# Solution Partner

# **Business & Market Outlook**

Mar, 2012



### Disclaimer

This presentation is for informational purposes only, contains financial results and other information about LG Chem, Ltd. and is subject to updating, revision, amendment and completion.

Forecasts and projections contained in this material are based on current business environments and management strategies, and they may differ from the actual results upon changes and unaccounted variables.

From 2010, the business results are subject to the IFRS(International Financial Reporting Standards).



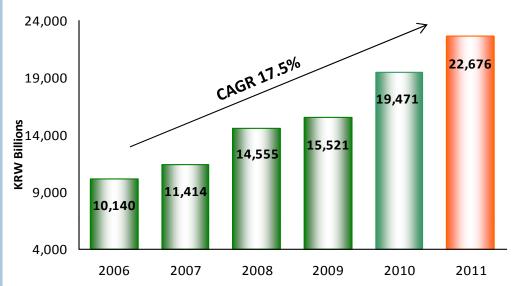
# **Table of Contents**

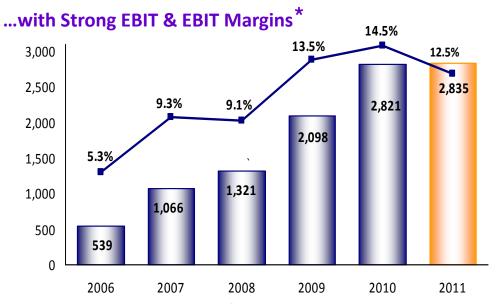
LG Chem at a Glance	1
4Q 2011 Business Results	3
Divisional Results & Outlook	5
2012 Business Plan	7
Appendix	9

### LG Chem at a Glance

- LG Chem was started in 1947 and is Korea's first and largest chemical company with an established track of over 60 years and annual revenues of KRW 22.7 trillion in 2011.
- LG Chem boasts multiple production facilities and an extensive distribution network that spans 15 countries worldwide in Asia, Europe, North and South America.
- LG Chem currently holds the largest vertically integrated petrochemical production platform in Korea.
- LG Chem was reborn as a specialized and diversified chemical company that focuses on petrochemical goods, rechargeable batteries including HEV/EV purpose, OLED materials, and 3D FPR.
- LG Chem will seek operational excellence in its core business and centralize its resources with new business such as HEV/EV batteries and LCD glass substrates to reinforce the necessary momentum for future growth.
- Despite high uncertainties remaining in the business environment such as a delayed recovery in the global economy, LG Chem recorded historically the highest sales and profits in 2011.

#### Impressive Revenue Scale.\*.



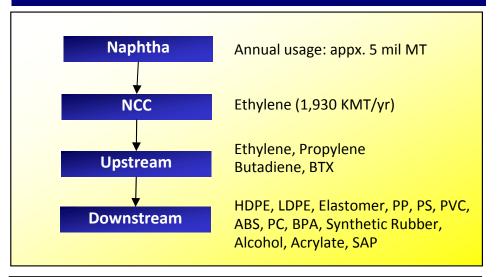


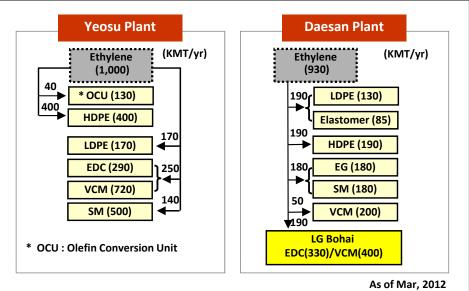
Sales and EBIT are subject to IFRS from 2009.
 Those prior to 2009 are subject to K-GAAP(consolidated base).



# **Differentiated Competitiveness**

#### **Vertical Integration Structure**





#### **Co-existence of upstream and downstream products**

- One of few petrochemical companies around the globe with vertical integration structure, featuring both upstream and downstream production capability.
- This structural characteristic delivers stable business performance against industry cyclicality.

#### **Comprehensive downstream product lines**

LG Chem's comprehensive downstream product lines of PO, ABS, PVC and other various products have complementary business cycles, enabling the Company to generate stable revenue

Stabilized revenue generating capability under any market conditions



Classification	'10.4Q	'11.3Q	'11.4Q	YoY	QoQ
Sales	4,999	5,886	5,599	12.0%	-4.9%
Operating Profits	562	724	500	11 00/	20.00/
(%)	(11.2)	(12.3)	(8.9)	-11.0%	-30.9%
Pre-tax Income	557	668	502	10.00/	24.00/
(%)	(11.2)	(11.3)	(9.0)	-10.0%	-24.8%
Net Income	437	512	377	-13.8%	-26.3%

## **Financial Position**

## **Financial Ratios**

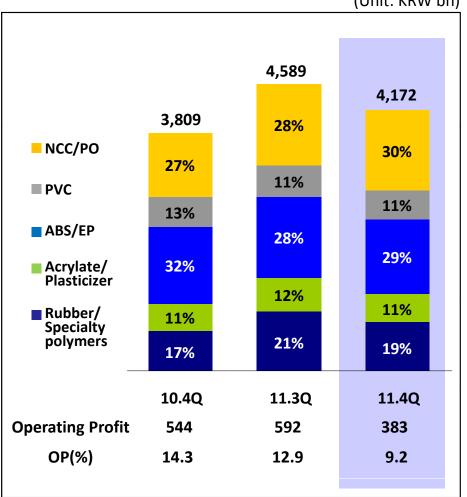
		,	Office Kitty Birj
Classification	'10	'11	Change
Asset	12,674	15,286	20.6%
Cash and equivalents	1,368	1,379	0.8%
Liabilities	4,830	5,578	15.5%
Borrowings	2,101	2,527	20.3%
Shareholder's Equity	7,844	9,708	23.8%
EBITDA	3,495	3,593	

Classification	'10	'11	Change
Total Liabilities/ Equity (%)	61.6	57.5	-4.1%p
Borrowings / Equity (%)	26.8	26.0	-0.8%p
Interest Coverage Ratio (x)	46.0	42.3	-3.7
ROE (%)	31.9	24.7	-7.2%p
ROA (%)	19.0	15.5	-3.5%p

### **Divisional Results & Outlook**

### **Business results**

(Unit: KRW bn)



## **Analysis**

#### Analysis

**■** Weakened profitability by declined price and inventory losses amid weak seasonality & the global economic downturn

: Achieved favorable results by increasing premium PO -NCC/PO

sales despite wait-and-see market situation

: Margin squeeze due to influx of offshore supply -PVC

and weak demand

-ABS/EP : Improved spread caused by stable feedstock price

such as BD, AN, etc.

-Acrylate/ : Margin contraction by weak demand

Plasticizer

-Rubber/ Specialty polymers

: Worsen profitability by product price drop with feedstock price (BD) plunges and weak seasonality

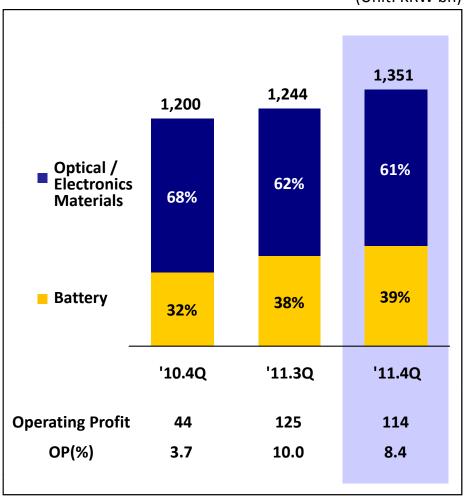
#### Outlook

- Market sentiment agreed the product prices bottom out
- Supply tightening ahead of maintenance shut-down in the Spring
- Recovery of profitability based on seasonality from 2Q

### **Divisional Results & Outlook**

### **Business results**

(Unit: KRW bn)



# **Analysis**

#### • Analysis

■ Even though sales increased thanks to customers' new product releases & growing year-end demand, profitability dropped slightly due to one-off expenses

**-Optical**: Sales rise propelled by increased utilization rate **Materials** and 3D FPR sales

-Battery: Increased sales thanks to customers' launch of new products such as 4G LTE phones and Ultrabooks & sales expansion in strategic customers (Apple, Nokia, etc.)

#### Outlook

■ Expect better profitability based on gradual IT demand recovery and capacity expansion of 3D FPR & polymer battery

-Optical : Expect gradual polarizer's utilization rate increase andMaterials 3D FPR demand rise thanks to growing 3D TV market

-Battery: Sales increase through high capacity polymer battery sales rise due to demand growth of new devices and polymer battery capacity expansion

### **Business Plan**

(Unit: KRW bn)

	_	(OIIIC. KKW DII)
Classification	'11	'12 Plan
Sales	22,680	24,550
Petro- chemicals	17,400	18,300
I&E Materials	3,340	3,740
Energy Solution	1,960	2,900
Operating Profits	2,840	
САРЕХ	2,320	2,550

<sup>2011</sup> Results don't include Automotive Battery Division.

### **Business Strategy**

- ☐ Petrochemicals : Activate the profitable business and strengthen core business and competence
- Sustainable profits through the cost leadership, etc
- Reducing energy consumption unit, enhancing premium product mix
- ☐ I&E Materials : Diversify product portfolio & build up initiation platform specialized materials business
- Display Materials : Diversify product portfolio
- Expanding product lines including polarizers for Tablet PC and 3D FPR
- Film/Battery Materials
- Film : Strengthen film business by developing films for OLED, etc.
- Battery Materials : Stretch product lines by producing a separator
- LCD Glass: Reinforce capabilities of production tech. and product development
- Secure cost competitiveness
- Early achievement of production yield on a par with competitors through optimization of manufacturing process
- ☐ Energy Solution : Strengthen global leading position & differentiated competitiveness
- Consumer Battery
- Enhance polymer battery's competitiveness and secure profitability
- Automotive Battery
- Sales rise in earnest with new customers
- Reinforce top position through cost competitiveness and product differentiation



(Unit: KRW bn)

	,	Offic. KKWV DIT			
Classification		'09	'10	'11	'12 Plan
	New/Expansion	158	324	664	743
Petro- chemicals	Maintenance	132	237	259	219
	Total	290	560	923	962
I&E	New/Expansion	472	814	992	1,012
Materials/ Energy	Maintenance	81	135	179	210
Solution	Total	553	948	1,171	1,222
	New/Expansion	22	1	1	-
Corporate Common	Maintenance	198	193	227	364
	Total	221	193	227	364
	New/Expansion	652	1,138	1,656	1,755
Total	Maintenance	411	564	665	794
	Total	1,063	1,702	2,321	2,548

### **Key Investments**

(Unit: KRW bn)

#### Petrochemicals

740

Yeosu : Expansions of acrylate,
 SAP and CA/EDC

- Daesan: Expansions of elastomer and synthetic rubber

#### **■ I&E Materials**

540

- Expansions of LCD glass substrates
- 3D FPR, separator, ITO film, etc.

#### ■ Energy Solution

470

 Expansions of polymer battery and automotive battery

Classification	2010				2010 2011					
Classification	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
Sales	4,423	5,028	5,021	4,999	19,471	5,491	5,700	5,886	5,599	22,676
Operating Profit	652	828	779	562	2,821	835	775	724	500	2,835
Petrochemicals	3,309	3,765	3,768	3,809	14,651	4,293	4,345	4,589	4,172	17,398
NCC/PO	948	1,082	1,068	1,018	4,116	1,108	1,152	1,298	1,285	4,843
PVC	453	455	455	489	1,852	500	517	502	455	1,974
ABS/EP	998	1,173	1,142	1,228	4,540	1,347	1,318	1,293	1,208	5,166
Acrylate/Plasticizer	401	451	478	429	1,760	549	550	546	441	2,085
Synthetic Rubber/ Specialty Resin	509	605	626	644	2,383	789	808	950	783	3,330
Operating Profit	490	624	621	544	2,279	736	642	592	383	2,353
I & E Materials	1,153	1,285	1,271	1,200	4,909	1,193	1,331	1,244	1,351	5,119
Optical/Electronic	843	917	913	832	3,504	807	891	800	845	3,343
Battery	347	414	394	399	1,552	432	500	485	543	1,960
Operating Profit	175	211	171	44	600	113	139	125	114	491



# **Borrowings**

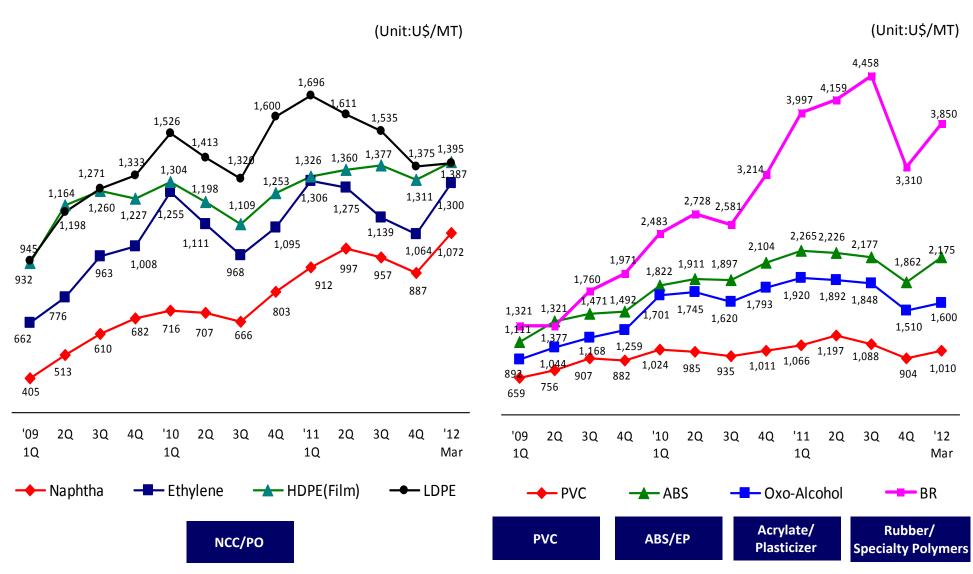
(Unit: KRW bn)

_		,	Offic . KINV DIT
	Classification	'10	'11
	<b>Total</b> (Overseas Subsidiaries)	<b>2,101</b> (824) 100%	<b>2,527</b> (1,044) 100%
	KRW Currency	<b>162</b> 8%	<b>475</b> 19%
	C P Others	150 12	448 27
	Foreign Currency	<b>1,940</b> 92%	<b>2,052</b> 81%
	Loan	936	1,128
	Negotiation Borrowings	865	924
	FRN	139	-
	Short-term (Overseas Subsidiaries)	<b>1,621</b> (559) 77%	<b>1,838</b> (679) 73%
	<b>Long-term</b> (Overseas Subsidiaries)	<b>481</b> (265) 23%	<b>689</b> (365) 27%

The % is calculated to total borrowings.

# **Cash Flow**

	Classification	'10	'11
Beginning Cash		1,107	1,368
Op	perating/Investing	810	-92
	Net Income	2,200	2,175
	Depreciation	656	757
	Working Capital	-617	-684
	САРЕХ	-1,702	-2,321
	Others	273	-19
Fir	nancing	-549	104
	Borrowings	-269	426
	Dividends	-280	-322
	Ending	1,368	1,380



- The prices are the average prices of CFR FE Asia for general grade in each product group.
- Mar 2012 prices are the price of the week of Mar 5th.

# **Appendix**

# **Global Position of Key Products**

As of March, 2012

	Item	Location	Сара	Global Rank	Capa Addition('12)
	ABS (Acrylonitrile-Butadiene-Styrene)	Korea, China	1,330 KMT/Yr	1st*	
	PVC (Polyvinyl Chloride)	Korea, China	1,270 KMT/Yr	6th	
	Oxo-Alcohol	Korea (Yeosu, Naju)	299 KMT/Yr	10th	
	AA (Acrylic Acid)	Korea (Yeosu, Naju)	193 KMT/Yr	9th	160 KMT/Yr (June)
Petro-	PC (Polycarbonate)	Korea (Yeosu)	170 KMT/Yr	6th	
Chemicals	BR (Butadiene Rubber)	Korea (Daesan)	180 KMT/Yr	7th	
	Elastomer	Korea (Daesan)	85 KMT/Yr	4th	
	SAP (Super Absorbent Polymer)	Korea (Gimcheon, Yeosu)	108 KMT/Yr	6th	72 KMT/Yr (June)
	MBS (Methacrylate-Butadiene-Styrene)	Korea (Yeosu)	50 KMT/Yr	4th	
	NBL (Acrylonitrile-Butadiene-Latex)	Korea (Yeosu)	100 KMT/Yr	2nd	
	BPA (Bisphenol A)	Korea (Yeosu)	300 KMT/Yr	8th	150 KMT/Yr (Dec)
10.5	Polarizer	Korea (Ochang)	128 mn m²/Yr	1st	
I & E Materials /	Consumer Battery (Lithium-ion)	Korea (Ochang)	78 mn cells/Month	3rd	12 mn cells/Month (Mar)
Energy	EV/HEV Battery (Lithium-ion)	Korea (Ochang)	100K Units/Yr**	1st	100K Units/Yr (~Dec)
Solution	Color Filter Photoresists	Korea (Ochang)	-	2nd	
	3D FPR	Korea (Ochang)	-	1st	

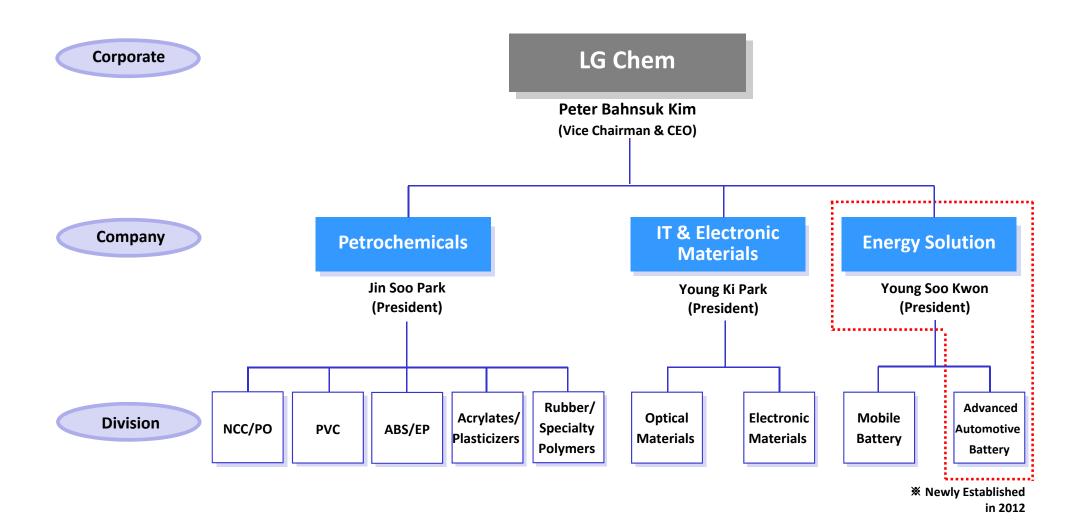
<sup>\*</sup> Actual Sales Base



<sup>\*\*</sup> Convert to GM 'VOLT' base

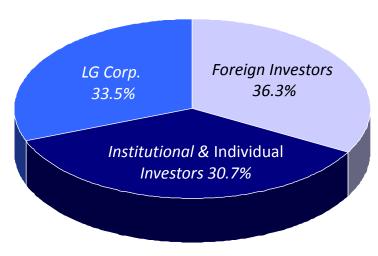
# **Appendix**

From 2012, Energy Solution Company newly established to strengthen each company's Independent Management System.



### **Stock Information**

# **Shareholders & Market Cap**



Common Stock as of Mar 9, 2012

(Unit: KRW)

	No. of	Mar 0	9, '12
	Shares	Price	Market Cap
Common	66,271,100	380,500	25.2 tn
Preferred	7,628,921	119,000	0.9 tn
Total	73,900,021		26.1 tn

Par value: KRW 5,000

## **Dividends**

Classification	'10	'11	Change
Net Income	2,200	2,170	-1.4%
EPS(KRW)	29,345	29,069	-0.9%
Total Dividends	295*	295*	0
Dividend Payout Ratio	14.9%	14.5%	-0.4%p
Common Stock Price at year-end(KRW)	391,000	317,500	-73,500
Dividend Yield Ratio	1.0%	1.3%	0.3%p

<sup>\*</sup> Dividend of KRW 4,000 per common share

