

2016.04.13

IR Conference

- Financial Information
- Strategy and Technology Developments

**ETERNAL
MATERIALS**
長興材料

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- This presentation may contain forward-looking statements subject to significant risks and uncertainties. Actual results may differ materially from those contained in the forward-looking statements.
- The forward-looking statements in this release reflect the current belief of Eternal Materials Co., Ltd. (“Eternal”) as of the date of this release, we undertake no obligation to update these forwarding-looking statements for new information.

Annual Consolidated Income Statement



Unit: NTD Million

Quarter	2013	2014	2015
Net Sales	38,189	40,343	38,487
Gross Profit	6,845	7,780	8,747
Operating Expenses	4,508	4,950	5,349
Operating Income	2,337	2,829	3,397
Income before Tax	2,612	3,011	3,491
Net Income*	1,930	2,307	2,872
EPS	1.94	2.26	2.81

* Net Income Attributable to the Shareholders of the Parent

Balance Sheet



Unit: NTD Million

Quarter	2013	2014	2015
Cash and Cash Equivalents	4,845	5,417	7,449
Accounts Receivable	12,245	13,148	12,172
Inventory	6,551	7,039	6,244
Property, Plant & Equipment	13,316	13,894	16,150
Total Assets	44,120	47,266	49,118
Short-Term Loans	7,541	6,327	4,848
Long-term Loans	7,225	9,750	12,394
Total Liabilities	23,978	25,274	26,730
Shareholders' Equity	20,142	21,992	22,388
Shareholders' Equity Attributable to the Parent	19,820	21,475	21,865

- **Industrial Trend & Strategy**

- Market Outlook

MACRO Trends	Corporate Strategies
<ul style="list-style-type: none"> • Competition and demands are integrated to superior minorities • Reregulated market orders • Product life cycle is getting shorter • Eco-friendly, energy saving and aging issue are highlighted topics 	<ul style="list-style-type: none"> • Enhance strategic alliance • Manufacturing regulations comply with environmental laws • Prompt actions and output efficiency • Develop short-term, mid-term and long-term projects based on highlighted topics

- BG Strategies

- High Performance Materials
 - Resin Materials
 - Electronic Materials
- } Increase market share in Mainland China
- [Increase market share in Mainland China
Develop high-end market via Nikko-Materials

- **Set up Manufacturing Site in Malaysia**
 - Provide prompt delivery and service to local clients
 - Offset tariff barriers
 - Close to RCEP and TPP markets
 - Estimated Operating Schedule: July, 2017
 - Initial Capacity: 90K MT/Y
 - Main Manufacturing Products:
Solvent-based acrylic coating resin, water-based acrylic coating resin, unsaturated polyester resin, etc...
 - Main Applications:
Plastic paint, marine paint, automotive baking paint, interior latex paint, interior/exterior water-based cement paint, Button resin, synthetic marble resin, automotive putty resin, etc...
- **Maintain North-East Asia Market**
 - Japan: seek and strengthen strategic alliance
 - South Korea: initiate distribution channels and promote me1 materials

- **Short-Term Technology Developments**

- 1) Polyimide Related Product and Technology Developments

Application	Photoimageable Coverlay (PIC)
Status	Qualification approved and more on-going validations are conducted in Japan as well as in South Korea
Market Size	600K SQM/Y, 300M NTD/Y

2) Conductive Polymer Product and Technology Developments

Application	<ul style="list-style-type: none">• Conductive Polymers for High Voltage Solid Capacitor and Transparent Conductive Film (TCF)• Help to achieve high withstand voltage and high capacity expectations
Status	<ul style="list-style-type: none">• MP and downstream solid capacitors are launched with 200V spec• TCF, antistatic materials and conductive fabric materials are under development
Market Size	<ul style="list-style-type: none">• Annual Output of High Voltage Solid Capacitor: 25.5 Billion NTD (1B pcs/m)• Annual Output of Conductive polymers used for solid capacitor: 645M NTD/m (320 MT/m)

3) Polyurethane Dispersions Product and Technology Developments

Application	Coating adhesive and resin for leather, fiberglass, oil ink, etc...
Status	<ul style="list-style-type: none">• Annual sales amount around 600 MT• New Reactor will be ready at 3rd quarter to increase annual capacity to 5K MT (2016 Sales FCST: 768 MT)
Market Size	300K MT /40B NTD

4) Acrylic Resin Modifier, Special Monomer(Glycidyl Methacrylate, Transesterification) Product and Technology Developments

Application	Additive for acrylic resin, thermal plastic, synthetic rubber, super absorption polymer, monomers for polymer dilution, oil ink, coating material for lens, optical films, dry film photoresist and barrier materials
Status	<ul style="list-style-type: none">• Superabsorbent resins with firm orders• GMA equipment at proposal stage, High-value transesterification monomer at trial stage
Market Size	18K MT/Y 3.5B NTD/Y

- **Mid-Term and Long-Term Technology Developments**

- 1) Energy Storage: Anode Additives for Lithium Battery, Cathode Material and Electrolyte

Application	Graphene anode additives helps to increase charge/discharge efficiency of LFP batteries, minimize cell resistance and expand cell capacity to 15~20%
Status	Qualification approved and more on-going validations are conducted in Taiwan as well as in China
Market Size	143 MT/Y, 28B NTD/Y of Graphene Powder

- 2) Biomedical Materials: Enzyme and Antibody for IVD

Application	Focus on developing enzyme and antibody that can be used to conduct blood biochemical test, molecular diagnosis and immunoassay
Status	At validation stage
Market Size	3B NTD of IVD Reagent Market in Taiwan

1) Silicone Based Related Product and Technology Developments

- LED Encapsulates → MP and developing new products with partners
- PSQ Micro-Beads → MP and will increase manufacturing capacity
- Organic-Silicone Additives for Coatings → MP and will increase manufacturing capacity
- Organic-Inorganic Hybrid Coatings → MP and will increase sales amount

2) Polyimide Related Product and Technology Developments

- Aqueous Developable Dry Film Photosensitive Polyimide for Semiconductor, Passive Device and Flexible Printed Circuit Board Applications
- Supply to semiconductor and passive component manufacturers in Taiwan
- Polyimide Material for Flexible OLED and Advanced Touch Panel Applications
- Under developing

3) Conducting Polymer Product and Technology Developments

- High Capacitance, High Voltage and High Thermo Resistances Solid Capacitor Applications
- Transparent Conductive Coating Film for Smart Phone Application
- Developing antistatic materials
- Developing conductive fabric

4) Liquid Crystal Polymer Product and Technology Developments

- High Performance Engineering Plastics for Connector Applications
- Flexible Printed Circuit Board for High Frequency Communication Device Applications
- Connector application project suspended, LCP thin-film products under development

5) High Refractive Index Monomer and Resin Product and Technology Developments

- UV Curable Optical Lens
- UV Curable Optical Films
- High refraction materials at trial stage and photo-catalytic synthesis is under development

6) A Variety of Nano Particle Product and Technology Developments

- Photo-Catalyst Self-Cleaning Coatings
 - Transparent Thermo-Isolation Self-Cleaning Coatings
 - UV Cut Materials
 - High Refractive Index Particles → Project Suspended
- } Nano particle at pilot stage
Resin at trial order stage



7) Uniformly Beads Synthesis Technology Developments

- Beads for LED and LCD Applications → promoted globally
- Beads for Cosmetics Applications → promoted in China

8) Nano Coating and Thick Film Coating Processes Technology Developments

- Nano Coating with Thickness less than 100nm of Hydrophilic Coating Film and Conductive Coating Film for Electro-, Opto-, Opto-Electro and Bio- Applications → Qualification approved in China
- Thick Film Coating with Thickness larger than 200um of OCA Film for Touch Panel Applications → Qualification Stage

9) Materials for Green Energy Industry

- Single Crystal Cell Efficiency: 20.1% → improved to 21%
- Mass Production → MP with firm orders



THANK YOU

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