

長興材料 ETERNAL MATERIALS

Elements of Infinite Possibilities

100





Synthetic Resins Division : Sustainable, Low-Carbon and Innovative Growth Strategy

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Presenter : Director, C.N. Li (Synthetic Resins Production Division and Unsaturated Polyester Resins Division)

B.C.Liu (spokesperson)

Date : 2024/08/20





- 2. 2024 Second Quarter Operating Result
- 3. Synthetic Resins Division : Sustainable, Low-Carbon and Innovative Growth Strategy



Agenda



Profile







Development Milestones





Global Production Sites





Global Service Network



2023 Product Lines Sales Ratio







Annual Sales Distribution (In the recent 5 years), 2023 Regional Markets Sales Ratio



2024 Second Quarter Operating Result







Financial Information-Balance Sheets & Key Indices

	2024Q2	2	2023		2022		Unit : TWD Millior
	Amount	%	Amount	%	Amount	%	
Cash and cash equivalents and current financial assets	7,935	<u>13</u>	7,624	<u>13</u>	6,671	<u>11</u>	-
Accounts receivable	15,823	<u>26</u>	15,213	<u>26</u>	17,132	<u>29</u>	
Inventories	8,875	<u>14</u>	8,479	<u>14</u>	9,716	<u>16</u>	
Financial assets	4,174	<u>7</u>	3,516	<u>6</u>	3,155	<u>5</u>	
Property, plant and equipment	19,640	<u>32</u>	18,323	<u>31</u>	17,473	<u>29</u>	
Total Assets	61,698	<u>100</u>	58,538	<u>100</u>	59,455	<u>100</u>	
Short-term borrowings	4,388	<u>7</u>	5,557	<u>9</u>	5,364	<u>9</u>	
Current portion of long-term borrowings	4,304	<u>7</u>	3,741	<u>6</u>	3,040	<u>5</u>	
Long-term borrowings	13,613	<u>22</u>	11,858	<u>20</u>	13,988	<u>24</u>	
Total Liabilities	34,771	<u>56</u>	33,322	<u>57</u>	34,384	<u>58</u>	
Total Equity	26,926	<u>44</u>	25,216	<u>43</u>	25,071	<u>42</u>	
Key Financial Ratios							-
Average cash collection days	133		141	L	141		
Average days required for sale	94		99		98		
Current ratio (%)	190		182	2	206		

Financial Information-Statements of Comprehensive Income



	2024Q	22	2023			2022	
	Amount	%	Amount	%	An	nount	%
Operating Revenue	21,590	100%	42,452	100	49	0,014	100
Gross profit	4,362	20%	8,147	19	10),163	21
Operating expenses	3,189	15%	(6,232)	(15)	(6	,886)	(14)
Operating Income	1,173	5%	1,915	5	3	,277	7
Non-operating income and expenses	169	1%	268	1	2	238	0
Net profit attributable to owners of the company	891		1,504	1,504		2,618	
			4			-	
Net profit margin (%)	4		4			5	
EPS	0.76		1.28		2	2.15	
ROE (%)	7		6			11	

Financial Information-Cash Flow Statements



	2024Q2	2023	2022
	Amount	Amount	Amount
Cash and cash equivalents at the peginning of the year	6,382	5,451	4,289
Cash flows from operating activities	1,860	6,514	6,581
Acquisition of property, plant and equipment	(1,861)	(3,149)	(2,783)
Increase (decrease) in borrowings	981	(1,107)	681
Dividends paid	(943)	(1,414)	(1,860)
Other items	(931)	250	(1,568)
Effects of exchange rate changes on cash and cash equivalents	163	(163)	110
ash and cash equivalents at the nd of the period	5,652	6,382	5,451
ree cash flow	(1)	3,365	3,799

Note: Free cash flow=

Cash flows from operating activities - Acquisition of property, plant and equipment

Sales Revenues & Gross Profits



Unit : TWD Millions



Performance by Segment



TWD Millions		2Q Sales		2Q Operating Profits			
		y/y	q/q		y/y	q/q	
Resin Materials	5,587	-0.3%	+19%	189	+130%	+47%	
Electronic Materials	2,978	+0.5%	+11%	247	-2%	-17%	
High Performance Materials	2,953	+34%	+14%	325	+32%	-6%	









Synthetic Resins Division : Sustainable,

Low-Carbon and Innovative Growth Strategy



Presenter : Director, C.N. Li (Synthetic Resins Production

Division and Unsaturated Polyester

Resins Division)

Date : 2024/08/20



1. Implementation of Sustainable Development

- Reducing Total Carbon Emissions
- Energy and Water Management
- Waste Reduction

2. Sustainable Growth Strategies

- New Market Expansion
- Sustainable Innovative Products
- 3. Digital Transformation



Implementation of Sustainable Development





Reducing Total Carbon Emissions



- A 3% annual reduction in global total carbon emissions starting from 2020.
- A 30% reduction in total carbon emissions by 2030 compared to 2020.
- A 100% reduction in total carbon emissions by 2050 compared to 2020.



Sustainable Product Lifecycle





 \approx 2023 Eternal product average : 3.215 tCO₂e / t

Energy and Water Management





Waste Reduction





Honors and Recognitions



MSCI ESG Sustainalytics Ecovadis 21.9/100 Silver Medal,60/100 **A**, 6.5/10 (100-0, 0 best) (AAA-CCC, AAA best) (0-100, 100 best) Top 31% in the global chemical 69/609 in the global chemical industry. industry ESG Risk Rating SILVER Medium MSCI 2023 Α Risk ecovadis ESG RATINGS Sustainability Rating CCC B BB BBB AA AAA

FTSE RUSSELL 3.4/5

Taiwan Corporate Governance Evaluation

Listed Companie : 21~35%

S&P Global **51**/100

20-30

30-40

40+

0-10

Sustainable Growth Strategies







Enhancing New Market Expansion

Completed early deployment in ASEAN, flexibly respond to the changes caused by geopolitical risks and trade wars

Seizing the golden decade of ASEAN and India's market rise

- Major beneficiaries of industrial chain shifts
- Government investment
- Increased urbanization
- Growing middle class

Tapping into North American Opportunities from Supply Chain Shifts

- Seeking non-China supply chains
- High local manufacturing costs
- Strong consumption power



Committed to R&D innovation in sustainable development

- Focusing on sustainable green products with significant R&D investment.
- Focusing on end-user needs and building a vertically integrated ecosystem.
- Not only reducing our own carbon footprint, but also assisting downstream partners in reducing theirs.



Sustainable Innovative Products - Low VOC

Polyaspartic Resin

- Exclusive MIT
- 100% Solids, Low VOC
- Low Odor, Friendly to Workers
- Fast Curing, Saves Working Time
- Can Cure at Low Temperatures, Suitable for Cold Weather and Winter Application
- Excellent Weather Resistance, Prevents Leakage Issues After Paint Aging
- Acid and Alkali Resistant, Chemical Corrosion Resistant
- Elastic and Impact Resistant

Applicable Areas :

Floor Coating

Waterproof Coating
Industrial Protective
Coating
Parking Lots
Sports Fields



Actual coating of the roof of the Eternal Materials Ping-Nan Plant

Sustainable Innovative Products - Industrial Protection Applications

<u>Water-based</u> Fluorocarbon Resin

- Low VOC
- Free of APEO and PFOA
- Excellent Weather and Anti-Chalking Resistance
- Excellent Acid and Alkali Resistance
- Extends Paint Life to 10-15 Years, Effectively Reducing Maintenance Costs

Composites

- High Strength-to-Weight Ratio
- Corrosion and Chemical Resistance
- Various Structural Design Options
- Withstands High Pressure for Hydrogen Storage
- Impact Resistance
- Suitable for Harsh Environments

Potential Application Markets



Actual Application of Eternal Materials Ping-Nan Plant





Utilizing Material Technology to Improve the Work Environment

- Reduces the back temperature of steel plates by approximately 20~30 degrees*
- Lowers the temperature in workshop environment by about 2~3 degrees*
- Extends the lifecycle of the coating to 10~15 years, with low maintenance costs
- Excellent weather resistance and anti-chalking properties
- Excellent acid resistance and alkali resistance

Applicable Areas:

Sustainable Innovative Products –

• metal sheet building



Before coating

After coating





* Detection values vary depending on the day's air convection and humidity



Sustainable Innovative Products - Building Exterior Wall Applications

Extends Paint Life to 10-15 Years, Effectively Reducing Maintenance Costs

Water-based Fluorocarbon Resin

Applicable Areas

- Solid Color Paint for New or Renovated Exterior Walls
- Multicolor Paint
 Stone-like Paint
 Art Paint
 Protective Topcoat
- Recognized by Government and Private Projects

Actual Application







Photos Authorized by Banmao Green Energy Engineering Corp.



rPET Polyester Resin

- Replaced 30% of petrochemical raw materials
- Reduced carbon emissions by 22.7%
- Matches the performance of petrochemical-based resins
- Endorse by major corporations and ready for market launch



rPET Button Unsaturated Resin

- rPET usage reaches 32%
- Reduce carbon emission by 7.6%
- Low styrene, GRS certified
- Mass Production and Supply to Major Fashion Brands



Digital Transformation







Digital Signage

IOT - Facilities interconnected

Using IoT to connect your production facilities, provide a comprehensive overview of operations on a single digital display. Visualize key data points such as production status, tank levels, utility usage, energy consumption, alerts, and equipment performance.







Establish a critical feature factor analysis method

We will develop an AI-driven process analysis method to identify critical features and improve process capability to above Cpk 1.33.



Establish a process collaboration platform

Big data-driven platform for FTR improvement, process decision-making, and anomaly handling.





Safety Management



• Contractor Management System :

By digitizing entry and permit processes and providing visual tools for project management.

• Equipment Health Management :

Using vibration analysis to keep track of equipment condition and schedule maintenance proactively.



Future Development

Manufacturing Execution System (MES)

- Adopting International Major MOM System (2023 Gartner Rated Leader)
- Integrating SAP ERP with Each Plant's Databases
- Integrating AI Applications in Processes to Assist Engineers/Operators in Improving Process Stability

Smart monitoring of critical equipment- Reactor

- Developing intelligent monitoring applications in partnership with reactor manufacturers.
- Real-time monitoring of reactor with proactive maintenance for anomalies.
- Enhance reactor reliability to minimize unplanned outages.

Tactical Data Analysis System

- Automatically identifies environmental and personnel safety hazards in the factory.
- Develop occupational safety applications..
- Intelligent command and control system integrates various factory data and alerts for critical events.



schematic diagram



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