Nan Ya Plastics
Operations & Prospects

March 2008

Agenda

- **Overview**
- **Strategy & Competitive Advantages**
- **Financial Highlights**
- **Expansion Plan**
- **Summary**
- **Q & A**

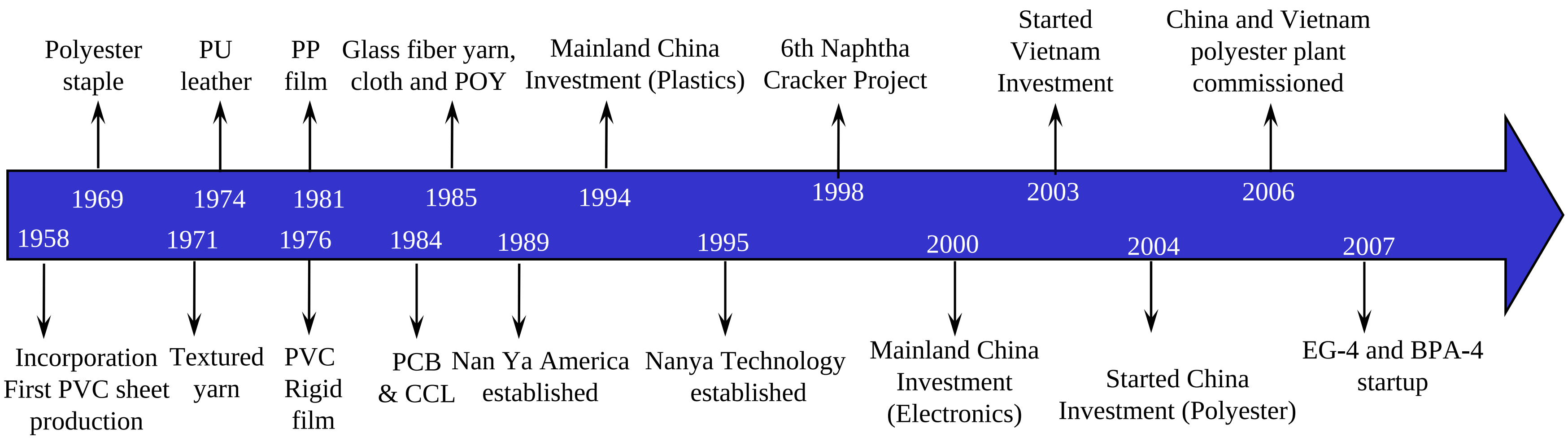
Overview

Highlights

- Member of the Formosa Plastics Group (FPG)
- The sixth largest private company in Taiwan in terms of market capitalisation
- Revenue till 3Q07 of US$ 5 billion with five major businesses: Sales breakdown – 40% chemicals, 23% electronic materials, 17% plastics, 15% fibers and 5% engineering
- Market capitalisation of US$ 18.5 billion
- 55 manufacturing plants and five power plants in Taiwan, 27 and 4 manufacturing plants in China and the US respectively.
- Leading market positions
  - World's No.1 manufacturer of secondary plastics
  - World's No.1 manufacturer of copper clad laminates
  - World's No.2 producer of polyester fibers

Overview

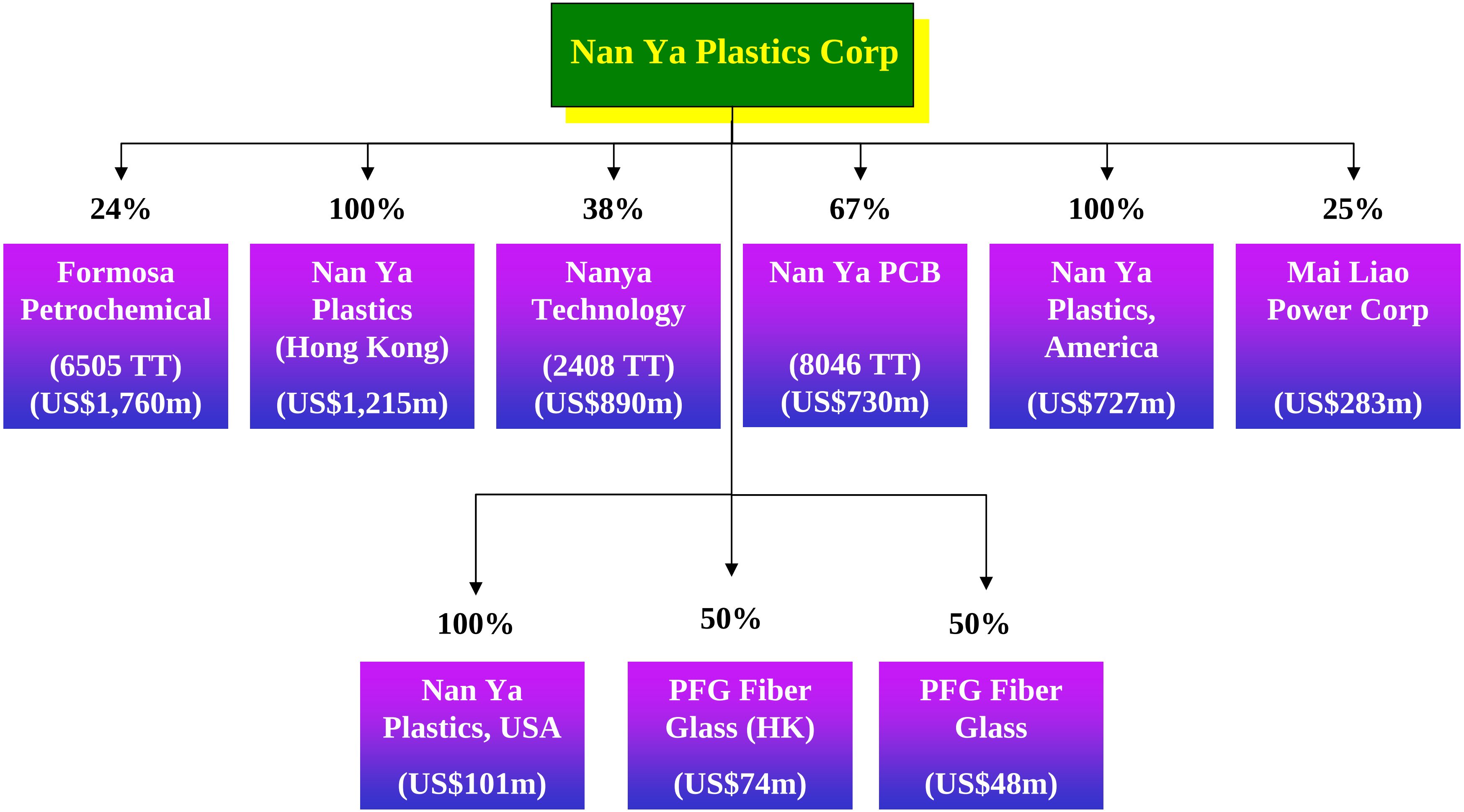
History



- **1950's - 1960's : Production of PVC secondary plastics in Taiwan**
- **1970's : Began manufacturing polyester fibre, expanding scale and varieties of plastics processing products**
- **1980's : Entered electronics business, growth in polyester and plastics**
- **1990's : Plastics and polyester facilities in the US commissioned, manufacturing of plastics initiated in China, construction of specialty chemicals in No. 6 Naphtha Cracker Project completed, and subsidiary for Dram manufacturing stated production**
- **2000's : Production facilities for electronic materials in China commissioned**
- **2006's : Completed the construction of polyester plants in China and Vietnam and started mass production**
- **2007's : BPA-4 and EG-4 plant of the phase-four expansion project in Mailiao complex started operation**

Overview

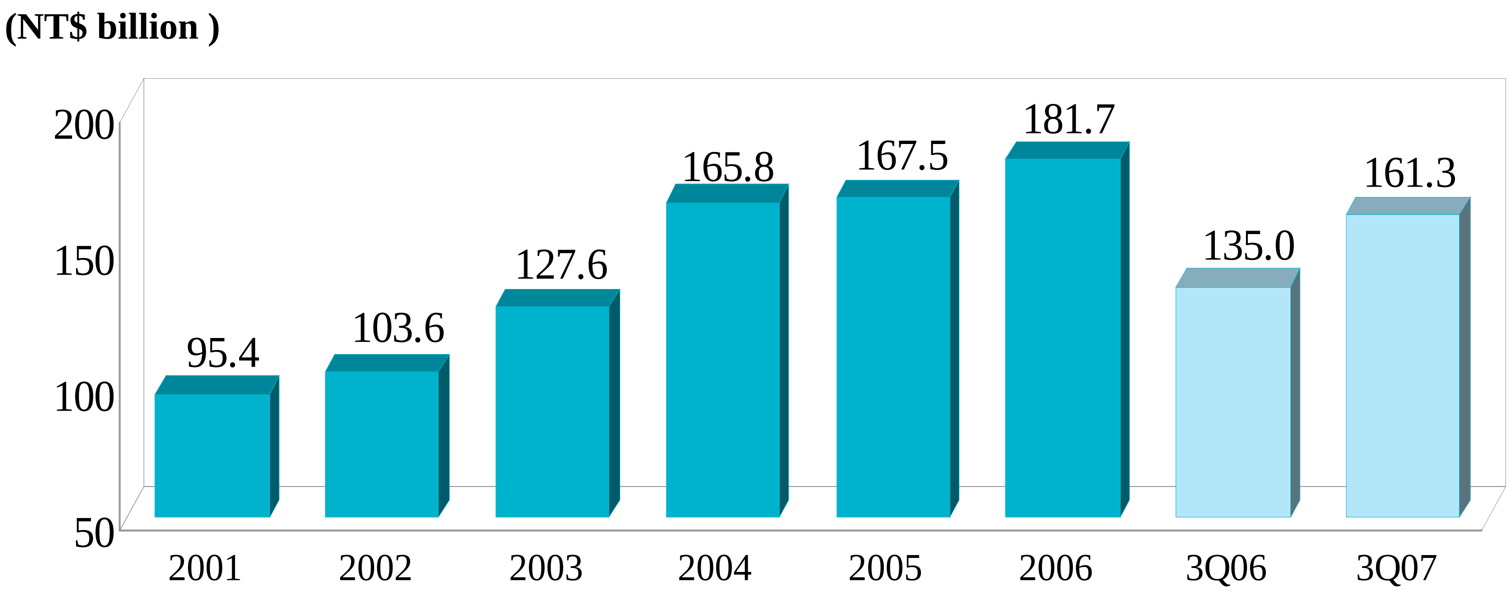
Subsidiaries - Book value as of Sep 2007



Strategy & Competitive Advantages

Strategy	Key areas	Objective
Backward Integration	• 6th Naphtha Cracker • Polyester products (e.g. EG) • Electronics products	Secure stable and low cost raw materials
Product Diversification	• High margin products • High value-added, specialty chemical and polyester fibre • Electronics products	Increase profitability and market share
Establish Production Base in China and Vietnam	• PVC sheeting, leather, pipes, fittings and PU leather • Electronics products • Polyester fibre	Support relocation of downstream customers and profit from rapid growth in China and Vietnam
Strengthen R&D Capability	• Polyester for electronic applications • Specialty chemicals (dispersion PU for leather, non-phthalate plasticiser) • Nano-composites material (Stain -resistance PVC sheet, Water and oil repellent for fabric)	As a main product base, Taiwan mother company also formed as a R&D centre, supporting required technology to overseas invested companies
Other complementary strengths	• Self-sufficient in power • Healthy financial structure • Internal construction and engineering departments	Able to operate at low manufacturing cost and high efficiency

Financial Highlights
Net Sales

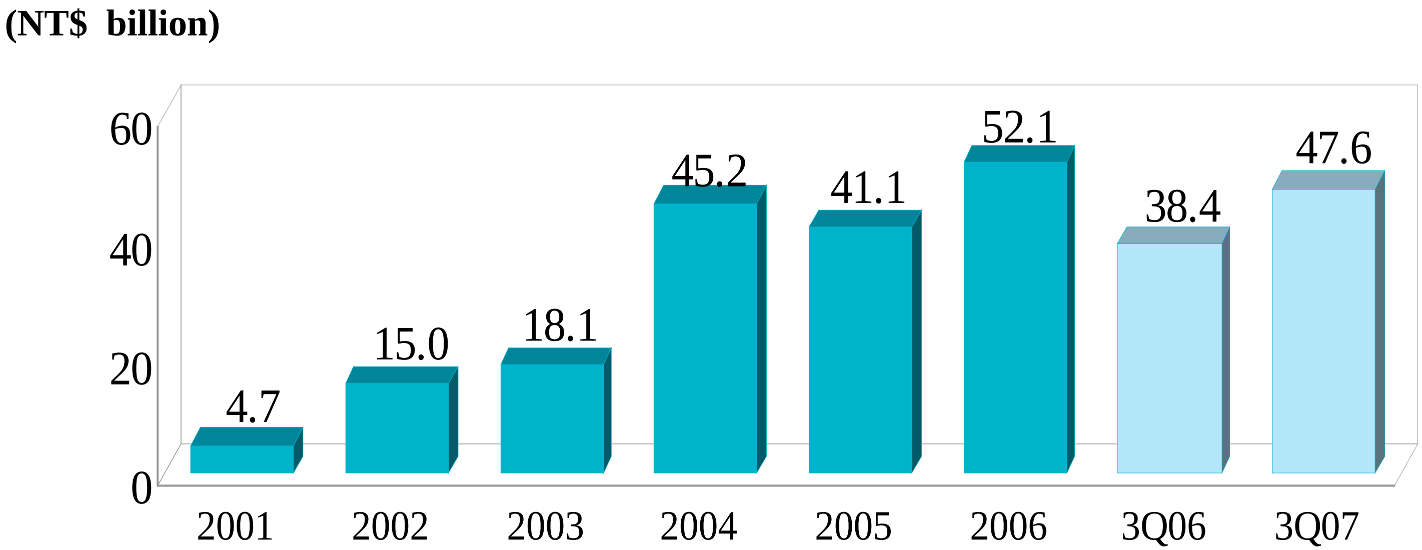


- **Revenue till 3Q07 rose 19.4% YoY due to:**

1. Plastics top-line declined slightly by 1%
2. Polyester sales increased by 11% as a result of sector recovery and successful cost shifting
3. Electronic material sales grew 15% as both price and utilization rate has improved
4. Sales of chemicals increased largely by 55% due to strong demand and higher feedstock price successful cost shifting

Financial Highlights

Pre-tax Income



- **26.7% YoY increase in 2006 pre-tax earnings due to:**

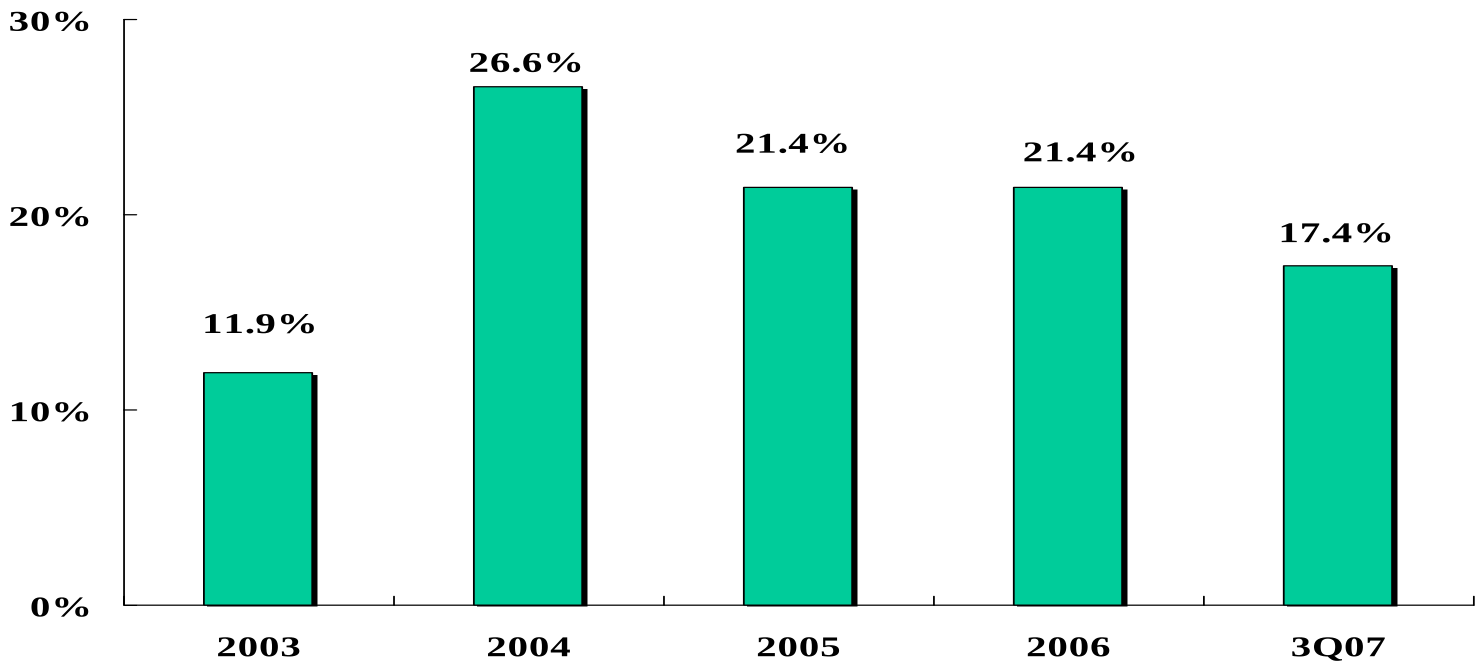
  1. Strong electronic material demand from consumer electronics industry
  2. Better product mix in plastics and polyester business groups
  3. Affluent investment income from Nanya Technology and Nan Ya PCB

- **Pre-tax earnings till 3Q07 increased by 24% YoY due to：**

  1. Core business income increased by 79% YoY thanks to strong downstream demand across various product lines and substantial margin increase for chemical products
  2. Equity income dropped by 6% YoY to NT$22.5bn: FPCC +NT$4.9bn, Nanya Technology –NT$5.6bn, Nan Ya PCB –NT$1.8bn
  3. Investment income reaches 49% of pre-tax earnings till 3Q07

Financial Highlights

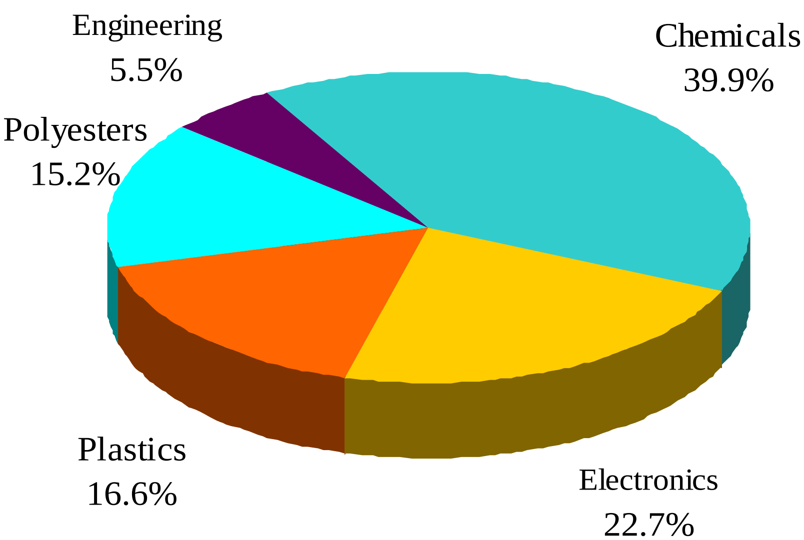
Return on Stockholders' equity



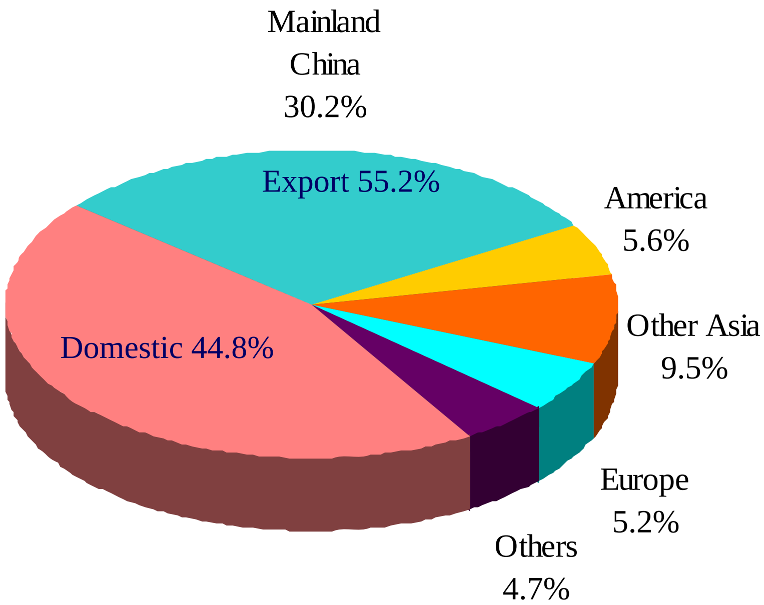
- Return on stockholder's equity for the past three years has exceeded 20% mainly because NC-6 project has reached harvest time and its return emerged
- Seeking further growth through expansion into the high-entry barrier and high-margin specialty chemical space

Financial Highlights
Revenue Breakdown

Net sales till 3Q07
NT$ 161.3 billion



2006 Sales breakdown by geography



- Revenue of NC-6 project grew 55% YoY till 3Q07
- Revenue contribution from electronic materials till 3Q07 increased 15% YoY
- Revenue growth in the next few years driven by expansions of BPA-4, EG-4, and 1.4BG-2
- Mainland China remains the most important export market, accounting for 55% of total exports in 2006

Expansion plan in China

Main Products	Unit	Capacity (p.a.)	Expansion	Completion Date	Capacity Increase (%)
PU leather	thousand yards	31,200	4,800	Jun-08	15
PVC rigid film	tonne	124,800	9,600	Jun-08	8
Copper clad laminate	thousand sheets	24,000	26,400	Oct-09	110
Copper foil	tonne	31,800	17,400	Oct-09	55
Glass fibre cloth	thousand meters	192,000	102,000	Sep-08	53
Glass fibre yarn	tonne	67,800	37,800	May-08	56
Epoxy resin	tonne	105,000	192,300	Jul-09	183

Long-term Investment Overview

Company name	Holdings (%)	BV (NT$m) 2007/9	Invt. income (NT$m) 2005	2006	2007/9
Formosa Petrochemical	24	57,107	14,052	10,594	12,228
Nanya Technology	38	28,880	974	7,584	-779
Nan Ya Hong Kong	100	39,412	1,395	3,001	2,370
Nan Ya PCB	67	23,689	3,370	7,212	3,881
Nan Ya America	100	23,593	2,356	998	1,630
Mai-Liao Power	25	9,194	1,165	1,268	660
Formosa Heavy Industries	33	3,955	138	228	218
Taiwan Industrial Responsibility	43	3,369	-448	-156	254
Nan Ya USA	100	3,276	24	13	17
HK PFG Fiber Glass	50	2,398	210	354	273
PFG Fiber Glass	50	1,569	351	522	272
Others		3,356	78	-212	24
Total		199,798	23,665	31,405	21,048

Summary

Strengths and Prospects

- The worlds' leading producer of secondary plastic products, polyester products and copper clad laminates
- Vertical integration achieves lower raw materials costs
- Consistently delivered admirable returns on equity
- Growth strategy
  - Expanding electronic material capacity in Kunshan China and will continue to grow with customer demand
  - Transform focus in Taiwan from processing base manufacture into the high-margin specialty chemical business, while adding processing capacity in emerging markets
  - Develop environmental friendly products to meet the global clean and green trend
- Based on optimal production to maintain long-term competitive advantages
  - Productivity enhancement through automation, personnel training and management programs
  - Involvement in No.6 Naphtha Cracking Project to control costs of raw materials

Appendix

Operating Performance

Unit：NT$ millions

Item		Plastics		Electronics		Polyester		Chemicals		Engineerging		Others		Total		YoY growth %
		Amount	Margin	Amount	Margin	Amount	Margin	Amount	Margin	Amount	Margin	Amount	Margin	Amount	Margin	
Sales revenue	2002	34,326		20,911		26,665		15,002		6,195		534		103,632		8.6
	Contribution	33.1		20.2		25.7		14.5		6.0		0.5		100.0		
	2003	34,458		27,001		29,173		26,098		10,101		812		127,642		23.2
	Contribution	27.0		21.2		22.9		20.4		7.9		0.6		100.0		
	2004	38,156		36,569		30,867		47,818		11,453		923		165,786		29.9
	Contribution	23.0		22.1		18.6		28.8		6.9		0.6		100.0		
	2005	35,934		36,358		28,337		53,201		13,061		619		167,510		1.0
	Contribution	21.5		21.7		16.9		31.8		7.8		0.4		100.0		
	2006	36,111		42,970		29,783		58,015		14,152		622		181,652		8.4
	Contribution	19.9		23.7		16.4		31.9		7.8		0.3		100.0		
	Till 3Q 2007	26,712		36,580		24,458		64,251		8,808		470		161,280		19.4
	Contribution	16.6		22.7		15.2		39.8		5.5		0.3		100.0		
Operating income	2002	3,202	9.3	-5	0.0	2,892	10.8	2,134	14.2	1,141	18.4	-1,546		7,819	7.5	-9.8
	Contribution	41.0		-0.1		37.0		27.3		14.6		-19.8		100.0		
	2003	1,870	5.4	1,063	3.9	2,657	9.1	6,101	23.4	1,574	15.6	-851		12,415	9.7	58.8
	Contribution	15.1		8.6		21.4		49.1		12.7		-6.9		100.0		
	2004	1,541	4.0	4,715	12.9	1,278	4.1	15,309	32.0	1,182	10.3	-907		23,117	13.9	86.2
	Contribution	6.7		20.4		5.5		66.2		5.1		-3.9		100.0		
	2005	1,831	5.1	1,381	3.8	-19	-0.1	9,113	17.1	925	7.1	-1,062		12,170	7.3	-47.4
	Contribution	15.0		11.4		-0.2		74.9		7.6		-8.7		100.0		
	2006	2,911	8.1	6,433	15.0	89	0.3	7,753	13.4	1,267	9.0	-878		17,575	9.7	44.4
	Contribution	16.6		36.6		0.5		44.1		7.2		-5.0		100.0		
	Till 3Q 2007	1,681	6.3	4,659	12.7	974	4.0	14,494	22.6	916	10.4	-483		22,240	13.8	79.3
	Contribution	7.6		20.9		4.4		65.2		4.1		-2.2		100.0		

Appendix I

Financial Ratio

Unit : %

YEAR	2003	2004	2005	2006	Q307
Interest Coverage	6.54	18.66	17.20	20.34	24.88
Gearing	61.62	50.51	45.91	34.82	31.53
Debt Ratio	44.83	42.62	39.60	33.78	32.74
Long Term Funds To Fixed Assets	287.63	325.54	343.49	390.89	389.02
Current Ratio	198.94	180.84	181.84	176.76	205.21
Quick Ratio	119.23	108.78	112.91	115.04	151.32
Return On Total Assets	7.41	15.56	13.13	14.10	11.58
Return On Stockholders' Equity	11.94	26.55	21.38	21.43	17.39
Operating margin	9.73	13.94	7.27	9.67	19.96
Net margin	13.46	26.23	23.85	26.15	27.44
EPS（NT$）	2.61	6.23	5.40	6.23	5.73

Appendix II

THE END

南亞塑膠工業股份有限公司
營運狀況及展望

2008年3月

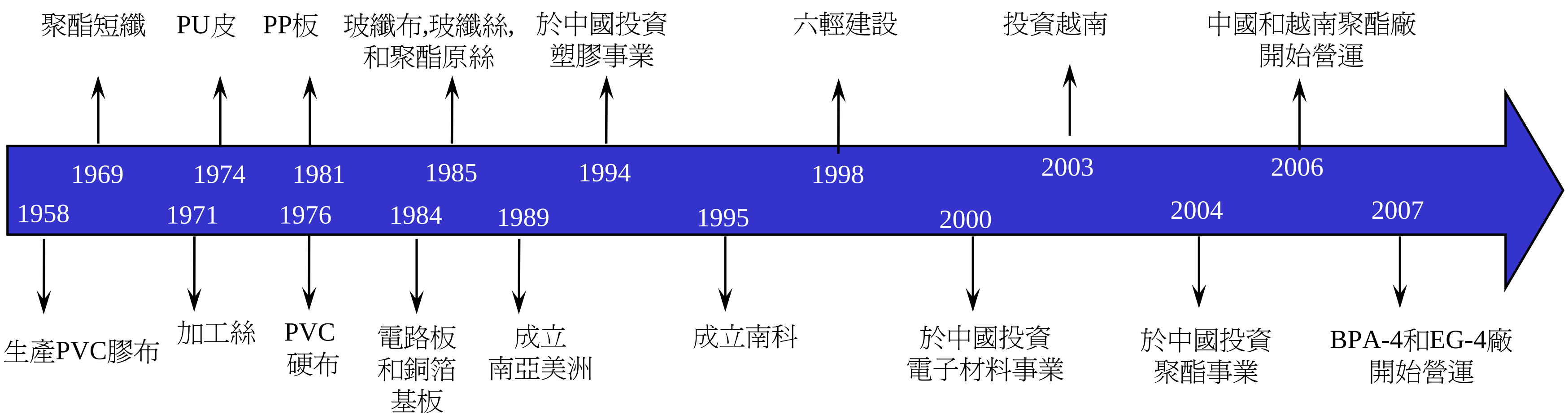
議程

- 公司概況
- 發展策略及競爭優勢
- 財務狀況
- 擴建計劃
- 總結
- **Q & A**

公司概況
事業簡述

- 台塑集團主要成員
- 台灣市值第六大民營企業
- **2007**年前三季營業額爲美金**50**億元。各事業部之營收比例分別爲：石化原料 **40%,** 電子材料 **23%,** 塑膠加工 **17%,** 纖維染整 **15%,** 機電工程 **5%**
- 台股上市市值：美金**185**億元
- 生產設備：
  - 台灣：**55** 個製造廠和**5**個發電廠
  - 中國：**27**個製造廠
  - 美國： **4**個製造廠
- 市場地位
  - 全球首大塑膠二次加工製造商
  - 全球首大銅箔基板製造商
  - 全球第二大聚酯纖維製造商

公司概況
歷史沿革



- **1950’s - 1960’s :** 於台灣發展塑膠二次加工事業
- **1970’s :** 開始聚酯纖維之製造；擴充塑膠事業
- **1980’s :** 進入電子材料事業； 持續擴充塑膠和聚酯事業
- **1990’s :** 美國之塑膠和聚酯廠開始營運；開始中國之塑膠加工事業；六輕特用化學建設完成；子公司開始生產**DRAM**
- **2000’s :** 中國之電子材料廠開始營運
- **2006’s :** 中國和越南聚酯纖維廠開始營運
- **2007’s :** 配合六輕第四期擴建之**BPA-4**和**EG-4**廠開始營運

公司概況

主要子公司 (截至96年9月之帳面價值。單位：美金百萬)

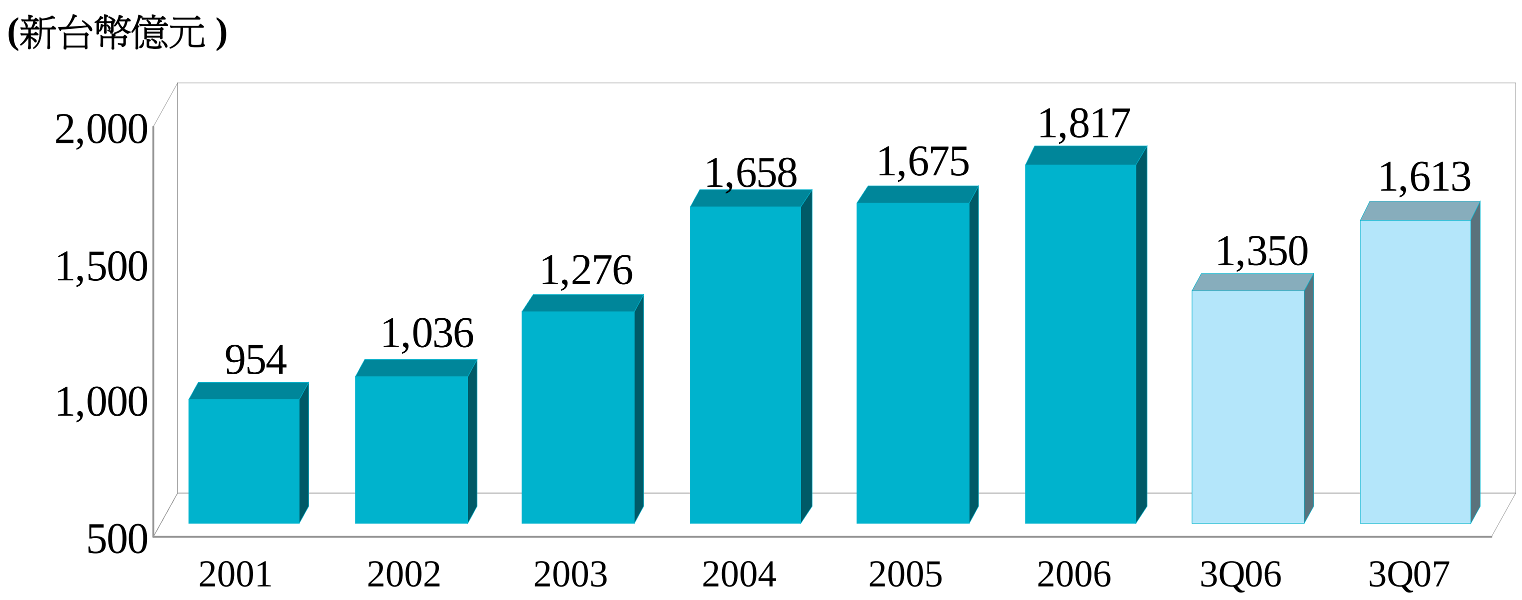
南亞塑膠

- 24% 台塑石化 (6505 TT) ($1,760)
- 100% 南亞塑膠工業(香港) ($1,215)
- 38% 南亞科技 (2408 TT) ($890)
- 67% 南亞電路板 (8046 TT) ($730m)
- 100% 南亞美洲 ($727m)
- 25% 麥寮汽電 ($283m)
- 100% 南亞美國 ($101m)
- 50% 香港必成玻璃纖維 ($74m)
- 50% 台灣必成 ($48m)

發展策略及競爭優勢

垂直整合	• 六輕建設 • 聚酯產品 (如：**EG)** • 電子產品	確保穩定及低成本的原料供給
產品多角化經營	• 發展高毛利產品 • 發展高附加價值之特用化學品和聚酯產品 • 發展電子產品	增加獲利和市場佔有率
在中國和越南建立生產基地	• **PVC**膠皮,膠布,硬管,**PU**皮 • 電子材料 • 聚酯纖維	配合下游客戶轉移製造基地並滿足中國越南當地的廣大需求
增強研發能力	• 電子用聚酯產品 • 特用化學 • 奈米級產品	台灣母公司將扮演研發中心的角色並提供子公司必要技術
其他	• 電力自足 • 穩健的財務結構 • 內部營造及工程部門	有助於高效率且低成本的生產

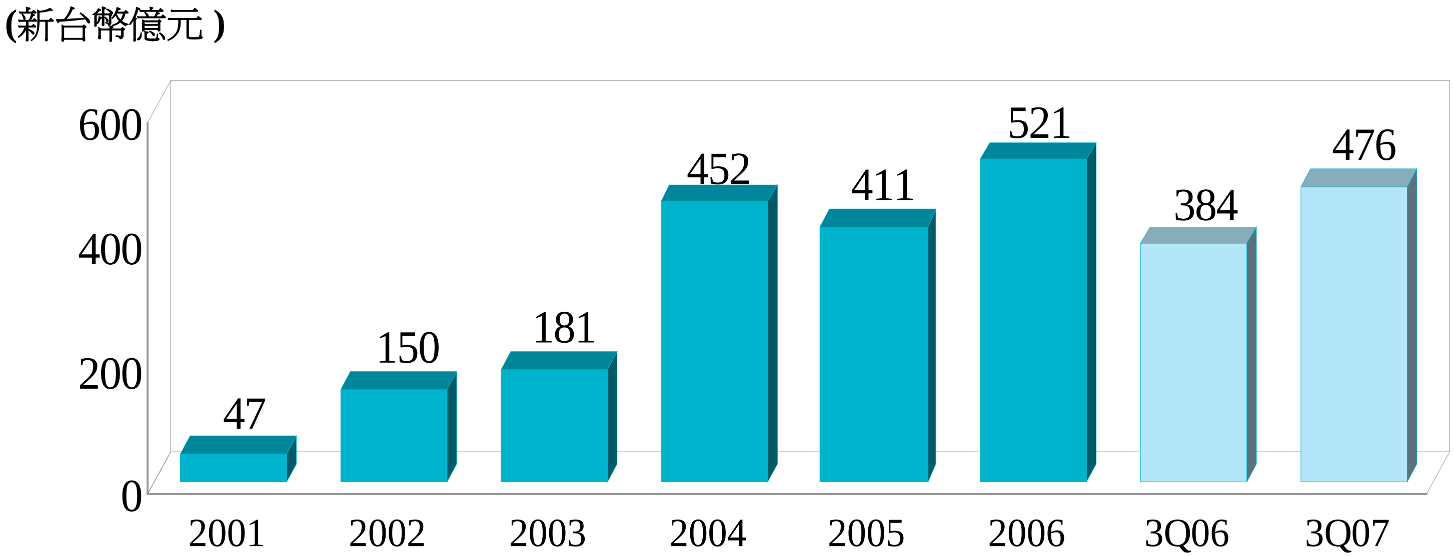
財務狀況
營業收入



■ **3Q07營收較去年同期成長19.4%:**

1. 塑膠加工事業:營收微幅下降 1%;
2. 纖維染整事業:受惠於整體產業復甦和成功的成本轉稼,營收成長11%
3. 電子材料事業:銷售價格和產能利用率同步提升,營收成長15%
4. 石化原料事業: 營收大幅成長55%,受惠於強勁需求和較高的原料價格 成功轉嫁

財務狀況
稅前淨利

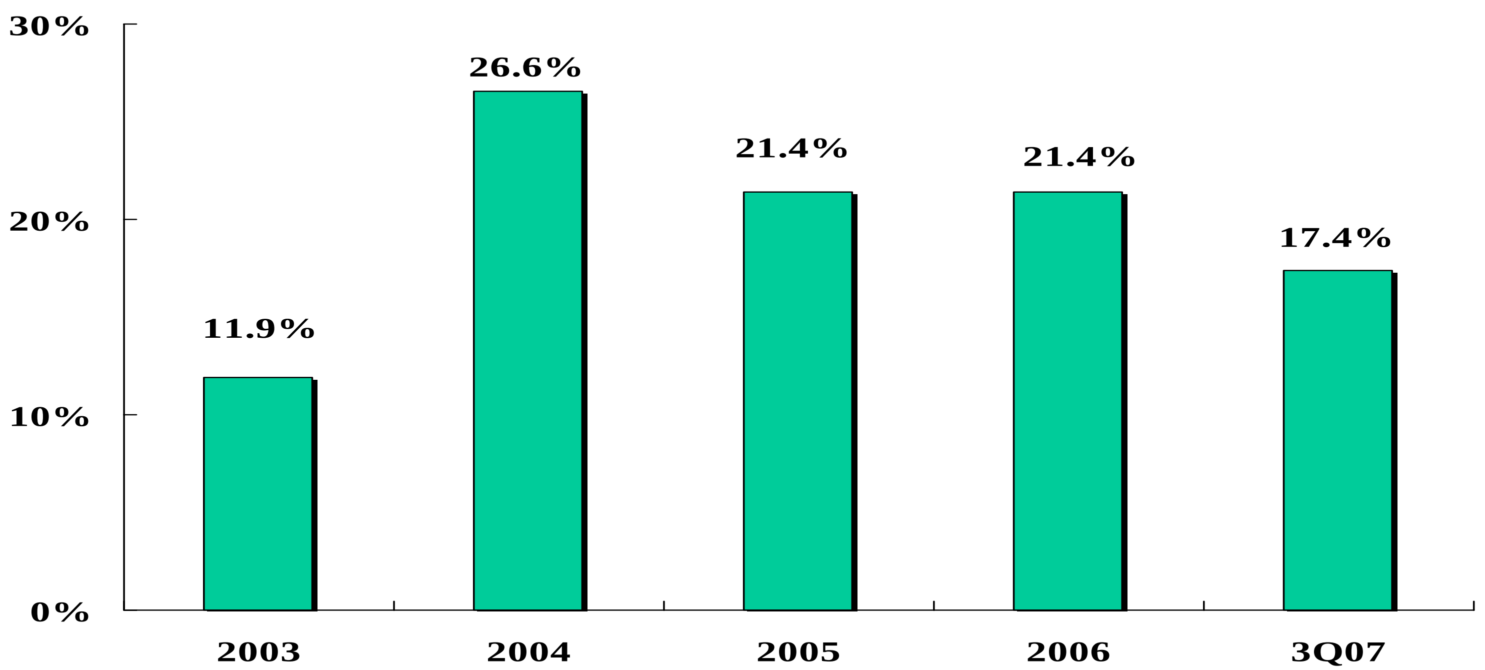


- **2006年稅前淨利年增26.7%,主因:**
  1. 消費性電子產業對電子材料的旺盛需求
  2. 塑膠加工和聚酯纖維事業的產品結構改善發揮效益
  3. 南科和南電的投資收入助益

- **2007年前三季稅前淨利較去年同期成長24%,主因：**
  1. 本業各項產品需求旺盛加上石化產品獲利率提升,獲利成長79%
  2. 權益法認列之投資收入減少6%至新台幣225億元,其中台塑石化獲利增加49億,南科減少56億,南電減少18億
  3. 總投資收入達稅前淨利之49%

財務狀況

股東權益報酬率

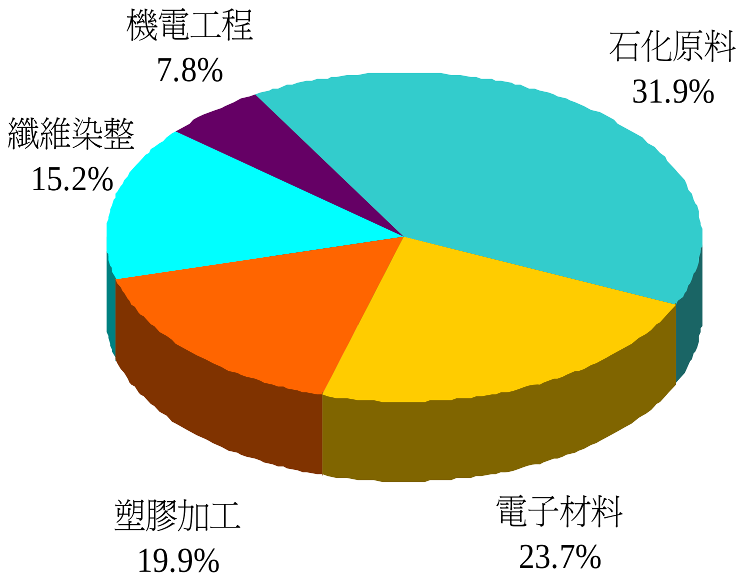


- 過去三年股東權益報酬率皆超過20%,主因六輕效應日益發酵
- 持續擴建高獲利和高進入障礙之化學品以追求永續成長

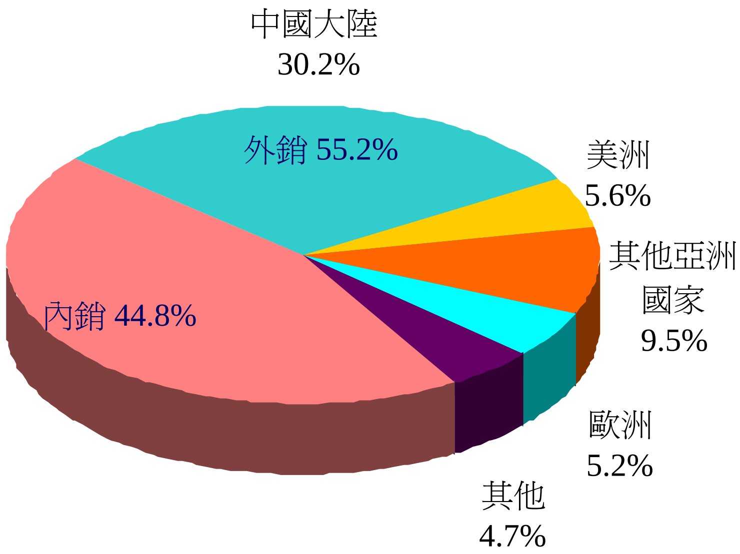
財務狀況

營收結構

2007年前三季
營業額: 1,613億



2006年地區別營收



- 2007年前三季六輕項目營收年增率為55%
- 電子材料事業部2007年前三季營收年增率為15%
- BPA-4, EG-4,和1.4BG-2新廠完成帶動未來數年的營收成長
- 中國仍為最大的出口市場,佔2006年出口額的55%

擴建計劃 – 中國

產品	單位	年產能	新增產能	完工日	產能增加 (%)
PU皮	千碼	31,200	4,800	08年6月	15
PVC硬布	噸	124,800	9,600	07年6月	8
銅箔基板	千張	24,000	26,400	09年10月	110
銅箔	噸	31,800	17,400	09年10月	55
玻璃纖維布	千米	192,000	102,000	08年9月	53
玻璃纖維絲	噸	67,800	37,800	08年5月	56
環氧樹脂	噸	105,000	192,300	09年7月	183

長期投資

公司	持股比例 (%)	帳面價值 百萬元（2007/9）	投資收入 (百萬元) 2005	2006	2007/9
台塑石化	24	57,107	14,052	10,594	12,228
南亞科技	38	28,880	974	7,584	-779
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南亞美洲	100	23,593	2,356	998	1,630
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越南台灣興業責任	43	3,369	-448	-156	254
南亞美國	100	3,276	24	13	17
香港必成玻璃纖維	50	2,398	210	354	273
台灣必成	50	1,569	351	522	272
其他		3,356	78	-213	24
總計		199,798	23,665	31,405	21,048

總結

- 塑膠加工、聚酯纖維和銅箔基板之領導廠商
- 垂直整合以獲得低價成本及穩定品質的原料
- 良好的股東權益報酬率
- 營運持續成長的策略
  - 配合客戶需求於中國江蘇昆山持續擴建電子材料產品
  - 將台灣事業重心由塑膠加工轉型爲高獲利之化學品,並於新興國家擴展加工事業
  - 配合國際環保潮流發展相關產品
- 維持長期競爭優勢
  - 透過自動化,員工訓練,及管理活動以提高生產力
  - 參與六輕建設以掌控原料供給及成本控管

附錄

營運績效

單位: 新台幣 百萬元

項目		塑膠加工		電子材料		纖維染整		石化原料		機電工程		其他		合計	
		金額	營利率	金額	營利率	金額	營利率	金額	營利率	金額	營利率	金額	營利率	金額	營利率
營收	2002	34,326		20,911		26,665		15,002		6,195		534		103,632	
	%	33.1		20.2		25.7		14.5		6.0		0.5		100.0	
	2003	34,458		27,001		29,173		26,098		10,101		812		127,642	
	%	27.0		21.2		22.9		20.4		7.9		0.6		100.0	
	2004	38,156		36,569		30,867		47,818		11,453		923		165,786	
	%	23.0		22.1		18.6		28.8		6.9		0.6		100.0	
	2005	35,934		36,358		28,337		53,201		13,061		619		167,510	
	%	21.5		21.7		16.9		31.8		7.8		0.4		100.0	
	2006	36,111		42,970		29,783		58,015		14,152		622		181,652	
	%	19.9		23.7		16.4		31.9		7.8		0.3		100.0	
	3Q 2007	26,712		36,850		24,458		64,251		8,808		470		161,280	
	%	16.6		22.7		15.2		39.8		5.5		0.3		100.0	
營業利益	2002	3,202	9.3	-5	0.0	2,892	10.8	2,134	14.2	1,141	18.4	-1,546		7,819	7.5
	%	41.0		-0.1		37.0		27.3		14.6		-19.8		100.0	
	2003	1,870	5.4	1,063	3.9	2,657	9.1	6,101	23.4	1,574	15.6	-851		12,415	9.7
	%	15.1		8.6		21.4		49.1		12.7		-6.9		100.0	
	2004	1,541	4.0	4,715	12.9	1,278	4.1	15,309	32.0	1,182	10.3	-907		23,117	13.9
	%	6.7		20.4		5.5		66.2		5.1		-3.9		100.0	
	2005	1,831	5.1	1,381	3.8	-19	-0.1	9,113	17.1	925	7.1	-1,062		12,170	7.3
	%	15.0		11.4		-0.2		74.9		7.6		-8.7		100.0	
	2006	2,911	8.1	6,433	15.0	89	0.3	7,753	13.4	1,267	9.0	-878		17,575	9.7
	%	16.6		36.6		0.5		44.1		7.2		-5.0		100.0	
	3Q 2007	1,681	6.3	4,659	12.7	974	4.0	14,494	22.6	916	10.4	-483		22,240	13.8
	%	7.6		20.9		4.4		65.2		4.1		-2.2		100.0	

財務分析

單位: %

年度	2003	2004	2005	2006	Q307
利息保障倍數	6.54	18.66	17.20	20.34	24.88
槓桿比率	61.62	50.51	45.91	34.82	31.53
負債佔資產比率	44.83	42.62	39.60	33.78	32.74
長期資金佔固定資產比率	287.63	325.54	343.49	390.89	389.02
流動比率	198.94	180.84	181.84	176.76	205.21
速動比率	119.23	108.78	112.91	115.04	151.32
資產報酬率	7.41	15.56	13.13	14.10	11.58
股東權益報酬率	11.94	26.55	21.38	21.43	17.39
營業毛利	9.73	13.94	7.27	9.67	19.96
淨利率	13.46	26.23	23.85	26.15	27.44
每股獲利（NT$）	2.61	6.23	5.40	6.23	5.73

THE END