	作。					14				
7.	材料 KY	2023 年		.1 公				證券交		
	二醋酸纖維絲束 33,634 公噸 二醋酸纖維素 34,966 公噸				2.3 經營政策 與績效			編製與	9 100000	
								作業辦法	-	
	醋新	64,922 公頓					00000	項附表-		
							15562	依產品	頤別之)	圣品
							產量			

註:上表簡稱「材料 KY」係指濟南大自然新材料股份有限公司確信範圍,包含台灣辦事處及 四家海外子公司:濟南大自然新材料有限公司、中峰化學有限公司、孟玄新材料有限公司及 阿斯泰克(山東)環保纖維有限公司。