

Wah Hong Industrial Corp.

Business Updates

2013.03.28



Agenda

- ✦ Financial Performance
- ✦ Operation Analysis
- ✦ Business Outlook
- ✦ Q & A

Agenda

 Financial Performance

 Operation Analysis

 Business Outlook

 Q & A

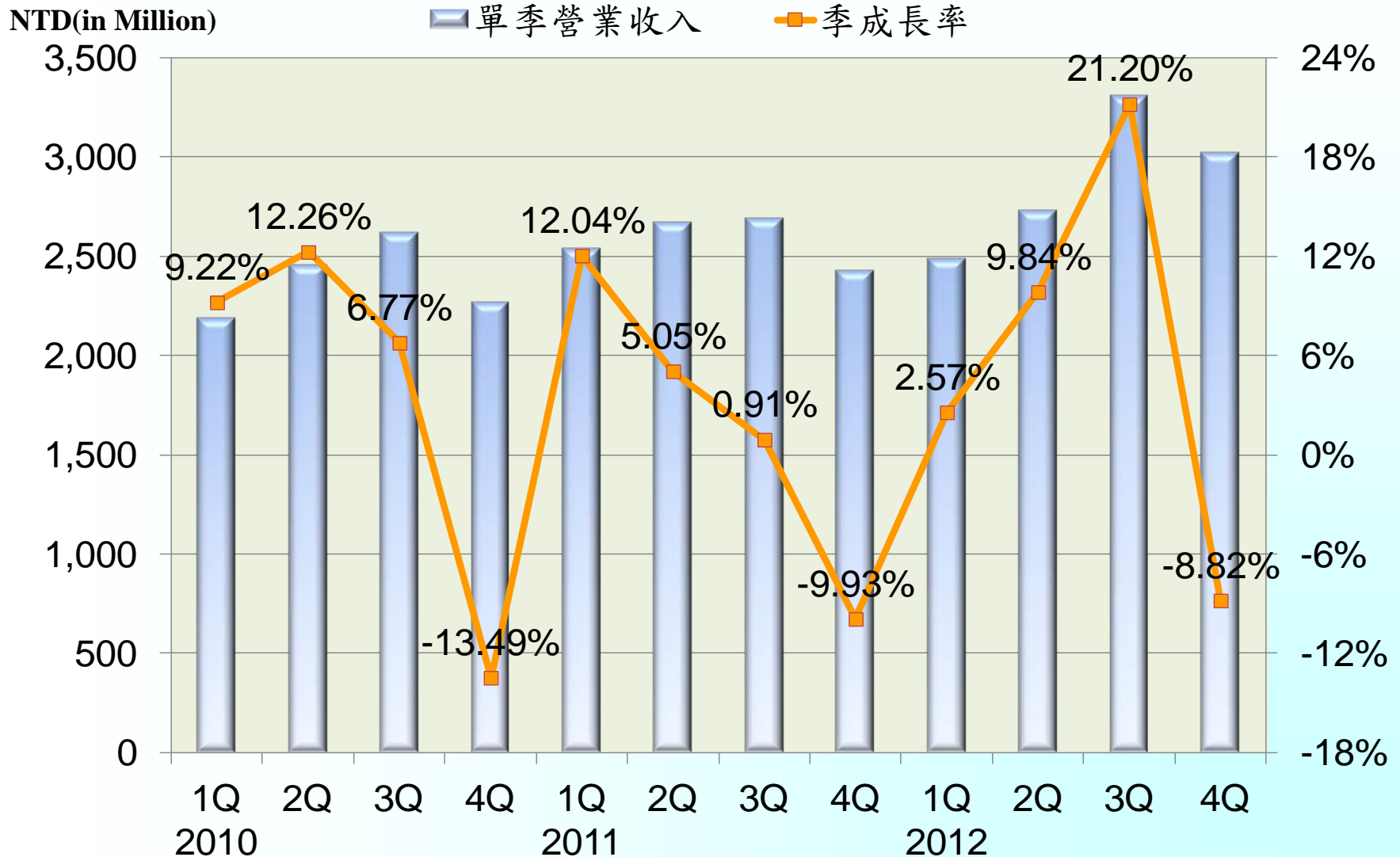
Consolidated I/S - 2012/Q4

in K NTD	2012 Q4		2012 Q3		QoQ %	2011 Q4		YoY %
	Audited	%	Audited	%		Audited	%	
NET SALES	3,014,574	100.0%	3,306,007	100.0%	-8.8%	2,421,149	100.0%	24.5%
OPERATING COSTS	2,656,143	88.1%	2,925,351	88.5%	-9.2%	2,151,745	88.9%	23.4%
GROSS PROFIT	358,431	11.9%	380,656	11.5%	-5.8%	269,404	11.1%	33.0%
OPERATING EXPENSES	222,045	7.4%	234,633	7.1%	-5.4%	188,066	7.8%	18.1%
INCOME FROM OPERATIONS	136,386	4.5%	146,023	4.4%	-6.6%	81,338	3.4%	67.7%
NON-OPERATING INCOME	(37,672)	-1.2%	(26,778)	-0.8%	41%	(9,057)	-0.4%	316%
INCOME BEFORE INCOME TAX	98,714	3.3%	119,245	3.6%	-17.2%	72,281	3.0%	36.6%
INCOME TAX EXPENSE	37,100	1.2%	35,023	1.1%	5.9%	5,373	0.2%	590.5%
CONSOLIDATED NET INCOME	61,614	2.0%	84,222	2.5%	-26.8%	66,908	2.8%	-7.9%
Minority interest income	1,186	0.0%	1,234	0.0%	3.9%	(12)	0.0%	9983%
Stockholder income	60,428	2.0%	82,988	2.5%	-27.2%	66,920	2.8%	-9.7%
EPS-Stockholder Income	0.71		0.97			0.70		

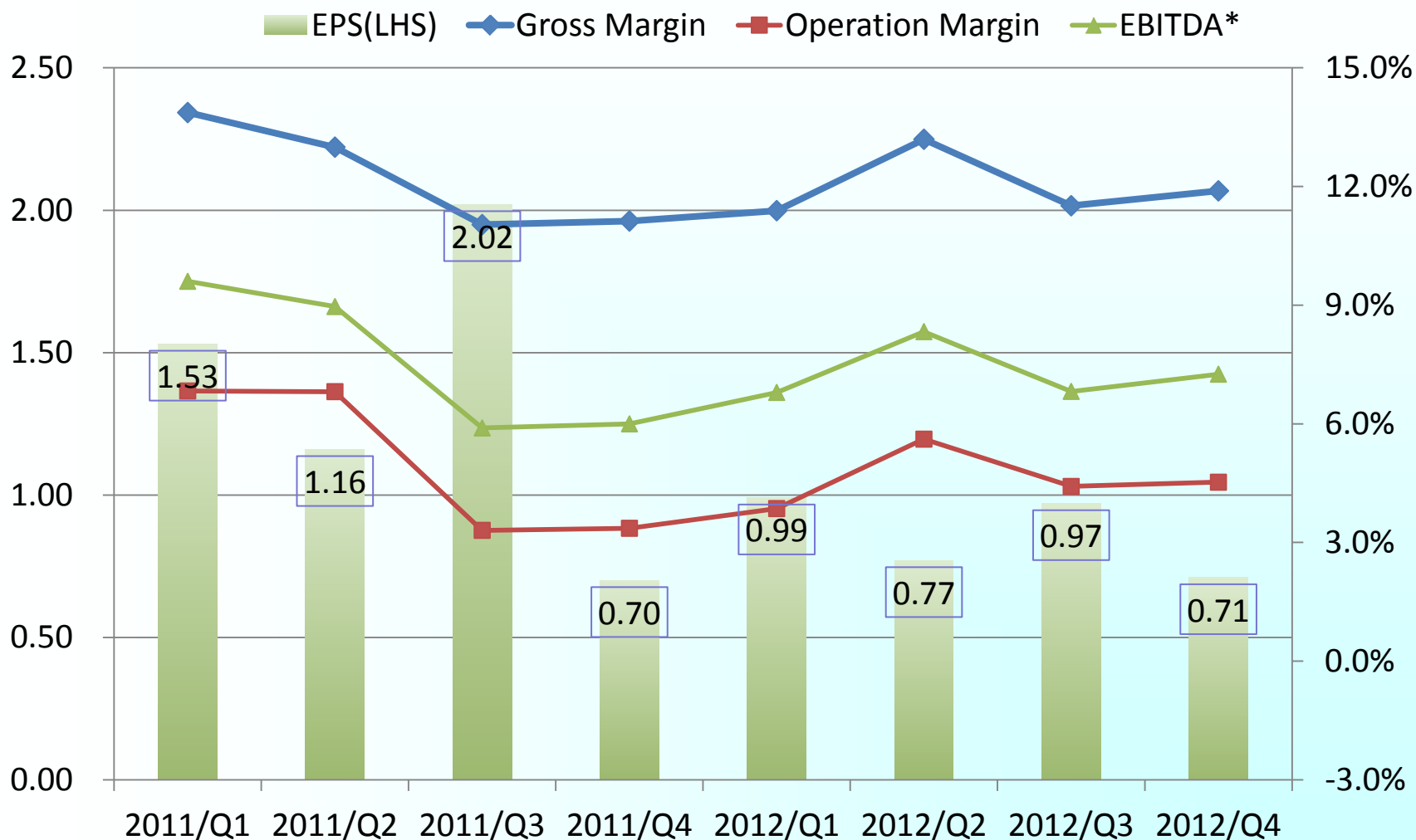
Consolidated I/S – FY2012

in K NTD	FY 2012		FY 2011	
	Audited	%	Audited	%
NET SALES	11,531,529	100.0%	10,309,049	100.0%
OPERATING COSTS	10,149,724	88.0%	9,045,088	87.7%
GROSS PROFIT	1,381,805	12.0%	1,263,961	12.3%
OPERATING EXPENSES	850,498	7.4%	738,978	7.2%
INCOME FROM OPERATIONS	531,307	4.6%	524,983	5.1%
NON-OPERATING INCOME	(65,532)	-0.6%	70,501	0.7%
INCOME BEFORE INCOME TAX	465,775	4.0%	595,484	5.8%
INCOME TAX EXPENSE	168,771	1.5%	187,050	1.8%
CONSOLIDATED NET INCOME	297,004	2.6%	408,434	4.0%
Minority interest income	4,282	0.0%	(478)	0.0%
Stockholder income	292,722	2.5%	408,912	4.0%
EPS-Stockholder Income	3.44		5.41	

Consolidated Revenue by Qtr.



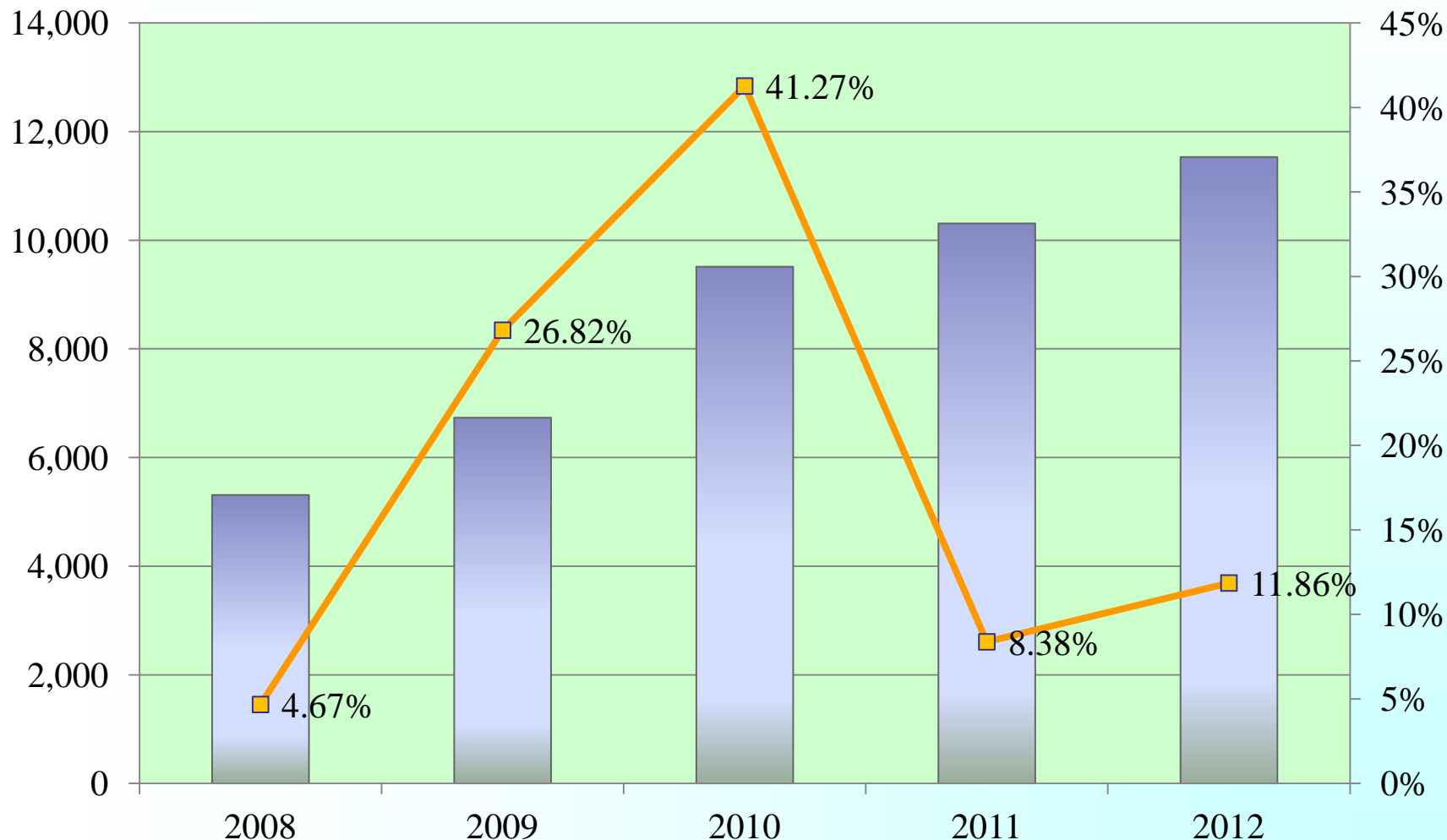
Profitability by Qtr.



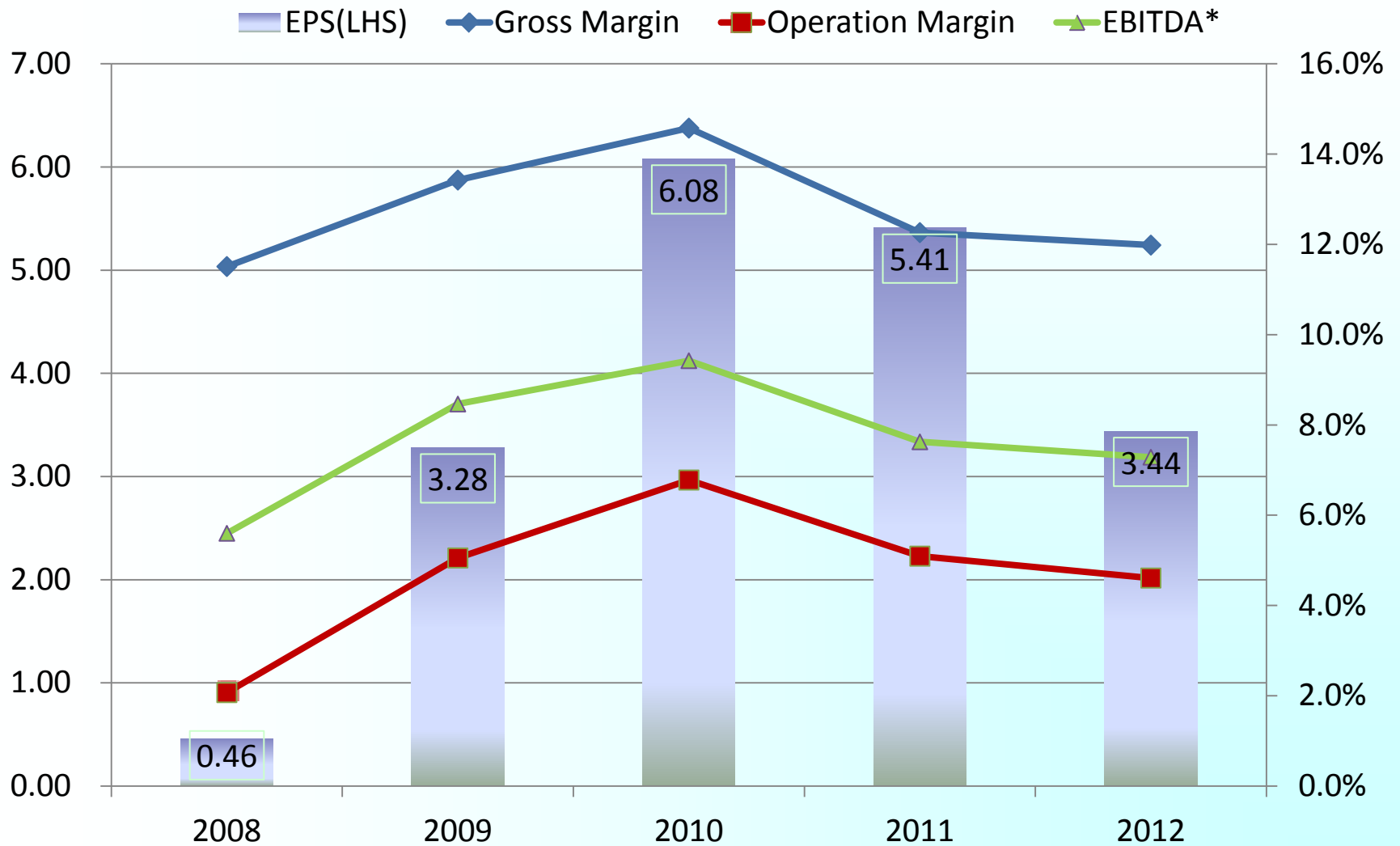
Consolidated Revenue by Yr.

NTD(in Million)

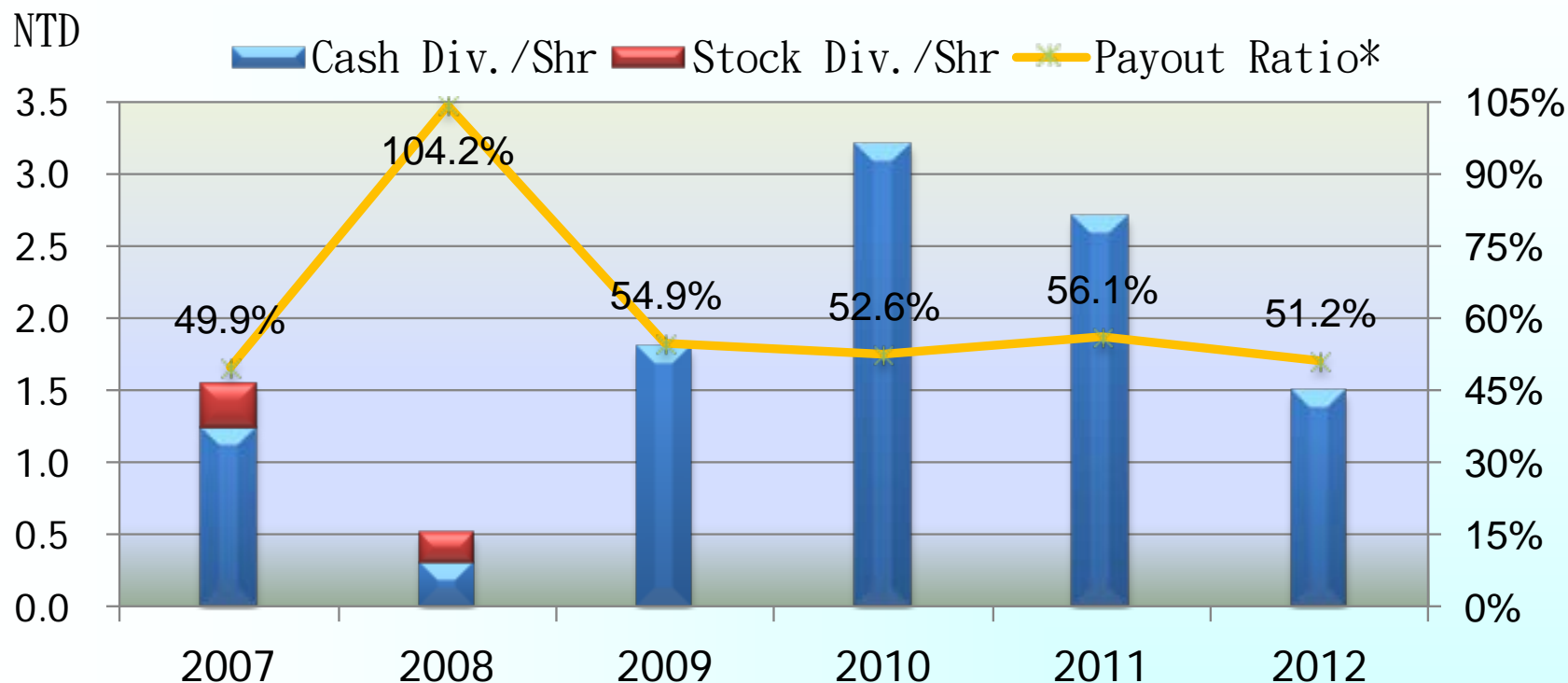
營業收入淨額 年成長率



Profitability by Yr.



Dividend Policy



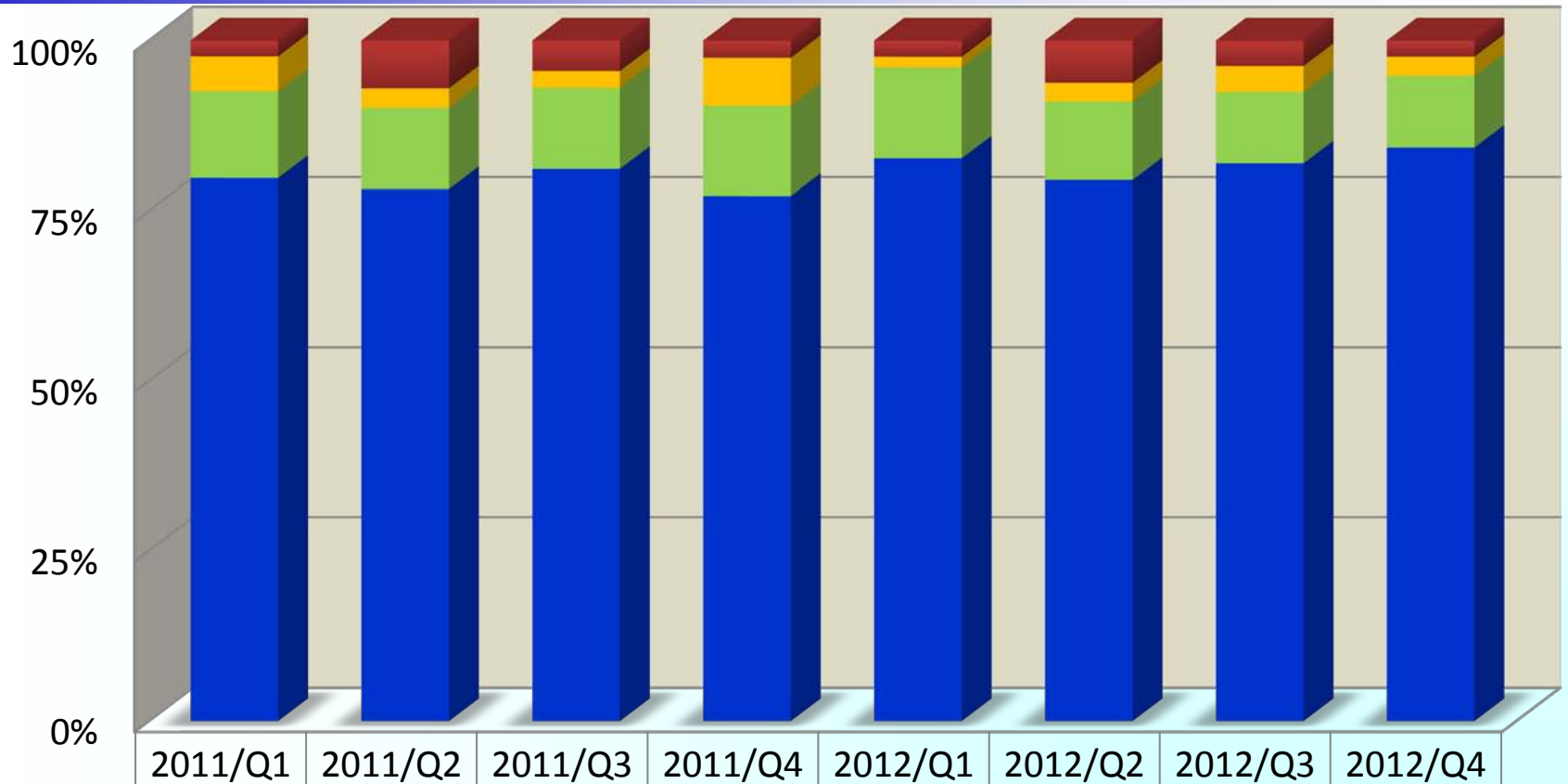
Cash Div.	1.23	0.30	1.80	3.20	2.70	1.50
Stock Div.	0.31	0.20	0.00	0.00	0.00	0.00

*"Payout Ratio" is calculated by: Dividend Amount/ Annual Net Income

Agenda

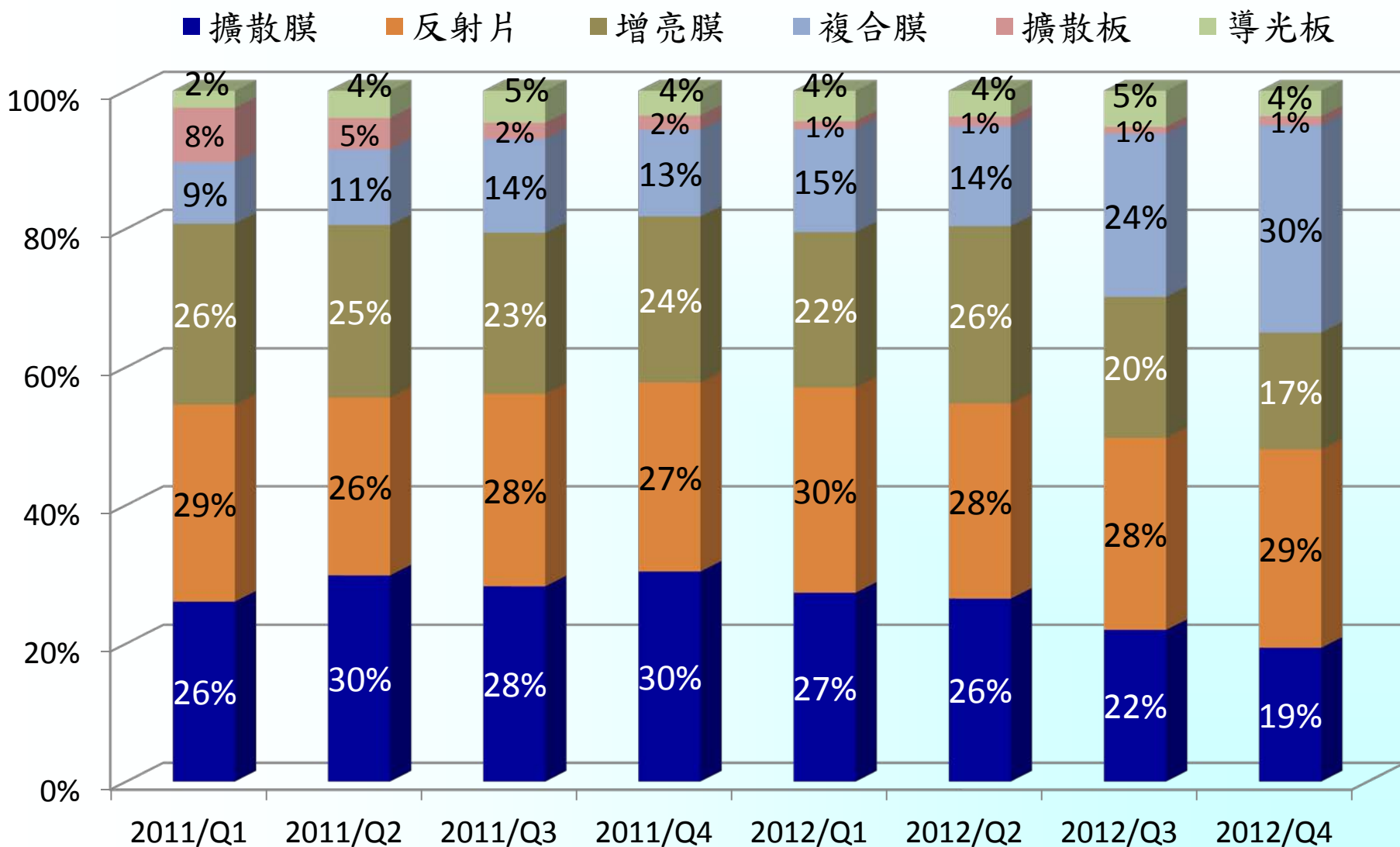
- ✚ Financial Performance
- ✚ Operation Analysis
- ✚ Business Outlook
- ✚ Q & A

Sales Breakdown by Departments

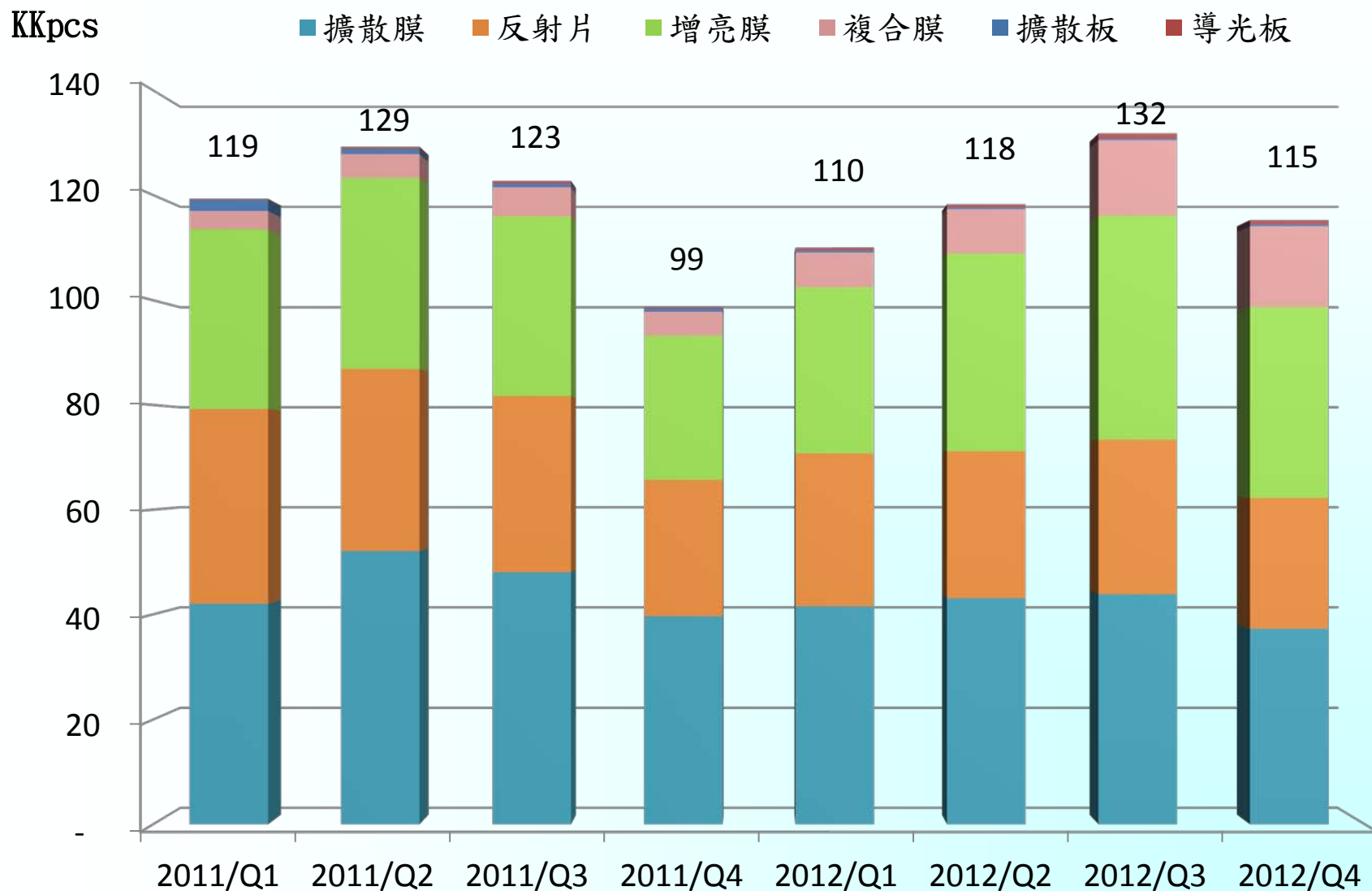


	2011/Q1	2011/Q2	2011/Q3	2011/Q4	2012/Q1	2012/Q2	2012/Q3	2012/Q4
■ 新事業	2.3%	7.0%	4.5%	2.6%	2.4%	6.2%	3.8%	2.4%
■ 光機熱	5.2%	2.8%	2.5%	7.0%	1.5%	2.8%	3.8%	2.8%
■ 機能材料	12.7%	12.0%	11.9%	13.2%	13.4%	11.5%	10.5%	10.5%
■ LCD光學材料	79.8%	78.2%	81.1%	77.2%	82.7%	79.5%	81.9%	83.9%

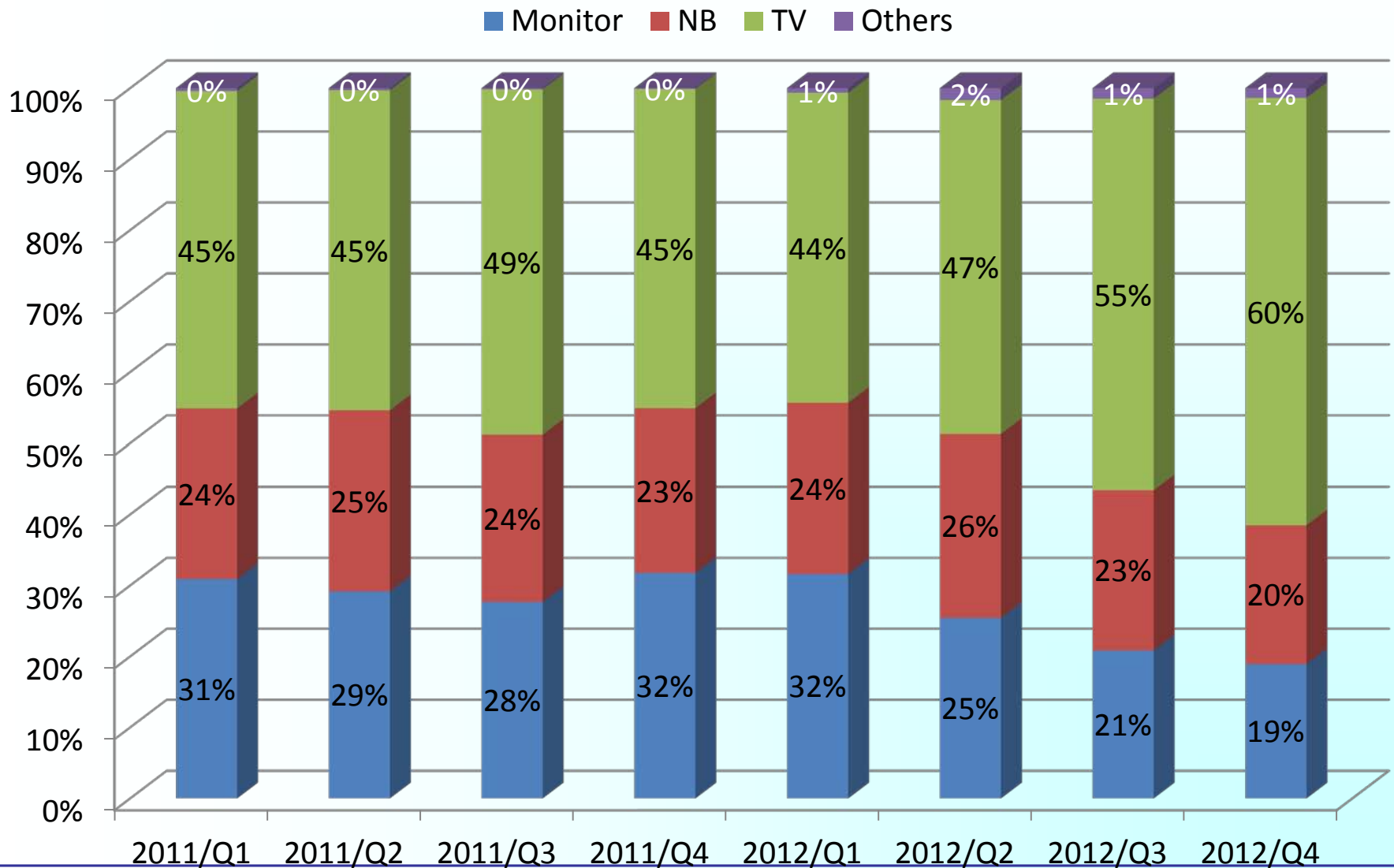
Sales Breakdown by LCD Materials



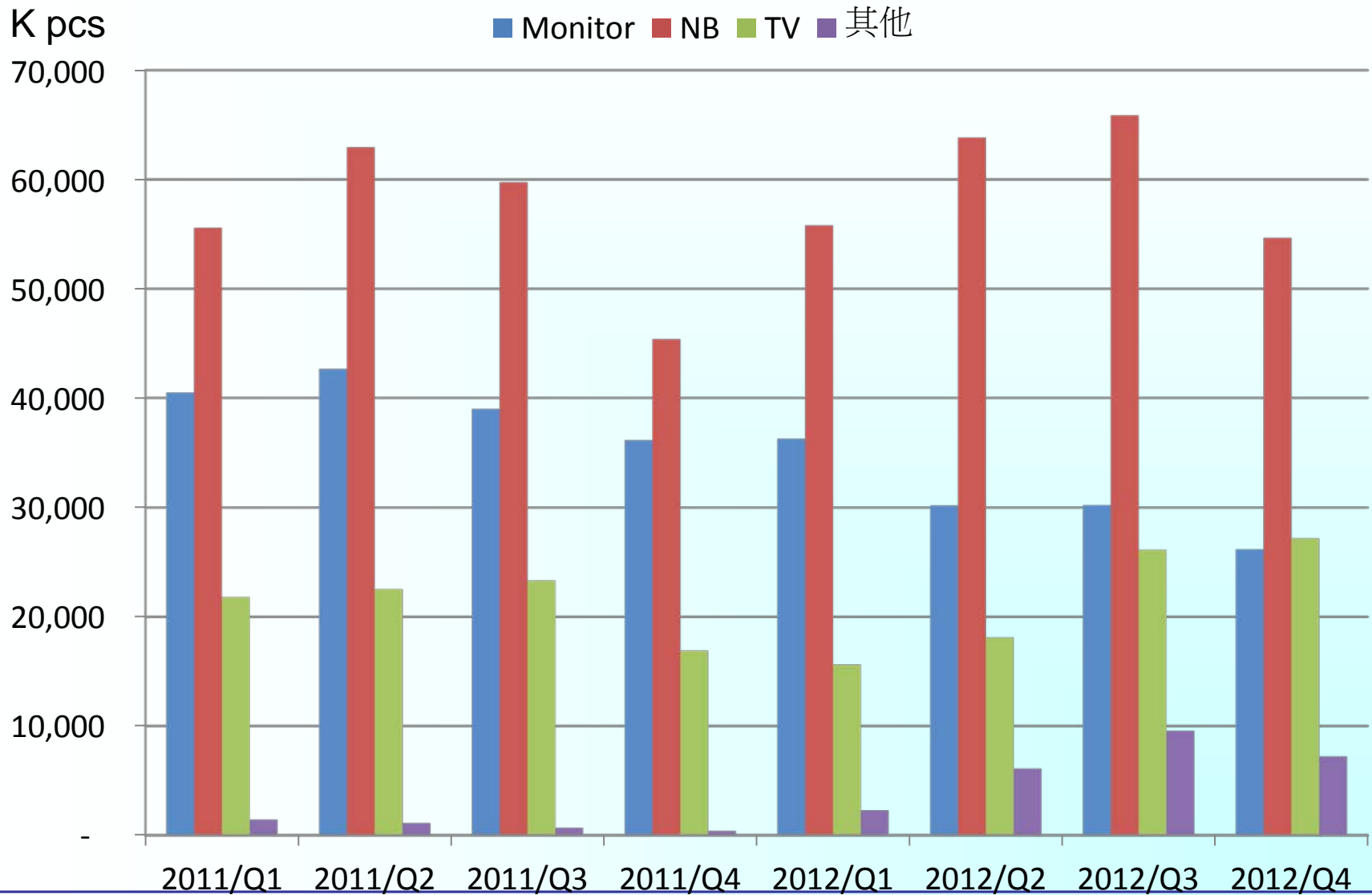
Shipments by LCD Materials



Sales Breakdown by LCD Applications



Shipments by LCD Applications



Agenda

 Financial Performance

 Operation Analysis

 Business Outlook

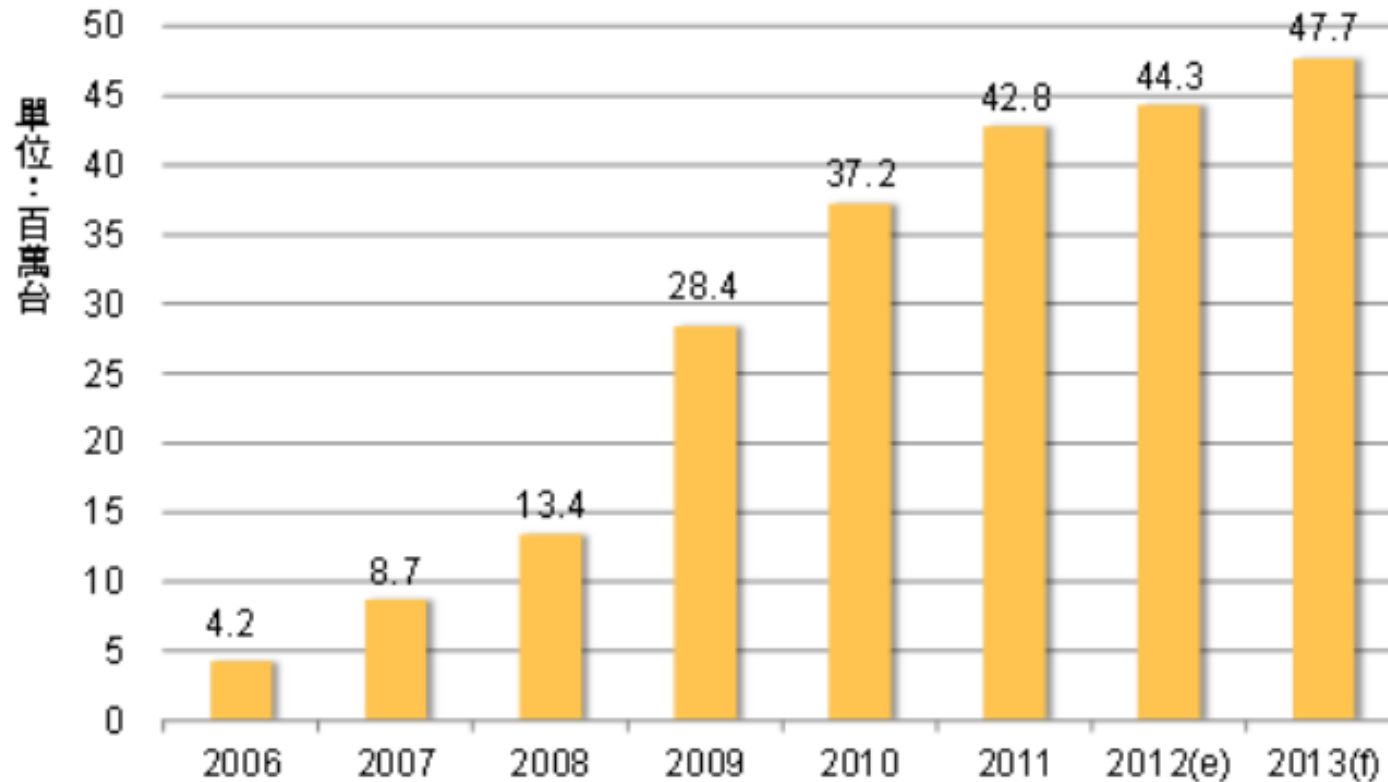
 Q & A

Highlights in Operation

- ◆ LCD materials keep a firm growth in sales.
- ◆ 3D FPR film to mass production.
- ◆ New business opportunities from 4K x 2K TVs.
- ◆ Emerging demand for touch materials.
- ◆ New applications for High Performance Materials:
 - Thermal Conductive Plastic
 - Self-reinforced PET composites

LCD materials keep growing

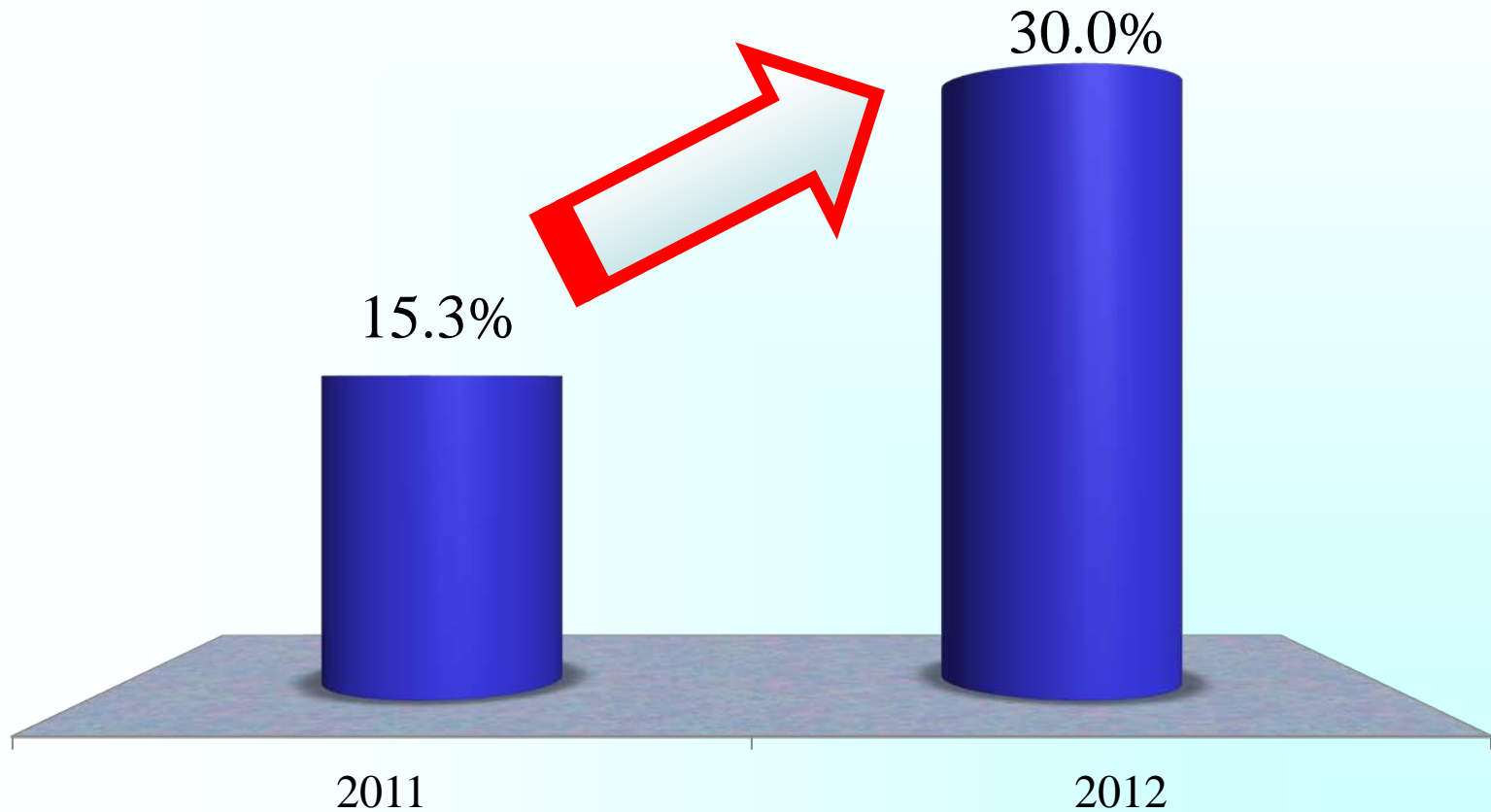
2008~2013年大陸市場液晶電視出貨量變化及預測



資料來源：DIGITIMES，2012/10

LCD materials keep growing

Sales of LCD Materials from China-based Customers



★ not included indirect sales to China-based customers

LCD materials keep growing

- ◆ Expanding China-based customers offer a strong support to demand for LCD materials.
- ◆ Demand from Japanese TV brands:
 - ODM/OEM outsourcing to Taiwanese supply chain.
 - Increasing demand for LGP in big screen(70''~80'').
 - Developing ink-printing Diffusion Plate for direct type TVs.
- ◆ Start supplying materials to brand tablets.

New Product – FPR 3D film

	2011	2012	2013	2014	2015
3D TV總出貨量	19500	36900	53000	70900	84200
SG 3D TV出貨量	10530	18819	27030	36159	42100
FPR 3D TV出貨量	8970	18081	25970	34741	42100
FPR 3D TV出貨比重	46%	49%	49%	49%	50%

資料來源: DNP

單位: K Units

	2011	2012	2013	2014	2015
韓國FPR 出貨量	8970	16974	19080	23397	26102
中國/台灣FPR 出貨量	0	1107	5890	11344	15998
中國/台灣FPR 比重	0%	6%	24%	33%	38%

- WH FPR film is set to MP @ 2013/Q2.
- Monthly capacity for 2013/H2 is 150Kpcs/M.

New business for 4Kx2K TV

- ◆ The high cost of DBEF restricts the cost down for LCD backlight unit?
 - Collaborated with our suppliers, WH offers our customers a new backlight structure design that can significantly save the materials cost and help to achieve a more popular selling price.

New Business for 4Kx2K TV

- ◆ Heat density from edging high power LED light bar worsens the MURA problem for displays.
- Combined with a formable heatsink and Hik@xy™ thermal spreading sheets, our solution has been tested to verify a reduction of 10°C~20°C in the module.

Demand for touch materials

Projective Capacitive (投射電容式)	原理結構圖	實際產品
GG (glass glass)		<p>iPhone 4 iPhone 4S iPad 2 New iPad</p>
GF (glass film)	<p>■ G1F touch panel</p>	<p>微軟 Surface iPad mini</p>
OGS DPW (Direct Patterned Window). TOC (Touch On Cover Window). WIS (Window integrate Sensor). OGS (One Glass Solution). ATT (Advanced Touch Technology) TOL (Touch on Lens)		<p>10.1" Iconia Tab HTC Wildfire</p>

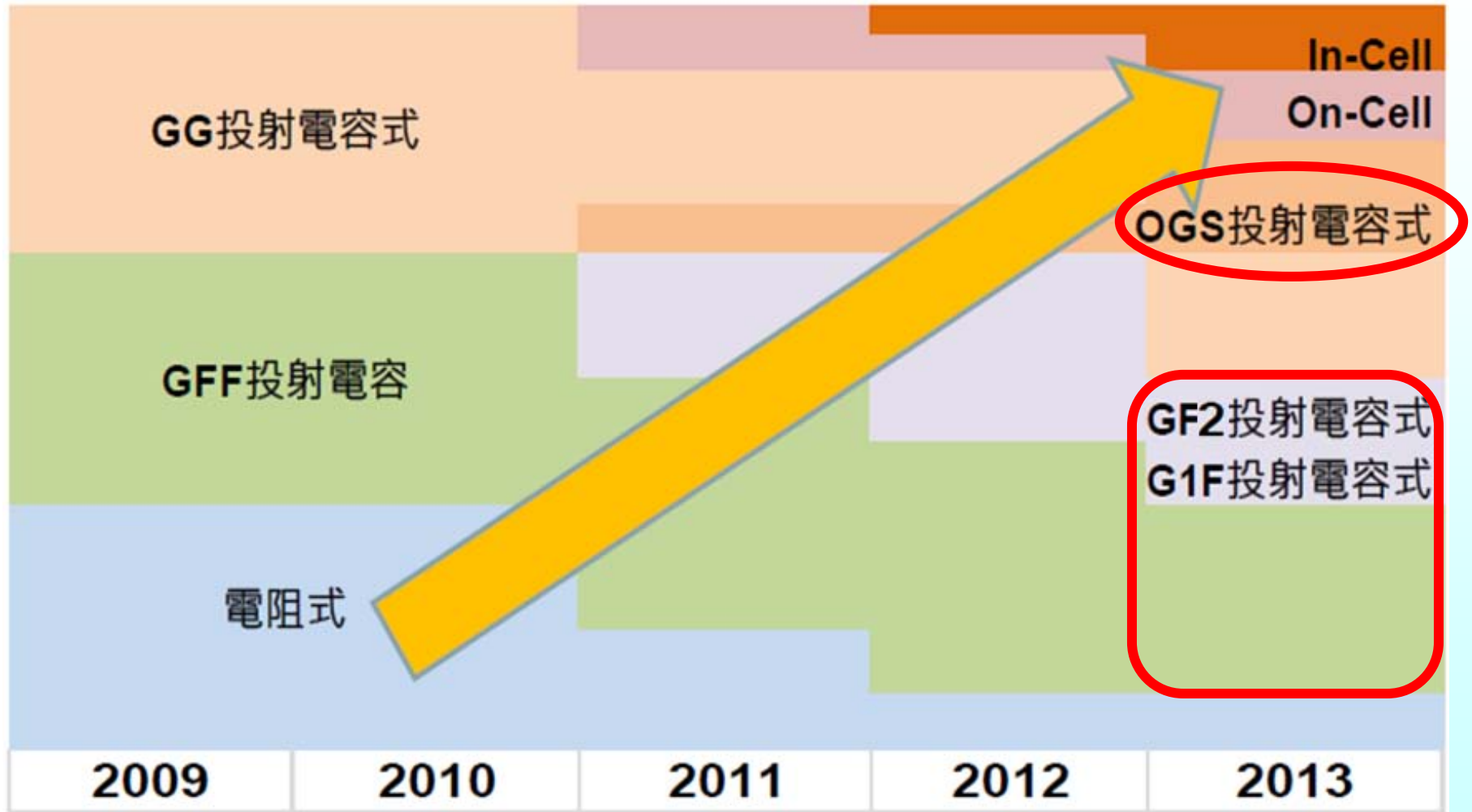
資料來源：工研院IEK (2012/11)



工業技術研究院
Industrial Technology
Research Institute

Copyright 2012
All Rights Reserved

Demand for touch materials

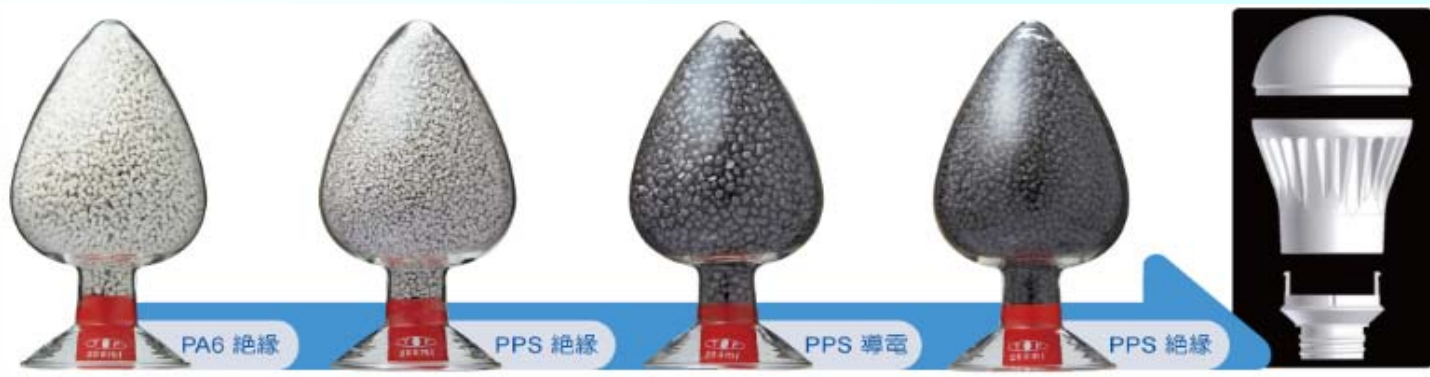


Demand for touch materials

- ◆ “Touch everywhere” 觸控新應用市場將持續發展，帶動觸控材料市場規模不斷創新高。
- ◆ GFF/G1F/GF2等Film-type sensor 以印刷/蝕刻的低成本、高良率製程，已囊括了包含Apple、Non-Apple & White Brand等各級平板電腦產品市場。
- ◆ 郡宏：ITO film → Film-type sensors
華宏：ASF防爆膜 → OGS sensors
PMMA複合板 → PFF sensors

Thermal Conductive Plastic

- ◆ 2013/Q1 導熱塑膠應用於LED球泡燈heat sink產品已量產出貨。
- ◆ 搭配heat sink之結構設計，客戶已實例應用於最高10W燈泡使用。
- ◆ 具有絕緣、輕量、可大量生產、省略二次加工、方便染色處理等具體效益。



Self-reinforced PET composites

- ◆ 自增型複合材料（Self-reinforced composites）優點為可回收重複使用，100%熱塑性材料，輕量化，高衝擊強度，耐磨耗等，不同於傳統的熱固性複材。
- ◆ 現有自增型的產品如：Curv®、Armordon®、Pure® 和 Tegriss®，主要均為PP材質。
- ◆ 開發產品：行李箱、鞋材護具、運動器材等，配合客戶需求，提供材料、壓板、成型之一站式服務。



SrPP	SrPET
比重低	強度好，剛性高（可減薄）
低溫衝擊强度高	耐磨性好
	染色性好（設計性高）
	加工範圍大
	價格便宜

Agenda

- ✚ Financial Performance
- ✚ Operation Analysis
- ✚ Business Outlook
- ✚ Q & A

Thank You!!

