

— 愛 護 地 球 • 保 護 森 綾 —  
Love the Earth, Protect forests

Jinan Acetate Chemical Co., Ltd.

DECEMBER 2025



Acetek Group

# AGENDA

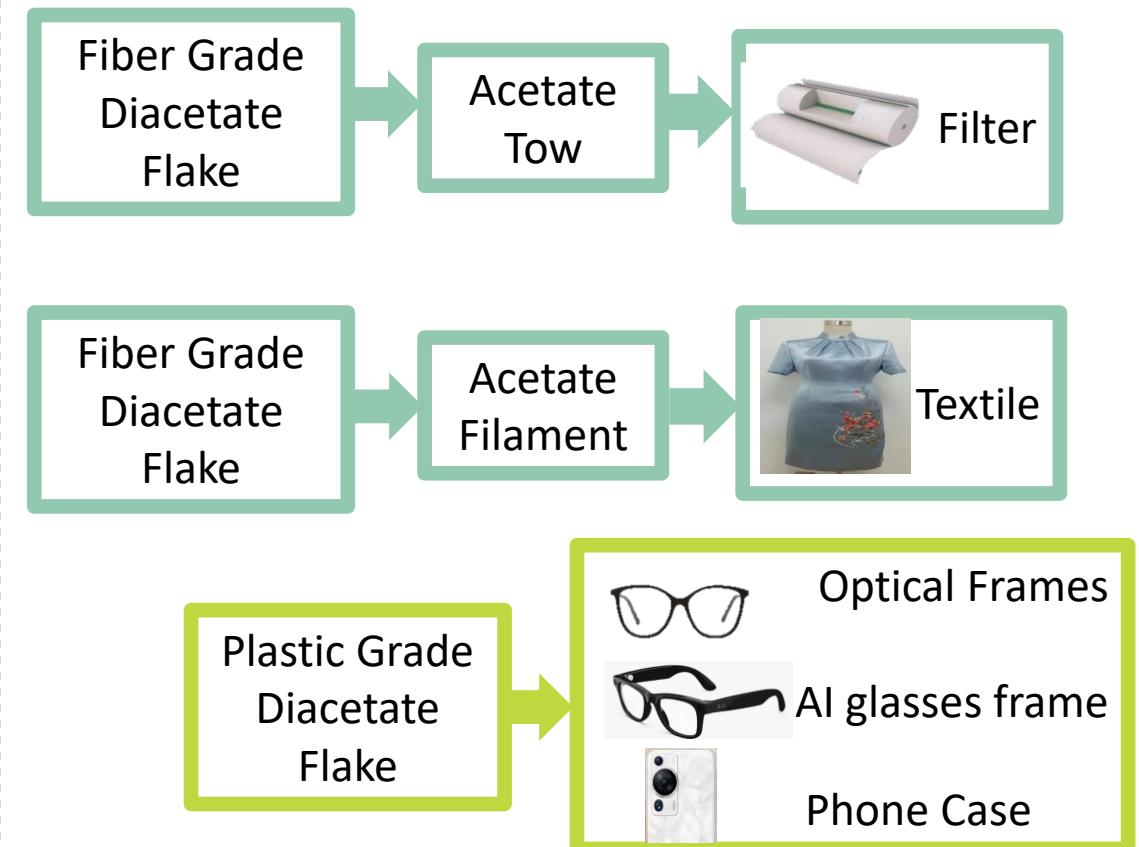
1. Introduction

2. ESG/  
Sustainable Environment

3. Outlook

- **Ticker:** 4763 TT
- **Revenue of January to November 2025:**  
NT\$12,057mn
- **Cash Dividend for 2024:** NT\$47.58
- **ROE:** Averaged 48% in 2020 through 2024
- **Business Scope:** Exports to more than 60 countries

## Products - Applications



# Jinan Acetate Chemical @ a Glance

Jinan Acetate(Plant1)



Jinan Acetate(Plant2)



- Jinan, Shandong
- Acetate Tow Production
- Employees: 275

Acetek Environmental



- Jinan, Shandong
- Acetate Tow Production
- Employees: 149

Acetek Material



- Zaozung, Shandong
- Acetate Flake Production
- Employees: 145

Acetek Momentum



- Zaozung, Shandong
- Cellulose Anhydride
- Employees: 60

Acetek Aspiration



- Dezhou, Shandong
- Acetate Flake & Cellulose Anhydride
- Employees: 143

# Jinan Acetate Chemical @ a Glance

Career Layout	Establish vertically integrated production operations that are consistent with upstream and downstream operations to ensure stable material sources and cost advantages, and fully connect R&D capabilities
Factory Certification	Won the Green Factory Award from the Jinan Municipal Bureau of Industry and Information Technology, showing that efforts in environmental sustainability have been recognized
Product Features	Bio-based raw materials, biodegradable, have lower carbon emissions and more sustainable properties compared to traditional petrochemical raw materials
Sustainable Honor	Listed as one of the "Top 100 Low-Carbon Enterprises in China", continuing to implement and strengthen the commitment and practice of environmental sustainability
Business performance	Won the first place in the best operating performance in CommonWealth Magazine's "2,000 Survey" for two consecutive years in 2023 and 2024
Foreign investors recognize	Listed among the top 100 Taiwanese companies selected by foreign investors, a company recognized as an excellent and reputable enterprise by international legal entities.
Customer Structure	The main customers are the four major international tobacco groups (PMI, BAT, JTI, Imperial), with long-term and stable cooperation
R&D Technology	Continue to develop biodegradable products, including AI glasses materials, hydroxyethyl cellulose (HEC), methyl cellulose (MC), etc.

# ESG- Carbon Footprint Certification (GHG Inventories Report)

- An independent third party conducted the first on-site carbon footprint inspection at four factories in Jinan and Tengzhou in June this year and issued a confirmed report in August.
- The total emissions from the Group's four substantially operating plants amounted to 225,102 tons.
- **Conclusion:** Based on on-site assessments conducted by a third party, our company's annual greenhouse gas emission intensity is estimated at 14.33, a decrease of 15.90% compared to the same period last year.

	Category 1 Direct GHG Emissions	Category 2 Energy Indirect GHG Emissions	Category 3 Transportation Indirect GHG Emissions	Category 4 Organizing the use of the product Indirect GHG Emissions	Total GHG Emissions
Emissions(mt CO <sub>2</sub> e/year)	83,129	59,293	82,680	81,000	225,102
Gas proportion (%)	36.93%	26.34%	36.73%	40.90%	100.00%

# ESG- Sustainable Environment

## ✓ Environmental management

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Our company has implemented the ISO 14001 Environmental Management System and obtained third-party verification from Shanghai Engel Certification Co., Ltd. in 2018, demonstrating our unwavering commitment to environmental management. Wastewater treatment costs, environmental fees, and costs for new or upgraded environmental facilities constitute the largest portion of our environmental expenditures, accounting for approximately 87.16%. Environmental expenditures in 2024 increased by 40.91% compared to 2023, primarily due to the expansion of our operations, and also reflecting our company's emphasis on environmental management.

## ✓ Water Resources and Wastewater Treatment

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In 2024, the company's overall water intensity decreased by approximately 16.43% compared to 2023. The amount of recycled water in 2024 reached 498,616 tons, accounting for 39.50% of the total annual water consumption. The proportion of recycled water in the company's total water consumption remained stable at nearly 40%. The area where the company's plant is located is not an ecological conservation area, and all water sources are supplied by the water company. Therefore, there are no concerns about the impact on the water quality and water resource protection of local nature reserves. Regarding wastewater discharge, all wastewater generated from daily production and domestic activities is collected and treated at the on-site wastewater treatment facility. Wastewater discharge is ensured to meet the relevant standards of the local environmental protection department before being released. No incidents of exceeding standards occurred in 2024, and this control measure was continued.

## ✓ Raw material management/recycling

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Instructions for the recovery of acetic acid by Acetek Material : 30% dilute acid is produced in the production process of the finished product line of acetate, which is fed into the acetic acid recovery system. After filtration, extraction and rectification, 99.5% acetic acid is obtained into the storage tank, and enters the cellulose acetate as a raw material. The production line is reused to reduce material consumption. Revenue in 2024 increased by 42.52% compared to 2023; however, energy intensity in 2024 decreased by approximately 19.94% compared to 2023.

# Sustainable & Biodegradable



# Walking with the Sustainers

**DIN CERTCO**  
Gesellschaft für Konformitätsbewertung mbH

## NOTIFICATION OF REGISTRATION

**Holder**

JINAN ACETATE CHEMICAL CO., LTD  
Room 409, Unit 2, Building 7  
Shangang Xintiandi  
No.61 Gongye South Road, Lixia District  
Jinan City  
250101 SHANDONG  
CHINA

**Product** Compostable intermediates

**Type, Model** Diacetate

**Testing basis** DIN EN 13432:2000-12  
ASTM D 6400:2019-01  
Certification scheme products made of compostable materials (2020-01)

**Mark of conformity**

kompostierbar

**Registration No.** 7H0157

**Valid until** 2027-04-30

**Right of use** With this notification of registration the holder is granted the special entitlement for advertising purposes according to §8 (5) of the Regulation governing Use of the Mark and the Trademark Usage Guidelines for the mark of conformity shown above in conjunction with the specified registration number.

See annex for further information.

2021-04-01  
Dipl.-Phys. Carlo Seiser  
Head of Certification Body

DIN CERTCO Gesellschaft für Konformitätsbewertung mbH - Albinstraße 56 - D-12103 Berlin - [www.dincertco.de](http://www.dincertco.de)

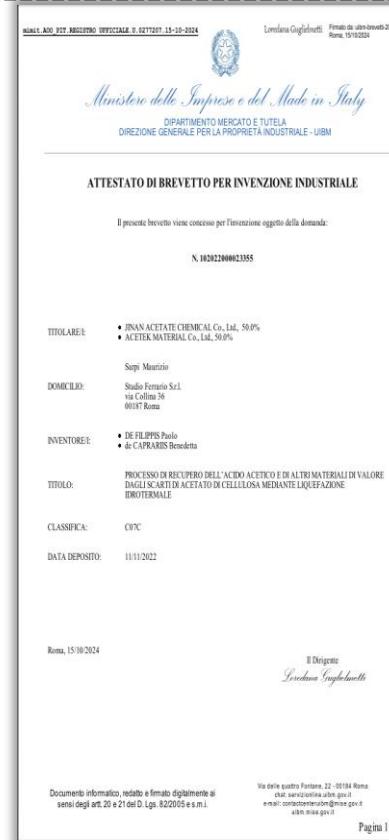
# Tobacco tow is biodegradable



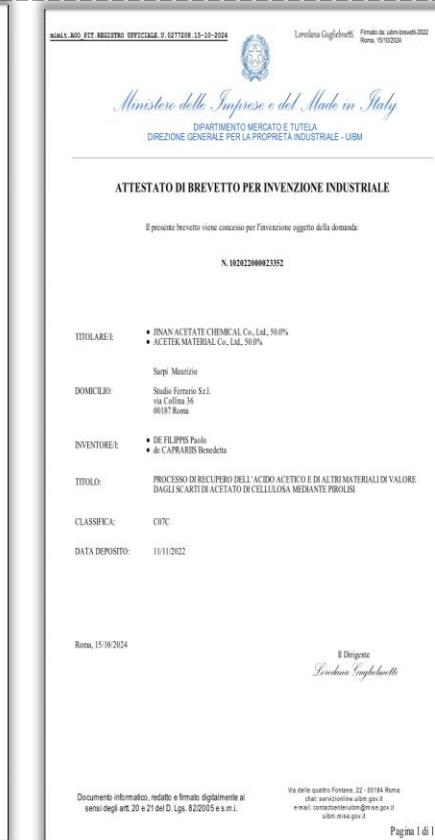
# Sustainable & Biodegradable



Walking with the Sustainers

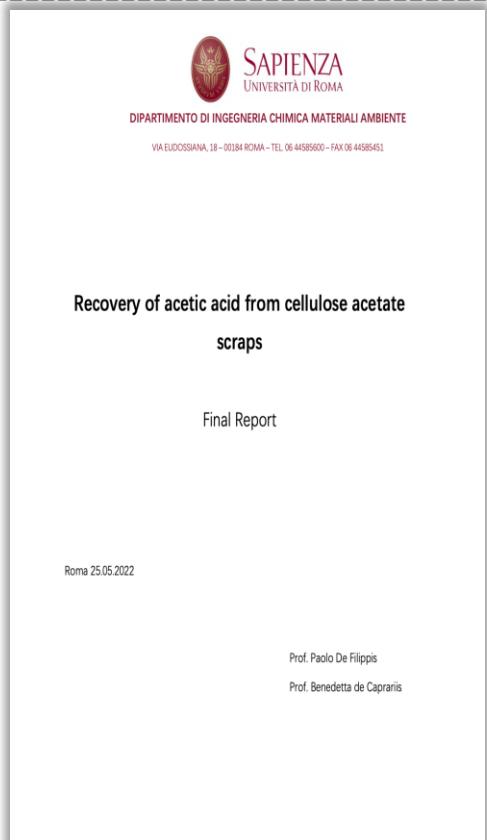


Waste glasses  
frame recycling



Waste plastic  
flakes recycling

Italian Patent



Joint research report of the  
University of Rome



DIPARTIMENTO DI INGEGNERIA CHIMICA MATERIALI AMBIENTI  
VIA EUODISIANA, 18 - 00184 ROMA - TEL. 06 44585600 - FAX 06 44585451

Recovery of acetic acid from cellulose acetate  
scraps

Final Report

Roma 25.05.2022

Prof. Paolo De Filippis  
Prof. Benedetta de Capraris

# Sustainable & Biodegradable



Wind power generation - Acetek Aspiration (Acetate Flake Production Plant 2) is expected to put its first wind turbine into operation in September 2026, and its second wind turbine into operation in August 2027. At that time, it is estimated that it can save more than NT\$30 million in electricity costs annually. At the same time, it will achieve green and low-carbon targets.

—Protect the Earth, Save Energy and Reduce Carbon—

	2/6.25MW
Wind turbine power generation/(million kwh)	3,236
Wind turbine electricity price/(Yuan/kilowatt-hour)	0.42
The annual electricity consumption is 50.4 million kWh. The remaining electricity after wind turbine generation. / (million kwh)	1,804
Electricity price paid for remaining electricity/(Yuan/kilowatt-hour)	0.7
Annual electricity bill (ten thousand yuan) after using wind power	2,621.92
Originally, the annual electricity cost was (in ten thousand yuan).	3,528.00
Estimated annual savings (ten thousand yuan)	906.08

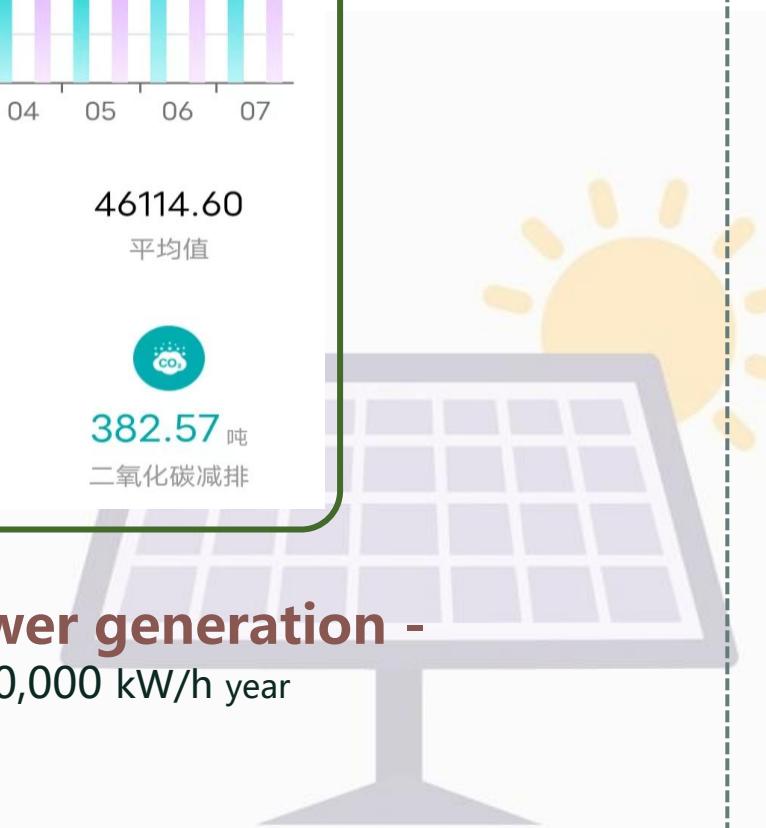
# Sustainable & Biodegradable

—Protect the Earth, Save Energy and Reduce Carbon—



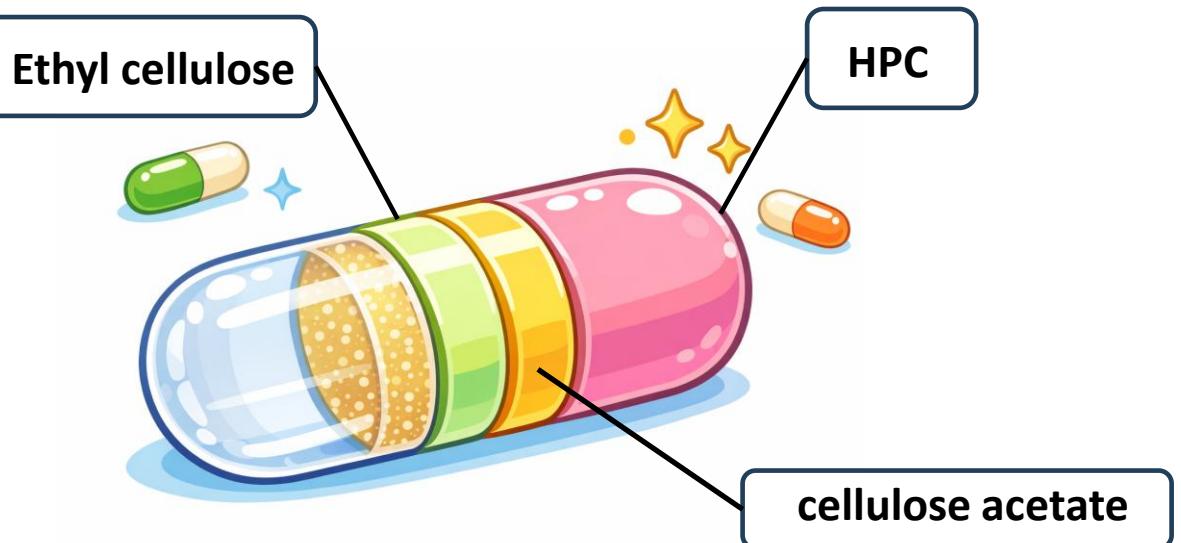
## Photovoltaic power generation -

- Total 600,000 + 800,000 kW/h year
- 64,525 trees
- CO2 1161.44 Tons



# Operational Outlook: Biopharmaceuticals / Electronic Materials

**Our company's objective:  
pharmaceutical capsule shell films.**



- ◆ Traditional pharmaceutical capsules mainly use ethyl cellulose and hydroxypropyl cellulose as raw materials.
- ◆ If a longer dissolution time in the body is required (commonly known as a sustained-release capsule), some ingredients include cellulose diacetate.
- ◆ Entering the field of electronic thin-film displays



# HNB(IQOS) Prospects

## Amazing growth rate

- According to the World Tobacco Development Report, heated tobacco products (HNB) are one of the mainstream categories of new cigarette products. The global market size was approximately US\$15.321 billion in 2019, and it is expected to reach US\$31.3 billion by 2022, more than doubling in three years.
- The global heated tobacco product market reached US\$15.321 billion in 2019, a 28% year-on-year increase, achieving rapid growth from scratch. This growth over the past five years has been primarily driven by the Japanese market. In 2019, Japan accounted for 56.4% of the global heated tobacco product revenue. South Korea, as the largest consumer, accounted for 10.5%, making it the second largest consumer, while Russia became the third largest consumer, accounting for 7%.
- The global cigarette production value grows at a rate of about 1-2% per year. According to statistics, the global tobacco market value was about US\$912 billion in 2022, but heated tobacco products accounted for only 3.43%.

## Annual compound growth rate exceeding 20%

- According to a PR Newswire report, a US consulting firm recently released a report on the future development trends of the global heated tobacco products market. The report indicates that the global heated tobacco products market will experience a compound annual growth rate (CAGR) exceeding 22% by 2025. The consulting firm believes that the recent popularity of heated tobacco products in the US, Japan, and South Korea has led to this phenomenal growth rate.

## Major powers will open their markets in the future, with immense potential.

- Currently, there are only 63 countries that are open to the market, with Japan, South Korea and the European Union as the main markets. Giant markets such as the United States (only some areas are open), China, India, and Brazil are still not open. Therefore, the market space for heat-not-burn tobacco products is still promising.

# Snus(Nicotine Pouches) non-woven fabric

## What is Snus

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Snus is a new type of nicotine product that does not burn or produce smoke. When using it, the nicotine pouch is placed between the upper lip and the gums, and the nicotine is absorbed through the oral mucosa. It does not contain tobacco leaves or tar and is classified as a "harm-reduced tobacco product".

## Global market size and growth

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- The global market size was approximately US\$11-12 billion in 2024.
- The market size is projected to reach US\$23-25 billion by 2030.
- The compound annual growth rate (CAGR) is 30-35%, far exceeding that of traditional cigarettes and heated tobacco products (HNB).

## Major Markets and Regions

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North America: The world's largest market, with the US accounting for approximately 80% of global consumption. Europe: Mature market in Northern Europe, with rapid growth in emerging European countries. Asia Pacific: The fastest growing market, with China possessing potential for explosive growth.

## Our company's goal

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In collaboration with the world's two largest tobacco companies, we are developing a customized product for cellulose acetate nonwoven fabric used in nicotine pouches. The new product is expected to be launched into the market supply chain in June 2026.

## Current Market Situation

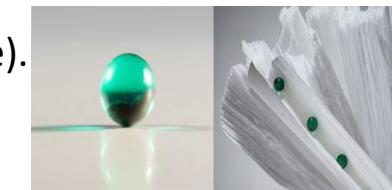
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- Fresh Bomb(crystal ball) filter cigarettes have seen rapid expansion since 2007, with Latin America being a high-penetration region.
- The product's selling points are the "press-to-change flavor" feature and flavor customization, enhancing differentiation and premium pricing.
- Menu/flavored cigarette market: 2025 US\$10.7 billion → 2035 US\$30.4 billion (CAGR 11%).

## Future growth and driving force

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- Product Upgrade: Standard tow → Customized filter/ventilation + capsule integration (increasing ASP and added value).
- Demand-Driven: Single capsule products are the mainstream, with high penetration in Asia/Latin America.
- Paraguay's Maquila / Investment laws provide tax advantages and import/export facilitation, helping to establish export-oriented production capacity.
- Setting up a factory in South America shortens lead times, reduces transportation costs, and enhances customers' resilience in "nearby supply."



## Our company's goal

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Capturing the growing demand for Fresh Bomb in South America and expanding the portfolio of high-margin products.

Successful mass production will strengthen the supply chain in South America and enhance global service coverage.

# Our 5-Year Targets



- 01 Expand our global market share in acetate tows to 20%
- 02 Continuously developing new products and expanding into the fields of biomedical and electronic technologies will contribute popular products to the market.
- 03 Sustain ROE in excess of 20%
- 04 Continue to perform well and strengthen the commitment and practice of environmental sustainability

# Thank You



+ GRATIS TEREÀ\*



\*gratiss TEREÀ nach erfolgreicher Registrierung  
und Teilnahme am IQOS Online-Event



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